ISEE 2016

ISEE
INTERNATIONAL SOCIETY FOR ENVIRONMENTAL EPIDEMIOLOGY
STUDYING HUMAN HEALTH AND THE ENVIRONMENT

28th Annual Conference
International Society for Environmental Epidemiology

"Old and new risks: challenges for environmental epidemiology"

September 1-4, 2016
Rome, Italy

DEP Lazio
Department of Epidemiology
Lazio Regional Health Service
Italy (ex ASL RomaE)

SISTEMA SANITARIO REGIONALE
ASL ROMA 1

REGIONE LAZIO

ORGANIZED BY

DIEP Lazio
Department of Epidemiology
Lazio Regional Health Service
Italy (ex ASL RomaE)

SISTEMA SANITARIO REGIONALE
ASL ROMA 1

REGIONE LAZIO

ISEE
International Society for Environmental Epidemiology
Studying Human Health and the Environment

AIE Associazione Italiana di Epidemiologia

SPONSORED BY

World Health Organization
Regional Office for Europe

HEI

Istituto Superiore di Sanità

ISPRA
Istituto Superiore per la Protezione e la Ricerca Ambientale

Agenzie ambientali AssoARPA
Calabria Veneto Bolzano Sicilia Puglia Lombardia Val d'Aosta Molise Emilia Romagna Toscana Friuli Venezia Giulia Liguria Umbria Abruzzo Marche Trento Sardegna Lazio

arpae
agenzia prevenzione ambiente energia emilia-romagna

CSA
CENTRO SALUTE AMBIENTE PUGLIA

ASSESSORATO REGIONALE DELLA SALUTE
Dipartimento per le Attività Sanitarie ed Osservatorio Epidemiologico

WITH THE PATRONAGE OF

Ministero della Salute

MINISTERO DELL'AMBIENTE
E DELLA TUTELA DEL TERRITORIO E DEL MARE

Ministero degli Affari Esteri e della Cooperazione Internazionale

INAIL
Istituto Nazionale per l'Assicurazione contro gli Infortuni sul Lavoro

TABLE OF CONTENTS

Francesco Forastiere

Carla Ancona

Paola Michelozzi

Dear Friends and Colleagues,

On behalf of Department of Epidemiology, Lazio Regional Health Service (ASL Roma 1), and of the Program Scientific Committee, we are pleased to welcome the participants at the 28th Conference of the International Society for Environmental Epidemiology (ISEE). An exceptional program has been laid out for the next three days during which internationally renowned experts, researchers, and hundreds of young students from all over the world will present their research and discuss results. The theme for this conference is "Old and New Risks: Challenges for Environmental Epidemiology". The challenge is evident because the world has to face the health consequences of well-established hazards, e.g. asbestos, pesticides, air pollutants, whose exposure are still to be eliminated or limited while several vested interests often represent unsurmountable obstacles. The challenge is even more marked when we consider that during our "Anthropocene epoch" the equilibrium of nature has been distorted posing incredible threats to our planets' sustainability and populations' health. The challenge is to find innovative methods for exposure assessment, study design and data analyses to assess health effects and measure changes.

We are honored to host such an extremely high-caliber and diverse range of speakers from around the world, and we hope that the program will stimulate an enthusiastic and motivated discussion, the learning and exchange of experiences among researchers from different backgrounds. The main objectives of ISEE are to facilitate and promote research in environmental epidemiology, with International conferences as main promoters of such purposes. Our final overall aim is to inform environmental policies to improve environmental conditions, limit exposure to noxious agents, and promote a healthy well-being. Thus "consequential" environmental epidemiology.

Rome sets the scene for the conference, with its fascinating historical background, impressive monuments, beautiful areas and districts. These are to be appreciated together with all the current environmental and societal problems we face today. Traffic, air pollution, noise, heat island effect, intense urbanization, migration and increasing poverty are all current visible issues and living experiences.

However, offering its splendid culture, beautiful sights and delicious cuisine, Rome is ready to welcome everyone here for the ISEE 2016 Conference. We welcome you to this wonderful event, and to share and exchange ideas with your worldwide environmental epidemiology colleagues. We hope you will find this meeting compelling and informative. Meanwhile, we hope you will have a fruitful and impressive experience in Rome.

We would like to thank each one of you for attending the Conference and bringing your expertise to our gathering as well to all those individuals and organizations who have worked together to prepare this meeting and make it a unique event.

Welcome to Rome, welcome to ISEE 2016!

Francesco Forastiere, Carla Ancona and Paola Michelozzi

ISEE 2016, Conference Chairs

Rome, September 1st 2016

Manolis Kogevinas

On behalf of the International Society for Environmental Epidemiology, it is my pleasure to welcome you to Rome for the 28th Annual Conference of our society. Rome is one of the most popular cities in the world for visitors and home of research centres with a long term record in excellence in research in environmental epidemiology. It is no surprise that the conference has a record large registration.

The Conference Organizing Committee has planned an outstanding meeting focusing on both old and new challenges in environmental epidemiology that provides opportunities to discuss many of the environmental health issues facing our global environment. We hope you will take advantage of this opportunity to participate in interesting discussions, meet with colleagues, and forge new collaborations.

I would like to thank Dr. Francesco Forastiere, Carla Ancona and Paola Michelozzi who have served as the Conference Scientific Committee co-chairs. I want to acknowledge all of their significant contributions and the efforts of their colleagues, staff, and volunteers in organizing the conference and also the numerous ISEE members who served in scientific committees of the conference.

The success of the conference now rests on us, our presentations and participation. I encourage you to experience as much as you can, to meet new colleagues, to debate scientific perspectives, and to take some time to enjoy this wonderful city.

Welcome to Rome and to the 2016 ISEE Conference.

Manolis Kogevinas

President ISEE

Roberta Pirastu

Associazione Italiana di Epidemiologia

The Italian Epidemiological Association (AIE) is honoured to co-organize the XXVIII Conference of the International Society for Environmental Epidemiology (ISEE) and welcome you to Rome.

Our association was founded forty years ago and one of our main goals is to establish collaborations between Italian and international organizations in order to carry out epidemiological research. Environmental epidemiologists make up a considerable number of AIE members thus making the discipline very strong at the national and international level.

The ISEE 2016 Italian Organizing Committee includes AIE members and, given the international connections, has contributed to the scientific achievement of the event. AIE also recruited volunteers among its members - public health institutions, environmental protection agencies, universities - who are working to make ISEE2016 a great success.

AIE and ISEE share a common philosophy: both aim to provide a unique forum for the discussion of environmental health problems. It is an exciting time for environmental epidemiology which has advanced both in knowledge and methods, and often is asked complex questions from policy makers, stakeholders, and the public. During the ISEE2016 Conference we have the unique opportunity to rethink old hazards and to know more about new risk factors, all this could help to answer open questions.

ISEE Conferences are a fruitful exchange among researchers, academics, and graduate students. It is an opportunity to strengthen public health and reinforce protective measures directed to resolve environmental issues and to ensure health equity. If “we stay hungry, stay foolish” this XXVIII Conference will be a brilliant example of this tradition.

Roberta Pirastu

President AIE
Chair Italian Organizing Committe

THE DEPARTMENT OF EPIDEMIOLOGY, LAZIO REGIONAL HEALTH SERVICE (ASL ROMA 1) - ITALY

The Department of Epidemiology (DEP) is an institution that has been operating in Rome since 1979, within the National Health Service of the Lazio Region (ASL Roma 1). The DEP mission is to provide public health policy makers with state-of-the-art scientific evidence on the effects of environmental exposures and on the effectiveness and quality of health care. The DEP performs high quality epidemiological research in environmental and occupational epidemiology, clinical epidemiology and health services research.

Environmental and occupational epidemiology

The DEP coordinates the Lazio Regional environmental epidemiology program. The program includes epidemiological studies on several occupational and environmental risk factors and provides the institutions with the evidence base for implementing adequate policy and preventive measures. The DEP also performs epidemiological surveillance and health impact assessment on different environmental exposures (i.e. air pollution, noise, waste, water contamination electromagnetic fields) as well as performs evaluations of climate change and extreme weather events.

Clinical epidemiology and health services research

The DEP performs research on health service activities at the regional level and provides technical-scientific support to local and regional managers for decision-making. At the regional level, the DEP monitors the health status of the resident population. In addition, the DEP has expertise in systematic reviews on health care interventions and on substance abuse, pharmacovigilance and comparative effectiveness research of drug treatment, socioeconomic and demographic inequalities in access to care and health outcomes.

The DEP employs around 100 people - a multidisciplinary team which includes medical doctors, biologists, pharmacists, statisticians and mathematicians, supported by librarians, IT experts, graphic artists and web-designers.

The DEP is the National Civil Protection Center for the prevention of heat-health effects and The National Center for Outcome Evaluation Programs. The DEP hosts the editorial base of the Cochrane Centre for Drugs and Alcohol (cda.cochrane.org). It is the regional reference center for surveillance of drug prescriptions, and is a member of the European Network of Centres for Pharmacovigilance and Pharmacoepidemiology (ENCePP).

DEP manages the Regional online public health library (BAL – Biblioteca Alessandro Liberati).

visit **www.deplazio.net**

PROGRAM SCIENTIFIC COMMITTEE

Danielle Vienneau
(Abstract submission)

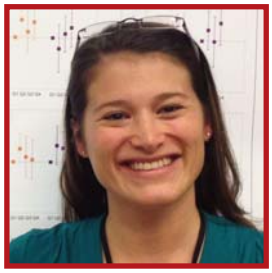
Ziad Abdeen
Isabella Annesi-Maesano
Tom Bellander
Roberto Bertollini
Bert Brunekreef
Chang-Chuan Chan
Gueladio Cissè

Hanna Boogaard
(Simposia)

Julie Cwikel
Francine Laden
Tony Fletcher
Elaine Fuertes
Nelson Gouveia
Anna Hansell
Bin Jalaludin

Barbara Hoffmann
(Early morning sessions)

Klea Katsouyanni
Manolis Kogevinas
Stephanie London
Dana Loomis
Marco Martuzzi
Adetoun Mustapha
Lucas Neas



Ana Maria Mora
(Post conference workshops)

Mark Nieuwenhuijsen
Annette Peters
Beate Ritz
Joel Schwartz
George Thurston
Martin Tondel
Berna van Wendel

ITALIAN SCIENTIFIC COMMITEE

Roberta Pirastu

Paola Angelini
Giorgio Assennato
Fabio Barbone
PierAlberto Bertazzi
Fabrizio Bianchi
Annibale Biggeri
Lucia Bisceglia
Ennio Cadum

Dario Consonni
Susanna Conti
Pietro Comba
Fabrizio Faggiano
Claudia Galassi
Emilio Gianicolo
Ivano Iavarone
Franco Merletti

Andrea Ranzi
Lorenzo Richiardi
Patrizia Schifano
Salvatore Scondotto
Massimo Stafoggia
Mariangela Vigotti

ABSTRACT REVIEWERS

Thanks to the large number of individuals who volunteered their time to review abstracts for the conference.

Michael Abramson
Gary Adamkiewicz
Margaret Adgent
Keren Agayshay
Ester Rita Alessandrini
Dr Alhaji Aliyu
Antonis Analitis
Carla Ancona
Isabella Annesi-Maesano
Kwaku Poku Asante
Claire Austin
Andrea Baccarelli
Michela Baccini
Dean Baker
Ferran Ballester
Fabio Barbone
Scott Bartell
Xavier Basagaña
Lisa Baxter
Kiros Berhane
Pietro Alberto Bertazzi
Marta Blangiardo
Ellen Boamah
Valentina Bollati
Hanna Boogaard
Riana Bornman
Gayan Bowatte
Carrie Breton
Kathleen Burns
Ennio Cadum
Michele Carugno
Maribel Casas
Wayne Cascio

Dolores Catelan
Giulia Cesaroni
Pau-chung Chen
Tsun-jen Cheng
Guéladio Cissé
Maggie Clark
Myles Cockburn
Aaron Cohen
Gwen Collman
Pietro Comba
Dario Consonni
Susana Cont
Sandra Cortes
Maria Costantini
Christine Cowie
Julie Cwikel
Payam Dadvand
Mohamed Aqiel Dalvie
Kees De Hoogh
Antônio Ponce De Leon
Manuela De Sario
Francesca de' Donato
Martine Dennekamp
Daniela D'ippoliti
Douglas Dockery
Marlose Eeftens
Andrey Egorov
Sara Farchi
Annunziata Faustini
Lucia Fazzo
Daniela Fecht
Maria Foraster Pulido
Francesco Forastiere

Michael Friger
Elaine Fuertes
Kateryna Fuks
Claudia Galassi
Ulrike Gehring
Rakesh Ghosh
Rebecca Ghosh
Emilio A. L. Gianicolo
David F Goldsmith
Nelson Gouveia
Shannon Grabich
Olena Gruzieva
Pascal Guénel
John Gulliver
Monica Guxens
Regina Hampel
Anna Hansell
Russ Hauser
Julia Heck
Joachim Heinrich
Denis Hémon
Jane Heyworth
Susan Hodgson
Gerard Hoek
Barbara Hoffmann
Jane Hoppin
Anke Huss
Ivano Iavarone
Ludmilla Jacobson
Bénédicte Jacquemin
Peter James
Rena Jones
Klea Katsouyanni

Adeladza Kofi Amegah
Manolis Kogevinas
Brama Kone
Sari Kovats
Shira Kramer
Hans Kromhout
Nino Kuenzli
Francine Laden
Margareta Lejonklou
Virissa Lenters
Zeyan Liew
Monica Lind
Jutta Lindert
Petter Ljungman
Danelle Lobdell
Mare Lõhmus
Stephanie London
Dana Loomis
Lizbeth López-Carrillo
Johnny Lorentzen
Ntsoaki Malebo
Helene Margolis
Marco Martuzzi
Milena Maule
Erik Melén
José Antonio Menezes-Filho
Catherine Metayer
Paola Michelozzi
Enrica Migliore
Dario Mirabelli
Ana Maria Mora
Nosiku Munyinda
Adetoun Mustapha

Silvia Narduzzi
Lucas Neas
Raymond Neutra
Mark Nieuwenhuijsen
Peter Odermatt
Bart Ostro
Roberto Pasetto
Annette Peters
Regina Pickford
Samya Pinheiro
Daniela Porta
Rachel Raanan
Katja Radon
Nishadi Rajapakse
Andrea Ranzi
Kristen Rappazzo
Ana Rappold
Lorenzo Richiardi
David Rojas-Rueda
Martin Röösli
Carlotta Sacerdote
Jason Sacks
Sharon Sagiv
Evangelia Samoli
Patrizia Schifano
Tamara Schikowski
Alexandra Schneider
Matteo Scortichini
Claudia Spix
Massimo Stafoggia
Marie Standl
Maciek Strak
Ta-Chen Su

Jordi Sunyer
Magnus Svartengren
Mariana Tavares Guimarães
Benedetto Terracini
Rachel Tham
Martin Tondel
Shilu Tong
Lilian Tzivian
Berna van Wendel De Joode
Ilana Shoham Vardi
Ana M Vicedo-Cabrera
Veronica Vieira
Jean-Francois Viel
Danielle Vienneau
Maria Angela Vigotti
Cristina Villanueva
Marco Vinceti
Jelle Vlaanderen
Ondine von Ehrenstein
Timothy Wade
Robert Wålinder
Katherine Walker
Marc Weisskopf
Peter Westerholm
Amanda Wheeler
Alexandra White
Janine Wichmann
Kathrin Wolf
Jun Wu
Antonella Zanobetti
Amerigo Zona

Thanks to Jane C. Schroeder, Environmental Health Perspectives

LOCAL ORGANIZING COMMITTEE

Francesca de' Donato (Chair)

Laura Ancona

Federica Asta

Giulia Cesaroni

Patrizia Compagnucci

Manuela De Sario

Daniela D'Ippoliti

Sara Farchi

Annunziata Faustini

Monica Ferri

Ursula Kirchmayer

Damiano Lanzi

Silvia Narduzzi

Rachele Pennella

Daniela Porta

Simona Ricci

Massimo Stafoggia

Simona Vecchi

SERVICES

Jacqueline Brakey, **JRB Productions,Clearfield, UT 84015** (Abstract Processing and Program creation services)
Claire Neri, **CS Events** (Conference Services)
Eric Bassanesi, **CP Centro Pilota Srl** (Technical Service)
Luca Carra, **Zadig** (Scientific Communication and Press)

VENUE

Auditorium Parco della Musica

The Rome Auditorium is a multi-functional complex dedicated to music, contributing to the enrichment of the already immense patrimony of the Eternal City. The site chosen for the construction of the Auditorium is on the narrow plain that stretches from the banks of the Tiber to the Parioli hill, located between the Olympic Village built for the 1960 Games and the Palazzo dello Sport and Stadio Flaminio, designed by Pierluigi Nervi. A site removed from the city centre offered the advantage of being able to welcome and easily handle a large audience (thanks to pre-existing infrastructure nearby), as well as occupying a space that for a long time had been a kind of artificial fracture, a "hole" in the city fabric.

The Parco della Musica was designed by Italian architect Renzo Piano, Jürgen Reinhold from Müller-BBM was in charge of acoustics in the three concert halls, Franco Zagari was landscape architect for the outdoor spaces.

The three large concert halls are Sala Petrassi, in memory of Goffredo Petrassi, about 700 seats; Sala Sinopoli, in memory of Giuseppe Sinopoli, about 1200 seats; and Sala Santa Cecilia, about 2800 seats. They are structurally separated to ensure soundproofing, though joined at the base by a continuous lobby. A fourth "concert hall", called Cavea, is the open air theater recalling ancient Greek and Roman theaters. The fan-shaped layout is formed around the central piazza. The Auditorium not only has concert halls, but also a Theatre Studio, Studios 1, 2, 3, and a foyer. The complex also includes a series of spaces for commercial, recreational, exhibition and study activities.

AUDITORIUM
PARCO DELLA MUSICA

Address:

Auditorium Parco della Musica, Viale Pietro de Coubertin 30 - 00196 Rome

Website:

www.auditorium.com

Getting there

The Auditorium Parco della Musica of Rome is on Viale Pietro de Coubertin, near the Palazzetto dello Sport, off Viale Tiziano. It is in the Flaminio district of Rome, by the Villaggio Olimpico and can be easily reached by public transport:

Public transportation

From Termini station, bus n° 910, 217.

From the historical center: bus n° 53 (Piazza San Silvestro), Metro A line Flaminio stop (Piazza del Popolo) then no.2 tram to Pietro de Coubertin Auditorium stop)

By car

From the G.R.A. (ring-road around Rome) take the Flaminio Saxa Rubra exit towards Corso di Francia

Or from the Lungotevere Flaminio turn off into Viale Tiziano and then again at the Palazzetto dello Sport (covered sport complex)

There are large parking garages near the Auditorium Parco della Musica with designated areas for disabled visitors.

GENERAL CONFERENCE INFORMATION

Registration Desk

Telephone number +39 0680241713

Opening hours

Wednesday, August 31	16:30-20:00
Thursday, September 1	8:00-18:00
Friday, September 2	7:30-18:00
Saturday, September 3	7:30-18:00

Badges

All conference participants receive a name badge when registering for the conference. It serves as an entrance ticket to all conference-related events, including the social dinner, lunches, and coffee breaks and must be worn at all times. A conference map is included with the badge.

Conference bags

ISEE 2016 provides reusable long-lasting bags made entirely from recycled plastic materials produced under fair-trade conditions by REFUGEE ScArt – migrant art. Refugee ScArt is a humanitarian project sponsored by the U.N. High Commissioner for Refugees (UNHCR).

Getting to the Sinopoli Hall

The Sala (Hall) Sinopoli is the large auditorium used for the plenary sessions. It accommodates about 1200 persons in the stalls and in the circle. It is a concert hall and it may take some time for you to reach your seat. Please, be sure to arrive and enter the hall well before the start of the plenary sessions.

Internet access

Free WIFI internet access is available. The password is **ISEE2016**.

The WIFI works for PCs and new generation mobiles and tablets equipped with dual band.

Please note: WiFI is provided in the Foyer and common areas, not in the conference rooms.

An Internet point is located in the Foyer (see the map). At the same spot, a charging station is provided for PCs/tablets/mobiles.

Posters

The poster sessions are held in the Foyer and Poster Areas (see the map). Posters should be on display from 8:30 (at the latest) to 18:00. There is a poster information point (as indicated on the map) located in the Foyer to help you find your designated spot and to pick up printed posters ordered from the ISEE 2016 web site. Plan enough time to display your poster, dedicated staff will assist you onsite. At the end of each day, posters need to be taken down, so please make sure to collect your poster no later than 18:00.

Each day, a selection of the best rated posters (highlighted in the program book) are presented in “Poster Corners” of each poster area.

Slide Center

Opening hours:

Thursday, September 1	9:00-18:00
Friday, September 2	7:00-18:00
Saturday, September 3	7:00-18:00

The PowerPoint slide **format is 4:3** (16:9 only for the plenary sessions in Sala Sinopoli). PowerPoint presentations must be compatible with Microsoft Office 2010.

All presentations need to be uploaded from the Slide Center where technical staff assist with the upload of your files and provide the opportunity to preview your presentation. Please note, that uploading your presentation in the session room itself will not be possible.

Please bring your presentation on a USB stick and ensure that your presentation is uploaded well in advance (at least 2 hours before your oral presentation). If you are unavoidably delayed, you must still go directly to the Speaker Ready Room.

Do not plan to use your own laptop for presentations. Apple Mac computers will not be provided in any of the ISEE session rooms.

If you intend to use multimedia or similar content in your presentation, communicate with the Slide Center staff well in advance to ensure that your presentation will run smoothly.

Please plan to arrive at your presentation room a few minutes in advance. Presentation files will be preloaded on the laptops in the individual Conference rooms.

Lunches

A buffet lunch is provided for all participants from Thursday to Saturday, from 12.15 to 13.00 in the Foyer of the Auditorium. We offer seasonal, locally produced food typical of the Mediterranean, including vegetarian dishes. A gluten-free menu is also available. Food is not allowed in the conference rooms of the Auditorium.

Cocktail reception

A cocktail reception will be held at the Auditorium at the end of the first day of the Conference on Thursday, September 1 from 19:30 till 21:30. During the cocktail, the Students and New researchers network (SNRN) will be performing the first ISEE Science Slam.

ISEE General Members meeting

The ISEE general meeting will be held on Friday, September 2, in Teatro Studio from 17:40 to 19:00.

ISEE Conference dinner

The conference dinner is scheduled on Friday, September 2, at Villa Piccolomini (www.villapiccolomini.it).
See the specific page in this program.

Taxi telephone numbers

06.3570 or 06.5551 or 06.6645

Water

Drinkable water is available at the “Water House” located just in front of the Auditorium venue, and in all the restrooms.

First aid

Medical first aid is available at the entrance (left side) of the venue (see the map).

ATM Machine

An ATM machine is available outside the venue (see the map).

People with restricted mobility

Auditorium Parco della Musica supplies assistance for people with restricted mobility, staff members can escort them to the lifts and to the reserved seats in the Rooms. Special passenger shuttles will be available for people with mobility problems to carry them to the Social event venue.

Smoking

Smoking is not allowed in any area of the Conference Venue.

Air conditioning

Central air conditioning is provided at the Auditorium. The dress code is casual. Please feel free to wear comfortable clothes suitable for walking to and from the venue in warm weather.

THURSDAY, SEPTEMBER 1

11:15 - 12:15 Sala Sinopoli

OPENING PLENARY SESSION "TRADITIONAL RISK FACTORS IN ENVIRONMENTAL HEALTH"

Chairs: Carla Ancona, Josep Maria Antó

Pier Alberto Bertazzi

Pietro (Pier) Alberto Bertazzi, Università degli Studi di Milano, Italy

Industrial disasters: 40th anniversary of the Seveso accident in Italy

The 1976 disaster in Seveso, Italy left a legacy of utmost relevance and contributed to a major shift in the way society, people and industry consider the environment-and-health issue. Main aspects of this legacy concern policy, science, research and the community. Policy: The accident prompted the adoption of new EU legislation on the control of industrial activities and their effects on the environment and people's health. Science: The accident provided further insight into the effects of 2,3,7,8-tetracholorodibenzo-p-dioxin (TCDD) on humans. Research: Seveso made it clear that for a complete health impact assessment, in addition to chemical exposure, the post-disaster stress, personal characteristics and the measures implemented to respond to the disaster should be considered. Community: People need to be protected, but also to play an active role in the response and recovery phases. Proper communication and participation avoid mistrust, control stressful factors and foster population resilience.

Pietro (Pier) Alberto Bertazzi, MD, MPH began his career as an internist at the Milan University Hospital in Italy. The opportunity to address occupational health problems and care for working patients progressively led him to widen his scientific and medical interest to the study of people's living and working environments. He completed his training at the UNC School of Public Health in Chapel Hill, NC and at NIOSH in Cincinnati, OH. His main focus was on the employment of epidemiological methods for the study, recognition and management of work-related disease determinants. When new tools for the study of molecular mechanisms of exogenous risk factors became available, he set up a molecular epidemiology lab where biologists, epidemiologists, statisticians, physicians and other scientists worked together. One major result was the US-Italy collaborative case-control study on "Environment And Genetics in Lung cancer Etiology-EAGLE". Environmental epigenetics is the latest development of his work with studies focused on benzene, air pollution and metals. He was temporary advisor to several international organizations (WHO, EU, ILO-BIT, IPCS). In the mid-eighties, he became professor at the Milan State University Medical School where he was appointed director of the Department of Clinical Sciences and Community Health with a joint appointment at the Department of Preventive Medicine of the Milan Fondazione Ca' Granda Policlinico Hospital.

Annette Peters

Annette Peters, Helmholtz Zentrum München, Germany

Air Pollution Health Effects: What we know and what we should know

Health effects of ambient air pollution have been consistently demonstrated over the past decades. An association between short-term and long-term exposures to ambient particulate matter with morbidity and mortality was observed. Combustion-related particles and gaseous pollutants are responsible for a substantial burden in urban areas around the globe. Recent data suggests that beyond the lung, the cardiovascular system is affected as well as other organs. The pathophysiological mechanisms hypothesized to be responsible for triggering the events as well progression of disease will be reviewed. The pollutants themselves do not act in isolation and individuals are exposed to various risk factor combinations including behavioral and life-style related risk factors, socio-economic factors. While continued research efforts are needed to substantiate the science base, there is sufficient evidence to further strengthen efforts around the world to provide clean air for all.

Annette Peters directs the Institute of Epidemiology II at the Helmholtz Zentrum München – German Research Center for Environmental Health, Neuherberg, Germany. She studied biology, mathematics and epidemiology at the Universities in Konstanz and Tübingen, Germany as well as at the Harvard School of Public Health, Boston, USA. She has pioneered work identifying the link between ambient particulate matter and cardiovascular disease exacerbation. Furthermore, she was among the first examining the role of ultrafine particles in epidemiological studies. Today, she directs the population-based KORA cohort in the region of Augsburg, is a principal investigator of the German National Cohort and a member of its board of directors. Her research interest is to integrate the assessment of environmental exposures with chronic disease epidemiology and biomedical approaches utilizing high throughput technologies such as whole genome-wide methylation or metabolomics. She has served on numerous scientific panels and expert groups including the group that drafted the global guidelines on air pollution published in 2005 by the World Health Organization, a panel that advised the International Olympic Committee during the Beijing Olympics in 2008 and chaired a grant panel of the European Research Council. She teaches as an adjunct associate professor at Ludwig-Maximilians Universität, München, Germany and at the Harvard School of Public Health, Boston, USA.

Foto: Michael Haggenmüller/ Helmholtz Zentrum München.

FRIDAY, SEPTEMBER 2

08:30 - 10:15 Sala Sinopoli

PLENARY SESSION "NEW ISSUES IN ENVIRONMENTAL HEALTH"

Chairs: Paola Michelozzi, Nino Kunzli

Donna Mergler

Donna Mergler, Université du Québec à Montréal, Canada

Gender-based analysis of environmental factors

We all know that boys and girls, men and women differ biologically and in their social and power relations throughout the life span. However, research in environmental epidemiology often does not consider sex and/or gender as a characteristic that requires in-depth consideration. The terms sex (biological attributes) and gender (socially constructed roles and behaviour) are often confused and used interchangeably. Throughout the lifespan, sex and gender are in interaction and both may play a role in influencing exposure and effect. Adjusting for sex/gender as a covariate does not necessarily take into account the underlying biological processes, the gender-related environmental profile of exposure, the social modifiers or the consequences on health and well-being. Integration of sex and gender considerations into research design and analyses would improve our understanding of exposure pathways and the associations between environment and health outcomes, as well as providing better gender- and sex-sensitive intervention strategies to reduce harmful environmental exposures and improve health.

Donna Mergler is a Professor Emerita at the Université du Québec à Montréal (UQAM), where she had been a professor in the Department of Biological Sciences. She is a member of the research group CINBIOSE (Centre de recherche interdisciplinaire sur la biologie, la santé, la société et l'environnement), the World Health Organisation and Pan-American Health Organisation Collaborating Centre for the Prevention of Occupational and Environmental Illness. The primary focus of her research is on early neurotoxic effects of exposure to occupational and environmental pollutants, including manganese, methyl mercury, persistent organic pollutants, solvents and pesticides. Over the past twenty years, she has contributed to the development of an ecosystem approach, which is grounded in methods involving community participation, combining quantitative and qualitative information, and gender and social equity, with a view to bringing about concrete and lasting solutions to problems of environmental degradation and pollution. Between 2008 and 2014, she headed a Canadian Institutes for Health Research (CIHR) Emerging Team on Gender, Environment and Health, whose objective was to develop new methods for incorporating sex and gender considerations into environmental health research and intervention.

Donna Vorhees

Donna Vorhees, Health Effects Institute, USA

What does the science behind hydraulic fracturing headlines tell us about health risk?

The rapid expansion of shale oil and natural gas development in the United States brings significant opportunities along with questions and controversies about its potential effects on the health of people living nearby. Widespread media reports about contaminated water and air have fueled community concerns. Might living near shale development put people at increased risk of adverse health effects? The scientific literature is growing, with use of various methods to assess whether and how people's health might be affected by shale operations. Ideal studies would include reliable measures of both exposure and health outcomes in the same population, but such studies are lacking. This presentation will summarize what research has told us to date and the questions that remain. It will conclude with a proposed path forward to answer the questions with research that is not only of high quality, but also has the necessary credibility for acceptance by individuals with widely divergent views and for use to develop sound policy.

Donna Vorhees directs the energy research program at HEI. She is leading an effort to develop and implement a Strategic Scientific Research Agenda designed to understand potential human exposures and health effects from unconventional oil and gas development and how they might be prevented or minimized. Dr. Vorhees has 25 years of consulting experience, assessing multi-pathway chemical exposures in indoor and outdoor environments, quantifying human health risks, and communicating risks to affected communities in the United States on behalf of government and private clients. Dr. Vorhees has conducted similar assessments in Nigeria and Cote d'Ivoire on behalf of the United Nations Environment Program. She currently serves on the USEPA Board of Scientific Counselors Subcommittee on Chemical Safety for Sustainability, has served on National Research Council committees (Health Risks of Phthalates and Sediment Dredging at Superfund Megasites) and other advisory committees, and has been a peer reviewer on numerous health risk assessments prepared by the USEPA, the Consumer Product Safety Commission, and Health Canada. She is Adjunct Assistant Professor at the Boston University School of Public Health where she teaches Risk Assessment Methods. Dr. Vorhees received her ScM and ScD in Environmental Health from the Harvard School of Public Health.

Andy Haines

Andy Haines, London School Hygiene and Tropical Medicine, UK

Facing the challenge of climate change-the prospects for health following the Paris agreement

Climate Change is a consequence of the emissions of carbon dioxide from fossil fuel combustion and other sources together with the emissions of short lived climate pollutants (SLCPs) – including methane, black carbon (BC) and Hydrofluorocarbons (HFCs). The ground breaking negotiations in Paris were widely considered to be a political success but staying below 2°C temperature rise, a widely accepted target, implies that CO2 emissions are reduced to net zero by 2060-2075. Current unconditional commitments of emission reductions are insufficient to achieve the 2°C target and could result in a world which is on average 3 degrees or so hotter than pre-industrial times. This would have major implications for human health including through increases in exposure to thermal stress, floods and droughts, impacts on crop yields and food security. Policies to achieve deeper cuts in greenhouse gas emissions are needed in a range of sectors including energy, transport, the built environment and food and agriculture. These would bring health co-benefits as a result of reduced air pollution, increased physical activity and healthier diets.

Sir Andy Haines is Professor of Public Health and Primary Care at LSHTM. He was Dean (subsequently Director) of the London School of Hygiene & Tropical Medicine for nearly 10 years until October 2010.He was a family doctor in inner London for many years and formerly Professor of Primary Health Care at UCL. His international experience includes a secondment at WHO Geneva and working in Jamaica, Nepal and the USA. His publications cover topics such as climate change and health, evaluation of complex interventions in primary care and various aspects of global health policy. He has been a member of many national and international committees including the UN Intergovernmental Panel on Climate Change (for the 2nd, 3rd and 5th assessment reports), the WHO Advisory Committee on Health Research, the Sustainable Development Solutions Network and is currently a member of the Scientific Advisory Panel of the UNEP-hosted Climate and Clean Air Coalition. He was chair of the Task Force on Climate Change Mitigation and Public Health which published a series of articles in the Lancet in 2009 and the Rockefeller Foundation /Lancet Commission on Planetary Health which published its report in 2015. His research interests currently focus on the implications of global environmental change for health.

SATURDAY, SEPTEMBER 3

08:30 - 10:15 SALA SINOPOLI

PLENARY SESSION "METHODOLOGICAL CHALLENGES IN ENVIRONMENTAL EPIDEMIOLOGY"

Chairs: Roberta Pirastu, Robert Devlin

Joel Schwartz

Joel Schwartz, Harvard University, USA

Causal inference in environmental epidemiology

Joel Schwartz, Ph. D is a Professor in the departments of Environmental Health and Epidemiology at the Harvard School of Public Health, on the steering committee of the Harvard University Center for the Environment, and Director of the Harvard Center for Risk Analysis. His major research interests include health effects of air pollution, of heavy metals, climate change, and drinking water. He has examined these questions using a variety of methods including time series, case-crossover, and case-only analyses of administrative data, survival and repeated measures analyses of cohorts, panel studies, etc. These have included a range of outcomes from cognitive function to biomarkers of heart disease to mortality. He has recently focused on environmental epigenetics, as well as gene-environment interaction studies. In addition, he has been involved in exposure modelling, including both land use regression approaches as well as use of remote sensing data and chemical transport models, and in methodological issues, including dose-response modelling, causal modelling, and data fusion. Prof. Joel Schwartz was a recipient of a John D and Catherine T MacArthur Fellowship.

Roel Vermeulen

Roel Vermeulen, Utrecht University, The Netherlands

Exposome and Omics

Recent years have seen tremendous technological advances in array and sequence based biotechnologies where the number of markers being measured can be described by an exponential function closely following Moore's law. These advances enable investigators to now explore broadly the full range of the molecular epidemiology paradigm: 1) exogenous and endogenous exposures, 2) downstream molecular signatures of such exposures, 3) early signs of adverse biological effects, 4) preclinical disease, and 5) clinical subtypes of disease and the interaction of these steps with the genome. In this delineation of events the specificity of the exposure signal is likely to decrease while mechanistic and disease specific signals increase. As such, at every point of this delineation a mixture of OMICs signals are likely to be present varying from purely exposure, to a mixture of exposure, mechanistic, and early disease, to primarily disease signals. In this view of OMICs in environmental health, the area of Exposomics focuses primarily on steps I and 2 of the delineation while the downstream events (steps 3 to 5) of the molecular epidemiology paradigm focuses more on understanding the underlying mechanism of exposure-disease relationships and identifying translational opportunities at the individual level. While conceptually these biotechnological advances allow for this delineation, and early work provides promise, there remain challenges in the use and interpretation of OMICs in environmental health research.

Dr. Roel Vermeulen is an Associate Professor at the Institute of Risk Assessment Sciences at Utrecht University, The Netherlands and holds an adjunct Professor position at the Public Health department at the University Medical Center Utrecht, The Netherlands and a Visiting Professorship at Imperial College London, London, UK. Dr. Roel Vermeulen is trained in occupational hygiene/exposure assessment and molecular/occupational/environmental epidemiology.

Shira Kramer

Shira Kramer, Epidemiology International, Inc. USA

Taking Sides in the Courtroom: The Epidemiologist as Expert and Advocate

Epidemiologists can serve justice and influence policy as expert witnesses in the legal arena of tort actions by providing testimony relating to causation. "Expert" implies extensive, balanced knowledge of a particular area of study. The combative modus operandi in the courtroom, however, undermines objectivity as experts are thrust into the role of advocates. Multiple drivers propel this position, including the compelling and often egregious facts of the case, unethical actions by defendants and their counsel, attacks on experts, untrained fact finders who are unable to evaluate complex data or misrepresented epidemiological principles, and imbalances in resources when challenging powerful moneyed interests. Despite these obstacles, participation in this highly impactful process is critical to our mission, balancing the roles of impartial expert and courtroom advocate. The experiences that led to my engagement in over thirty cases against large corporate defendants are illustrated with selected issues from the first large case for which I served as a key causation expert.

Dr. Shira Kramer holds a B.A. in the Biological Sciences from The Johns Hopkins University, a Master's degree in Human Genetics, and a Ph.D. in Epidemiology, both from The Johns Hopkins University School of Public Health. Dr. Kramer served on the faculty of the University of Pennsylvania School of Medicine and the Children's Cancer Research Center of the Children's Hospital of Philadelphia, from 1978-1984. She conducted research into the epidemiology/etiology of childhood cancers, taught epidemiologic methods, and co-authored two textbooks. Dr. Kramer founded, and serves as President of two companies, Epidemiology International and Sterilex Corporation. Epidemiology International conducts research on the health effects of environmental, occupational, and pharmacological agents. Sterilex Corporation develops antimicrobial products targeting resistant microorganisms and bacterial biofilm. During her professional career, Dr. Kramer has served as an epidemiological expert witness in state and federal courts in over thirty cases as a plaintiff's expert. She is a co-author of the ISEE Ethics Guidelines for Environmental Epidemiologists.

17:40 - 18:45 SALA SINOPOLI

PLENARY SESSION "AFTER GLYPHOSATE: EVIDENCE EVALUATION FOR PUBLIC HEALTH POLICY"

Chairs: Michal Krzyzanowski, Manolis Kogevinas

Discussants: Erik Lebret (RIVM Netherlands) and Mireille B. Toledano (Imperial College UK)

Rodolfo Saracci

Rodolfo Saracci, IARC, Lyon, France

The hazards of hazard identification

Hazard identification , the first step in the path towards control of toxic exposures, is itself composed by multiple steps involving problematic aspects that range from fundamental epistemology of causation in science to operational questions on how to evaluate results from studies affected by minor or major shortcomings . Three problematic aspects, potentially 'hazardous' for the process of hazard identification, are worth discussion in view of recent methodological developments and case-based debates, notably in the area of carcinogens identification. First how grading of the evidence for or against toxicity in humans may combine criteria to define causality with empirical testability of causal hypotheses. Second how prior assumptions, often implicit, about possible toxicity may influence the interpretation of available results, in particular from epidemiological investigations. Third how objective conditions of conflict of interest may even inadvertently affect the judgment of scientists taking part in the identification process. Clarity about these aspects can help to prevent distortions resulting in false negative or false positive hazard identifications.

Dr. Rodolfo Saracci qualified as an MD, followed by work and a specialty in internal medicine and by a postgraduate degree in medical statistics. He 'discovered' epidemiology at the MRC Statistical Research Unit in London - directed by the late Sir Richard Doll - that he had joined for training in clinical trials methodology. His extended career as a research epidemiologist has been principally developed at the WHO International Agency for Research on Cancer (IARC) in Lyon as a staff member and Chief of the Unit of Analytical Epidemiology. He is currently Senior Visiting Scientist at IARC where he also chaired the Ethics Review Committee. His main research has been on cancers in relation to the general, domestic and occupational environment, interactions between carcinogens and methods of exposure assessment in the context of epidemiological studies. He has also kept an active interest on ethical issues in epidemiology and a continuous involvement in teaching of epidemiological methods: in 1988 he founded the European Educational Programme in Epidemiology of which he has been the Director until 2013 and is currently a teacher. He is a Fellow of the UK Faculty of Public Health and has been President of the ADELF, Association des Épidémiologistes de Langue Française and of the IEA, International Epidemiological Association.

CONFERENCE DINNER

The conference dinner will be on Friday, September 2, 19:30 - 23:30, at Villa Piccolomini (www.villapiccolomini.it), Via Aurelia Antica 164, a renaissance villa surrounded by a beautiful park with breathtaking views of the city and of Basilica San Pietro. The dinner will be based on the flavors of the Mediterranean, entertainment will start with live music by Nando Citarella (www.nandocitarella.it), great interpreter of Classical Neapolitan Song, and his group made up of guitars, mandolins, vocals, percussion, keyboards and dancers.

The concert will be followed by a DJ set and dancing.

A free bus service will be available from Auditorium to Villa Piccolomini.

Buses will depart just outside the Cavea (main entrance) from 19:00 up until 19:30.

Return trips back to the Auditorium will be from 23:00 to 24:00. The bus will stop at:

- **Largo Bartolomeo Gastaldi** (Hotel Polo and Hotel Duke);
- **Via Filippo Civinini** (Hotel Regent and Grand Hotel Ritz);
- **Piazza delle Muse** (Grand Hotel Hermitage);
- **Auditorium**.

To enter the Conference dinner **bring your badge and the ticket for any accompanying persons**.

STUDENT AND NEW RESEARCH NETWORK EVENTS

SNRN Science Slam - 20:00 Thursday, September 1 - Foyer

The first ISEE Science Slam will take place during the Conference cocktail reception. Five contestants will present their research in an entertaining 8-minute performance. Come and vote for the best performance!

SNRN Early Morning Sessions

7:30- 8:30 Friday, September 2
"An Interactive Ethics Workshop for Young Researchers – a Joint Session of the ISEE Ethics and Philosophy Committee and the SNRN"

7:30- 8:30 Saturday, September 3
"Building Your Network: How to Connect and Make it Count"

SNRN Connection Corner - 10.15-10:45, September 2 - 3

The SNRN Connection Corner is a casual meeting space where senior investigators and grant program officers make themselves available so that students and new researchers can stop by and chat with them in an informal relaxed atmosphere. The SNRN connection Corner is located in the Cavea just opposite the RISONANZE Room and is open from 10:15-10:45 (during the morning coffee breaks) on September 2 and 3.

Social event - ISEE World Cup - 19:00 Saturday, September 3

A 5-a side mixed football tournament will take place on Saturday, September 3 from 19:30 onwards at Orange Futbolclub (www.futbolclub.it) Via degli Olimpionici, 71. Students and New researchers can be part of a team and play or just come along and cheer while having an Italian style "aperitivo" and meet new ISEE members. A dedicated lounge area with background music, drinks and snacks will be available next to the football pitches.

Check the web page www.isee2016roma.org for further details.

CONFERENCE SUSTAINABILITY

Several efforts have been made to minimize the environmental impact and carbon footprint of the 28th ISEE Annual Conference.

Lunches and refreshments

Only seasonal, Mediterranean food from regional producers will be provided, with a strong preference for vegetarian options. During lunches and refreshments, beverages will be served in glass bottles and cups. Tap water will be served as the main beverage during the conference. A prefabricated water house will be made available for conference participants to get fresh sparkling and natural water from local aqueducts. Water from all the fountains in the city is drinkable.

Conference material

Conference bags are durable and reusable, made entirely from recycled plastic materials produced under fair-trade conditions by REFUGEE ScArt – migrant art. Refugee ScArt is a humanitarian project funded by the Spiral Onlus Foundation and sponsored by the U.N. High Commissioner for Refugees (UNHCR) – Office South Europe. In a workshop space made available by Rome's solid waste treatment company, refugees transform plastic waste materials into artistic fabric-like sheets which are then used to manufacture objects.
Visit www.refugeescart.org.

Reusable water bottles/cups will be provided to all participants.

The organizing committee will reduce promotional material and encourages participants to collaborate in reducing paper waste by using the electronic version of the conference program which will be available on the website before the conference start date.

Certificates of attendance. Certificates will be sent via email, again minimizing the use of paper and printing.

Transportation to the conference social dinner

Buses from the Rome public transport service have been reserved for Friday evening to transport guests from the conference venue to the social evening venue, Villa Piccolomini. The meeting point will be communicated to participants during the conference.

While in Rome, conference participants are encouraged to use public transport.

The most sustainable way of moving in Rome is by bicycle. Visit the map of the bike roads in Rome (www.agenziamobilita.roma.it/it/piste-ciclabili.html).

Accommodations

The organizing committee recommends hotels and hostels in proximity to the conference and venues to reduce the transportation impact of the event.

Waste

Throughout the Conference, efforts will be adopted to ensure the minimization of waste production and the promotion of selective waste collection and recycling. The catering service follows an environment-friendly code.

Social activities

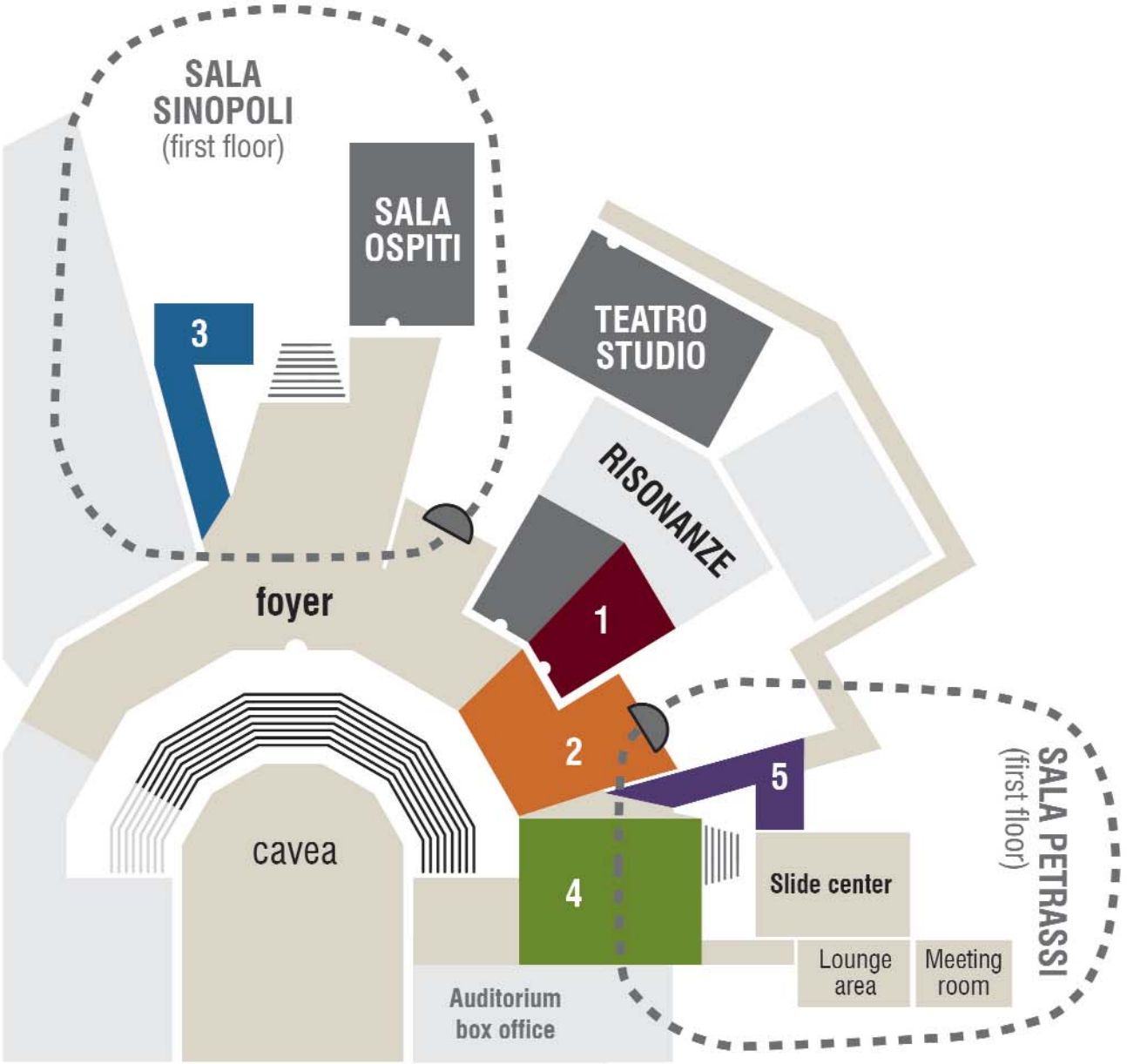
Among the social activities are some sporting events organized to promote physical fitness and wellness of conference participants. Visit www.isee2016roma.org/events.

SOCIAL RESPONSIBILITY

We try to remove barriers to accessibility that can result from challenges and circumstances such as physical limitations (e.g. restricted mobility) and social differences (social status and nationality).

Special passenger shuttles will be available for people with mobility problems to carry them to the Social event venue.

The conference venue Auditorium Parco della Musica provides a special textured footpath for the blind or visually impaired that guides guests with special needs from the entrance to all the Rooms. Inside the venue, there are several tactile maps to guide guests to the different halls and the other places inside the building. Auditorium Parco della Musica supplies assistance for disabled people, staff members can escort them to the lifts and to the reserved seats (that are always placed close to the best rows).



Poster area	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5
Thursday, September 1	Air pollution respiratory disorders - Adults & children, Air pollution cardio-metabolic disorders	Children's Environment and Health, Built Environment & Green Space, Waste,	GIS, Statistical Methods, Environmental Equity, Womens health	Biomass Burning, Perinatal Exposures & Reproductive Health, Radiation Risk Assessment	Noise, Causal Inference, Arsenic
Friday, September 2	Air Pollution Reproductive, Air Pollution - Neurological, Chemicals\Metals, Review methods	Indoor, Air pollution cardio-metobolic disorders, Organic Chemicals	Air Pollution Exposure assessment Children's Environment and Health	Biomarkers, Policy, Cancer & Enviornment	Epigenetics, Health Impact Assessment
Saturday, September 3	Climate change, Temperature related effects, Water	Children's Environment and Health, Ageing Endocrine disruptors	Occupational exposures , Food\nutrition Microbiome, Health Impact Assessment	Air Pollution Exposure assessment, Cancer & Enviornment, Environmental Disasters, Ethics	Exposome, Epigentics, Exposure Assessment

JOHN GOLDSMITH AWARD FOR OUTSTANDING CONTRIBUTIONS TO ENVIRONMENTAL EPIDEMIOLOGY

The John Goldsmith Award is for sustained and outstanding contributions to the knowledge and practice of environmental epidemiology. This annual award was established to honor John Goldsmith, one of the organizers, early leaders, and constant supporters of the ISEE, who passed away in October 1999. ISEE has chosen Dr. Philippe Grandjean, MD, DMSc, as the recipient of the 2016 John Goldsmith Award.

During the Plenary Session on the evening of **Thursday, September 1**, Dr. Grandjean will deliver the Goldsmith Award Lecture: "Environmental epidemiology – lost in translation?"

Philippe Grandjean

Dr. Grandjean is Professor of Environmental Medicine at the University of Southern Denmark and Adjunct Professor of Environmental Health at Harvard School of Public Health. He is a founding Editor-in-Chief of the open-access journal Environmental Health. He serves as member of the European Environment Agency's scientific committee and the World Health Organization's European Advisory Committee on Health Research. His research on children's health and environmental pollutants has been supported mainly by the National Institute for Environmental Health Sciences and has led to 300 journal publications. Grandjean's book "Only one chance - and How to Protect the Brains of the Next Generation" was well received and has now been translated into French ("Cerveaux en danger") and Danish. In 2004, he received the 'Mercury madness award' from eight US environmental NGOs, in 2012 the Science Communication Award from the University of Southern Denmark, and in 2015 the Bernardino Ramazzini Award.

Environmental epidemiology - lost in translation?

Epidemiology has been ridiculed as a black-box endeavor that contemplates associations but leaves causality as an elusive mystery. The critique is unfair, but two crucial issues need renewed attention: 1) What could the implications of the pertained hazard be in a worst-case scenario? 2) Do our findings appropriately represent the specific hazard and its plausible effects? Unfortunately, so-called Type 3 errors are common, and we often fail to recognize how imprecision causes bias. Inference can then become narrow and misleading. While avoiding empty advocacy, we need to sharpen our translation of environmental epidemiology. In a science narrative, our research can fall victim to unwarranted politicking; and in a public health narrative, it falls victim to callous ivory towering. These views are not contradictory but reflect the crossfire when research aims at inspiring public health action. Responsible translation of our research is obligatory in our commitment to public health.

REBECCA JAMES BAKER MEMORIAL PRIZE

In August 2004, environmental epidemiologist Dr. Rebecca James Baker died unexpectedly at the age of 33, of a pregnancy-related heart condition. Rebecca was particularly committed to environmental epidemiology as a tool for improving public health and quality of life and to working with people from different cultures and backgrounds.

To honor Rebecca's memory and to encourage students and new researchers to follow her example, the Rebecca James Baker Memorial Prize is awarded each year at the ISEE Annual Conference.

The awardee is selected among graduate students and new investigators within three years of having completed their degree who are first authors on an accepted abstract for the Annual Conference.

The awardee for this year will be announced during the Plenary Session on the evening of **Thursday, September 1**, namely:

Ana Maria Mora

Dr. Mora completed her PhD degree in Epidemiology at UC Berkeley School of Public Health in May, 2014 and is currently working as an Associate Professor at the Central American Institute for Studies on Toxic Substances (IRET) at the Universidad Nacional in Costa Rica, and a Postdoctoral Fellow at the Department of Environmental Health at Boston University School of Public Health. She has been involved with studies focused primarily on the health effects of exposures to environmental toxicants, including pesticides, heavy metals, and per- and polyfluoroalkyl substances, in pregnant women and children.

Dr. Mora is a native of Costa Rica and she completed her Medical Doctor degree from University of Costa Rica in 2005. After finishing her PhD degree in the US, she moved back to Costa Rica and has been living there since.

TONY MCMICHAEL MID-TERM CAREER AWARD

The Tony McMichael Award is funded by an AJ (Tony) McMichael Endowment Fund that is held at the Australian National University, where Tony was Director of the National Centre for Epidemiology and Population Health. The Tony McMichael Mid-Term Career Award recognizes a mid-career scientist who has pursued innovative, independent research in environmental epidemiology. The awardee is an innovative scientist, has been recognized as an excellent mentor and teacher of environmental epidemiology, has made significant contributions to the practice of environmental epidemiology and has contributed meaningfully to ISEE. This annual award was created to honor Tony McMichael, who passed away in 2014. He was a world-renowned epidemiologist, known not only for his original scientific work, but also for his compassionate mentoring of junior colleagues. Tony is described as being "visionary, inspirational and an epidemiologist in a league of his own". He was a pioneer, in particular exploring the myriad pathways whereby global climate change will affect our health and well-being. Tony was deeply involved with the International Society for Environmental Epidemiology, including a term as President from 2008-2009. The Australian National University is delighted to be able to award the Tony McMichael Award at the ISEE annual conference to one or more outstanding mid-career researchers.

The inaugural Tony McMichael awardees will be announced by Prof. **Robyn Lucas** during the Plenary Session on the evening of **September 1**. The award will go to:

Dr. **Mireille Toledano** is a senior lecturer in epidemiology at Imperial College London and an investigator of the MRC-PHE Centre for Environment and Health specializing in environmental and spatial epidemiology. She was awarded a Master's degree in environmental epidemiology from the London School of Hygiene and Tropical Medicine, and a PhD in Epidemiology from Imperial College London. Her research to date focuses on early life epidemiology and environmental exposures, including birth, child and adolescent health in relation to water quality and disinfection by-products, air pollution, noise, non-ionizing radiation, waste incineration and green space. Her primary interest is the set-up and coordination of longitudinal studies involving the collection of new environment and health databanks as a resource to the environmental epidemiologic community. These include COSMOS, a cohort of 105,000 adults across the UK, the SCAMP neuro-cognitive and behavioral cohort of 6,000 adolescents across London including biological samples and the IBMS study, the largest collection of breast milk around sources of urban environmental pollution across the UK and 2nd largest in Europe. She is a past Councilor of ISEE and is currently vice-Chair of the ISEE European Chapter.

Marc G. Weisskopf, Ph.D., Sc.D., is Associate Professor of Environmental and Occupational Epidemiology at the Harvard T.H. Chan School of Public Health in the departments of Environmental Health and Epidemiology. Dr. Weisskopf received his Ph.D. in Neuroscience from the University of California, San Francisco, and his Sc.D. in Epidemiology from the Harvard School of Public Health. He also spent two years as an Epidemic Intelligence Service Officer with the Centers for Disease Control and Prevention working on environmental health issues in the Wisconsin State Health Department. His neuroscience work focused on molecular and cellular aspects of neural signaling and plasticity. His epidemiological expertise and research focuses on environmental risk factors for neurological function and disease, including autism spectrum disorders, amyotrophic lateral sclerosis, Parkinson's disease, cognitive function, and psychiatric conditions. Dr. Weisskopf also explores the use of physiologically-based methods for assessing toxicant effects on the brain, and epidemiological methods issues that relate to environmental health studies. He is currently a Councilor of ISEE.

BEST ENVIRONMENTAL EPIDEMIOLOGY PAPER AWARD

This ISEE annual award for the best environmental epidemiology paper published in a peer-reviewed journal aims to recognize excellence in the field of environmental epidemiology and encourage the publication of outstanding papers. Criteria for the award include but are not limited to: quality, originality, importance/impact, and relevance to environmental epidemiology. The winning paper is selected by the ISEE Best Environmental Epidemiology Paper Award Committee and approved by the ISEE Council. The handling editor of the journal in which the paper is published will receive a special certificate.

ISEE has selected the Best Environmental Epidemiology Paper Award for 2015:

Gasparrini A, Guo Y, Hashizume M, Lavigne E, Zanobetti A, Schwartz J, Tobias A, Tong S, Rocklöv J, Forsberg B, Leone M, De Sario M, Bell ML, Guo YL, Wu CF, Kan H, Yi SM, de Sousa Zanotti Stagliorio Coelho M, Saldiva PH, Honda Y, Kim H, Armstrong B. **"Mortality risk attributable to high and low ambient temperature: a multicountry observational study"** Lancet 2015; 386(9991):369-75.

NEW RESEARCHER BEST ABSTRACT AWARD

ISEE presents two awards to the best abstracts in environmental epidemiology submitted to the annual conference by a new researcher. New researchers are considered those who have fewer than five years of experience from their terminal degree in the field of environmental epidemiology or other related disciplines. The awardees for this year will be announced during the final Plenary Session on the evening of **September 3**.

STUDENT POSTER AWARD

ISEE presents three awards to the best scientific poster presented by a student at the Annual ISEE Conference. The awardees for this year will be announced during the final Plenary Session on the evening of **Saturday, September 3**.

POST CONFERENCE WORKSHOPS

Post-conference workshops will be held on **Sunday, September 4** for pre-registered participants.

Post-Conferences workshops held at Auditorium Parco della Musica

TIME	LOCATION	TITLE
9:00-12:30	Sala Ospiti	The Exposome: from concept to practice
9:00-12:30	Risonanze	Mediation analysis in Environmental Epidemiology: key concepts, challenges, and application of modern causal methods
9:00-12:30	Studio 1	DAGs & the Environment: Practical Applications of Causal Inference Methodologies in Environmental Health Research
9:00-12:30	Studio 2	Writing and Publishing Environmental Epidemiology Research Papers
9:00-12:30	Studio 3	Innovative Approaches to Scalable Research on Household Air Pollution
9:00-12:30	Teatro Studio	Applying Epigenetics to Environmental Health and Epidemiology

Post-Conference Courses held at the Grand Hotel Ritz, Via Domenico Chelini, 41 (see map page 25)

TIME	LOCATION	TITLE
9:00-12:30	Sala Regency	Analysis of cohort studies with Stata and R
14:00-17:00	Sala Regency	Epigenomic Data Lab – Hands on Session for Epigenome-Wide DNA Methylation Data Analysis
9:00-17:00	Sala Euclide	Up and running with R statistical software

Further information on the ISEE website www.isee2016roma.org.

ANCILLARY MEETINGS

WEDNESDAY, AUGUST 31

ISEE Council
12:00-17:00 *CDA Room*

FRIDAY, SEPTEMBER 2

ISEE Council
7:30-8:30 *Meeting Room*

ISEE Africa Members' Meeting
13:00-14:15 *Studio 1*

ISEE Asia Members' Meeting
13:00-14:15 *Studio 2*

ISEE Europe Members' Meeting
13:00-14:15 *Studio 3*

Ethics Committee
13:00-14:15 *Sala Ospiti*

SUNDAY, SEPTEMBER 4

Early-mid carrier postdocs meeting
9:30-12:30 *Meeting Room*

ESCAPE meeting
13:30-16:00 *Meeting Room*

THURSDAY, SEPTEMBER 1

ISEE Council
8:00-10:30 *Meeting Room*

ISEE Latin American and the Caribbean (LAC) Chapter Members' Meeting
8:00-10:30 *Studio 3*

COST Action meeting
13:00-14:15 *Studio 1*

Annual Conference Planning Committee
13:00-14:15 *Studio 2*

EHP Associate Editors meeting
13:00-14:00 *Studio 3*

Ethics Committee
13:00-14:15 *Sala Ospiti*

SATURDAY, SEPTEMBER 3

ISEE Council
7:30-8:30 *Meeting Room*

Capacity Building Committee
13:00-14:15 *Studio 2*

ELAPSE project meeting
13:00-14:15 *Studio 3*

ISEE Policy Committee
13:00-14:15 *Sala Ospiti*

SATELLITE EVENTS

Satellite events will take place on Wednesday, August 31 at the Grand Hotel Ritz (Via Domenico Chelini, 41, 00197 Roma) 11 min walk to the main ISEE conference venue.

Environmental Public Health Tracking: Experiences and Tools to Support Public Health Research and Decision-Making

9:00-13:00

HEALTHY-POLIS: Developing Urban Life Course Approaches in Response to Climate Change

14:00-18:00

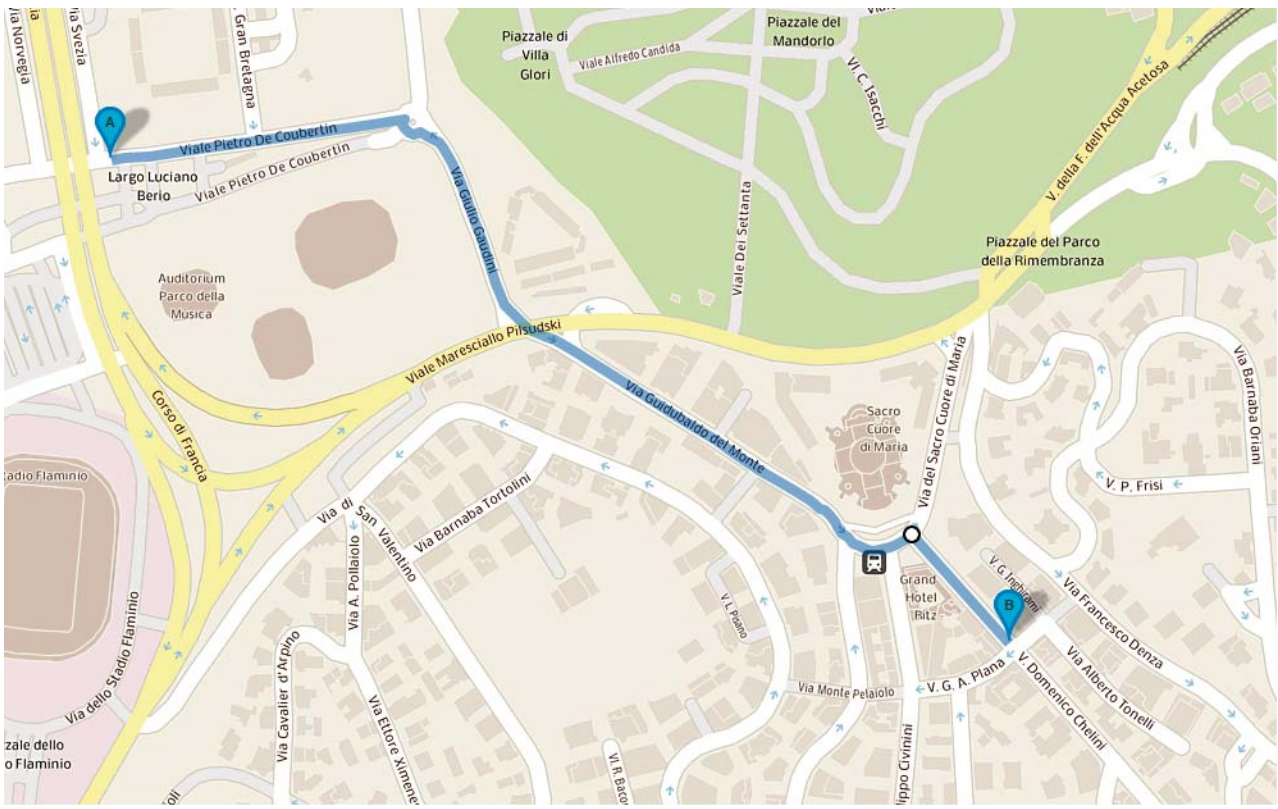
Epidemiological preparedness and response to environmental disasters

14:00-18:00

For details of these events please check the isee2016 website

www.isee2016roma.org/satellite-events

Grand Hotel Ritz location



FACTS FOR THE VISITOR

Rome tourist attractions

Visit **www.turismoroma.it**. (English, Français, Espanol, Deutsch). Maps to download (city map, bus and metro maps)

Roma Pass for free entry to museums and public transportation (valid for 48/72 hours). You can purchase the Roma Pass at all major Archeological sites (Roman Colosseum, Roman forum etc) travel agencies, tourist information points (APT tel. 06 488 991), newsstands, tobacconists (La Tabaccheria) and some museums and hotels.

Info at **www.romapass.it**

Public transports

Rome has a public transport system consisting of buses, metro, tram and city railways.

Information on time tables, network, routes planning, people with disabilities needs, and fares can be found at **www.atac.roma.it**

Tickets. If you plan to use public transportation only occasionally **Your ticket is a BIT (1.50 euro)**; if you need to travel on different means for the whole day or for several hours **Your ticket is ROMA24h**; for two, three or seven days **Your tickets are ROMA 48h, ROMA72h, CIS ticket**.

Taxi

RADIOTAXI 06.3570, SAMARCANDA 06.5551; PRONTO TAXI 06.6645. Chiama Taxi With this app you can call your taxi from your smartphone o tablet reducing waiting times and costs. Taxi Companies offering Wheelchair-accessible taxis: Easy Access 06.3570 **www.3570.it/servizi/mobilita/en.default.asp**

Money

The Italian currency is the EURO. (1 euro =1.086 USD). All major credit cards are known and accepted throughout most establishments although smaller restaurants may not have facilities or may have a policy of a minimum charge. Anyway it's a good idea to carry a little cash at all times. ATMs are available everywhere.

Tipping

In restaurants check that a 10% service charge is not already included in the bill. In bars and cafes tipping is less frequent, some leave a few coins.

Telephone or fax

The international code for Italy is 0039 (+39). The city code for Rome is 06 and must be dialed with local calls. Local and long distance calls can be made from public phones. Public phones only accept phone cards, these can be bought at Tobacconists and Newsstands.

Emergency number 112

Electricity

220V AC. Plugs are either 2 or 3 prong. Most hotels have hairdryers or shaving points. Adaptator can be bought at hardware store.

Smoking in public places

Smoking inside is forbidden. Smoking is allowed in streets and in open areas.

DETAILED CONFERENCE SCHEDULE

See the Online Abstract Book, Environmental Health Perspectives
ehp.niehs.nih.gov/isee

THURSDAY, SEPTEMBER 1

08:00 - 18:00		**REGISTRATION**	
10:30 - 11:15		**WELCOME ADDRESSES** **Conference Co-Chairs:** Francesco Forastiere, Carla Ancona, and Paola Michelozzi	Sala Sinopoli
11:15 - 12:15		**OPENING PLENARY SESSION**	Sala Sinopoli
		TRADITIONAL RISK FACTORS IN ENVIRONMENTAL HEALTH **Session Chairs:** Carla Ancona and Josep Maria Antó	
	PL-01	**Industrial disasters: 40th anniversary of the Seveso accident in Italy** *Pier Alberto Bertazzi, Università degli Studi di Milano, Italy*	
	PL-02	**Air Pollution Health Effects: What we know and what we should know** *Annette Peters, Helmholtz Zentrum München, Germany*	
12:15 - 13:00		Lunch	Foyer
13:00 - 14:15		**POSTER SESSION 1** (see session details on page 58)	Poster Areas
14:15 - 15:45		**PARALLEL SESSIONS**	
14:15 - 15:45	O.01	**Health Effects of Long Term Exposure to Air Pollution** **Session Chairs:** Bert Brunekreef and Narges Khanjani	Sala Sinopoli
	O-001	**A National Cohort Study of Effects of $PM_{2.5}$ and Ozone at Low Concentrations on Mortality In the Continental United States** *Qian Di,* Francesca Dominici, Antonella Zanobetti, Joel Schwartz*	
	O-002	**Long-term exposure to ambient ozone and progression of subclinical atherosclerosis: The Multi-Ethnic Study of Atherosclerosis and Air Pollution** *Meng Wang, Lianne Sheppard, Paul Sampson, James Stein, Sverre Vedal, Joel Kaufman **	
	O-003	**Long-Term Exposure to Ambient Particulate Matter and Incident Stroke: Results from the Women's Health Initiative** *Gregory Wellenius,* Melissa Eliot, Adam Szpiro, Brent Coull, Silas Bergen, Lesley Tinker, Charles Eaton, Eric Whitsel, Sverre Vedal, Joel Kaufman*	
	O-004	**Sources of air pollution and all-cause mortality in the Netherlands** *Paul Fischer,* Marten Marra, Caroline Ameling, Guus Velders, Joost Wesseling, Danny Houthuijs*	
	O-005	**Long-term exposure to air pollution and incidence of multiple sclerosis** *Giulia Cesaroni,* Anna Maria Bargagli, Matteo Renzi, Francesco Cerza, Nera Agabiti, Riccardo Di Domenicantonio, Chiara Badaloni, Marina Davoli, Francesco Forastiere*	
	O-006	**Burden of disease from major air pollution sources in China** *Michael Brauer,* Aaron Cohen, Richard Burnett, Mohammad Forouzanfar, Joesph Frostad, Haidong Kan, Qiao Ma, Shuxiao Wang, Randall Martin, Aaron van Donlelaar*	
14:15 - 15:45	S.01	**The Broadening Noise Phenome and its Biological Links** **Session Chairs:** Danielle Vienneau and Maria Foraster	Sala Petrassi
	S-001	**Noise phenotype and mechanisms: overview and methodologies in the context of SiRENE (Short and Long Term Effects of Traffic Noise Exposure)** *Nicole Probst-Hensch,* Foraster Maria, Ikenna Eze, Emmanuel Schaffner, Harris Héritier, Mark Brink, Christian Cajochen, Jean-Marc Wunderli, Danielle Vienneau*	
	S-002	**Transportation noise and cardiovascular disease: evidence and gaps** *Anna Hansell**	
	S-003	**Traffic noise and risk for metabolic disease and cancer** *Mette Sørensen,* Jeppe Christensen, Ole Raaschou-Nielsen*	
	S-004	**Traffic noise and depressive disorders: results of a secondary data-based case control study** *Andreas Seidler,* Janice Hegewald, Anna Lene Seidler, Melanie Schubert, Mandy Wagner, Patrik Dröge, Eva Haufe, Jochen Schmitt, Enno Swart, Hajo Zeeb*	
		Discussants: *Ta-Yuan Chang, Sara Adar, and Göran Pershagen*	

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

14:15 - 15:45	S.02	**Climate Change - Beyond the Paris Agreement: how can environmental Epidemiology contribute?** **Session Chairs:** Bettina Menne and Francesca de'Donato	Teatro Studio
	S-005	**Extreme weather events (EWE): the impact on health in Italy** *Paola Michelozzi,* Manuela De Sario, Francesca de'Donato*	
	S-006	**Research for national adaptation policy** *Sari Kovats**	
	S-007	**Researching to better understand the health co-benefits of mitigation** *Vladimir Kendrovski**	
	S-008	**Implications of future development pathways for the health risks of climate change** *Kristie Ebi**	
	ETH-01	**Climate ethics – what this means for global health after the Paris agreement, 2015** *Martin Tondel**	
14:15 - 15:45	O.02	**Prenatal exposures and pregnancy outcomes** **Session Chairs**: Mark Nieuwenhuijsen and Kelly Ferguson	Risonanze
	O-008	**Associations between Craniofacial Birth Defects and Disinfection By-Product Exposures in Massachusetts, USA** *John Kaufman,* Michael Wright, Michael Narotsky, Amanda Evans, Zorimar Rivera-Nunez*	
	O-009	**Associations of Paternal Urinary Phthalates with Embryo Development** *Haotian Wu,* Brian W. Whitcomb, Cynthia K. Sites, Rahil Tayyab, J. Richard Pilsner*	
	O-010	**Co-exposure to fine particulate matter and maternal stress in utero influences placental mitochon drial function** *Kelly Brunst,* Yueh-Hsiu Mathilda Chiu, Brent Coull, Itai Kloog, Robert Wright, Andrea Baccarelli, Rosalind Wright*	
	O-011	**Exposure to Multiple Endocrine Disrupting Chemicals in a Cohort of Reproductive-Aged Danish Women** *Anna Rosofsky,* Patricia Janulewicz-Lloyd, Kristina Thayer, Michael McClean, Lauren Wise, Ellen Mikkelsen, Elizabeth Hatch*	
	O-012	**Prenatal exposure to mercury and ultrasound measures of fetal growth in a Spanish birth cohort study** *Ferran Ballester,* Carmen Iñiguez, Mario Murcia, Ana Fernández-Somoano, Mònica Guxens, Mikel Basterrechea, Aitana Lertxundi, Adonina Tardón, Jordi Sunyer, Sabrina Llop*	
14:15 - 15:45	O.03	**Arsenic and Health: Contemporary and Emerging Research** **Session Chairs:** Fabrizio Bianchi and Andres Cardenas	Sala Ospiti
	O-013	**Low-Moderate Arsenic Exposure and QT Interval: the Strong Heart Study** *Katherine A Moon,* Peter Okin, Richard Devereux, Eliseo Guallar, Jason G Umans, Lyle Best, Barbara V Howard, Ana Navas-Acien*	
	O-014	**The association of arsenic exposure and metabolism with Type 1 and Type 2 Diabetes in youth: The SEARCH Case-Control Study** *Maria Grau Pérez,* Chin-Chi Kuo, Miranda Spratlen, Kristina Thayer, Michelle Ann Mendez, Richard Hamman, Dana Dabelea, John Adgate, Ronny A Bell, Frederick W. Miller, Robin Puett, Angela D. Liese, Chongben Zang, Christelle Douillet, Zuzana Drobná, Elizabeth Mayer-Davis, Miroslav Styblo, Ana Navas Acien, William C Knowler*	
	O-015	**Associations between Arsenic in Drinking Water and the Occurrence of Chronic Kidney Disease: A Nationwide Population-Based Study in Taiwan** *Ya-Yun Cheng,* How-Ran Guo*	
	O-016	**Elevated Bladder Cancer in Northern New England: The Role of Drinking Water and Arsenic** *Dalsu Baris, Richard Waddell, Laura Beane Freeman, Molly Schwenn, Joanne Colt, Joseph Ayotte, Mary Ward, John Nuckols, Alan Schned, Brian Jackson, Castine Clerkin, Nathaniel Rothman, Lee Moore, Anne Taylor, Gilpin Robinson, Monawar Hosain, Karla Armenti, Richard McCoy, Claudine Samanic, Robert Hoover, Joseph Fraumeni, Jr., Alison Johnson, Margaret Karagas, Debra Silverman**	
	O-017	**Locus 10q24 and AS3MT Related to Arsenic Metabolism and Insulin Resistance in American Indians: the Strong Heart Family Study** *Poojitha Balakrishnan,* Dhananjay Vaidya, Nora Franceschini, Saroja Voruganti, Matthew Gribble, Karin Haack, Sandra Laston, Jason Umans, Kevin Francesconi, Walter Goessler, Kari North, Elisa Lee, Joseph Yracheta, Lyle Best, Jean MacCluer, Jack Kent, Jr, Shelley Cole, Ana Navas-Acien*	
	ETH-02	**Arsenic exposure and environmental justice** *Juan Ramos-Bonilla**	

14:15 - 15:45	S.03	**Pesticides and health in Latin America: old and new risks over the lifespan** **Session Chairs:** Donna Mergler and Rafael Ogaz	Studio 1
	S-010	**Recent measurements of residues of DDT in water, soils and sediments from Yanomami indigenous areas at the Amazon in Brazil** *João Torres,* Eridi Silva, Thayna Soares, Yago Guida, Fabio Torres, Rodrigo Meire, Armindo Goes, Tetsuo Yamane, Pedro Santos*	
	S-011	**Prenatal exposure to organochlorine pesticides and birth outcomes in Bolivia** *Juan P Arrebola,* Miriam Cuellar, Jens Peter Bonde, Beatriz González-Alzaga, Luis Adolfo Mercad*	
	S-012	**The Pesticides Poisoning in the State of Sao Paulo - Brazil** *Telma Nery, Rogerio Christensen,* Andre Leite, graziela silva, Golda Schwartz, Telma de Cassia dos Santos Nery**	
	S-013	**Environmental and occupational risks to chronic diseases in agricultural workers in Chile** *Sandra Cortés,* Claudia Foerster, Fabio Paredes, Catterina Ferreccio*	
	S-014	**The Infant's Environmental Health Study (ISA) in Costa Rica: Pregnant women's pesticide exposure and oxidetive stress** *Berna van Wendel de Joode,* Eva Ekman, Ana María Mora, Christian Lindh*	
	S-015	**Associacion of prenatal mancozeb exposure with neurodevelopment in one-year-old children from the Infants' Environmental Health Study (ISA)** *Ana Maria Mora,* Christian Lindh, Leonel Córdoba, Juan Camilo Cano, David Hernandez-Bonilla, Lourdes Schnaas, Donald Smith, Jose Antonio Menezes-Filho, Brenda Eskenazi, Donna Mergler, Berna van Wendel*	
14:15 - 15:45	O.04	**Radiation and electromagnetic fields** **Session Chairs:** Anke Huss and Michelle Turner	Studio 2
	O-018	**Maternal Exposure to High Magnetic Fields during Pregnancy and the Risk of Attention-Deficit/ Hyperactivity Disorder (ADHD) in Offspring: A prospective cohort study with up to 18 years of follow -up** *De-Kun Li,* Hong Chen, Jeannette Ferber, Roxana Odouli*	
	O-019	**ELF-MF occupational exposure and hematolymphopoietic cancers - an analysis of the Swiss National Cohort** *Anke Huss,* Adrian Spoerri, Matthias Egger, Hans Kromhout, Roel Vermeulen*	
	O-020	**Use of portable exposimeters to monitor radiofrequency electromagnetic field exposure in different microenvironments in Kathmandu valley, Nepal** *Sanjay Sagar,* Seid Mohammed, Benjamin Struchen, Martin Röösli*	
	O-021	**Maternal cell phone use during pregnancy and child behavior problems in five birth cohorts** *Laura Birks,* Mònica Guxens, Eleni Papadopoulou, Jan Alexander, Mina Ha, Anke Huss, Leeka Kheifets, Hyung-ryul Lim, Jorn Olsen, Madhuri Sudan, Roel Vermeulen, Elisabeth Cardis, Martine Vrijheid*	
	O-022	**Modeling effect modification and exposure uncertainty in the association between lung cancer mortality and radon exposure in a cohort of uranium miners via a Bayesian hierarchical approach** *Sabine Hoffmann, Chantal Guihenneuc, Pierre Laroche, Sophie Ancelet**	
	O-023	**Thyroid Nodules in Fukushima** *Yutaka Hamaoka* (Keio University)*	
14:15 - 15:45	O.05	**Food, Nutirion, and Microbiome** **Session Chairs:** Adetoun Mustapha and Marie Standl	Studio 3
	O-024	**Early-life selenium status and cognitive function in childhood** *Helena Skröder Löveborn,* (Maria Kippler, Fahmida Tofail, Marie Vahter*	
	O-025	**Prospective Study of Dietary Patterns, Bone Lead Levels and Risk of Incident Coronary Heart Disease in Men** *Ning Ding,* Xin Wang, Marc Weisskopf, David Sparrow, Howard Hu, Sung Kyun Park*	
	O-026	**Prenatal Exposure to Mercury, Child Fish Consumption and Receptive Communication Testing in an Italian Mother-Child Birth Cohort** *Fabio Barbone,* Valentina Rosolen, Marika Mariuz, Luca Ronfani, Liza vecchi Brumatti, Maura Bin, Darja Mazej, Janja Tratnik, Francesca Valent,Milena Horvat*	
	O-027	**Gut microbiome of mothers delivering prematurely shows reduced diversity and lower abundance of Bifidobacterium and Streptococcus** *Cecilie Dahl, Hein Stigum, Nina Iszatt, Maggie Stanislawski, Siddhartha Mandal, Catherine Lozupone, Jose Clemente, Rob Knight, Merete Eggesbø**	
	O-028	**Farm-like indoor microbiome: Towards asthma prevention** *Juha Pekkanen,* Anne Karvonen, Martin Täubel, Rachel Adams, Anne Hyvärinen, Erika von Mutius, Pirkka Kirjavainen*	

	ETH-03	**Boosting the brainpower and prevention of nutrition-associated diseases - The balance of benefits and harms** *Adetoun Mustapha**	
15:45 - 16:10		Afternoon Break	Foyer
16:10 - 17:40		**PARALLEL SESSIONS**	
16:10 - 17:40	S.04	**Recent developments in air pollution exposure assessment** **Session Chairs:** Barbara Hoffmann and Danielle Vienneau	Sala Sinopoli
	S-016	**An overview of recent advances in air pollution exposure modeling** *Michael Brauer**	
	S-017	**European models incorporating satellite and chemical transport modelling with local variables in LUR** *Kees de Hoogh,* John Gulliver, Aaron van Donkelaar, Randall V. Martin, Julian D. Marshall, Danielle Vienneau, Gerard Hoek*	
	S-018	**Daily air pollution exposures over large geographical areas** *Joel Schwartz**	
	S-019	**Space-time UFP and BC models for different geographical areas** *Gerard Hoek**	
	S-020	**Modelling historical long-term air pollution exposures** *John Gulliver,* Kees de Hoogh, Gerard Hoek, Danielle Vienneau, Daniela Fecht, Anna Hansell*	
16:10 - 17:40	O.06	**Acute exposure to air pollution and novel cardiovascular outcomes** **Session Chairs:** Bart Ostro and Annunziata Faustini	Sala Petrassi
	O-029	**Effect of PM_{10}, $PM_{2.5}$, and PM_1 on blood markers in a panel of elderly subjects** *Mohammad Sadegh Hassanvand,* Masud Yunesian, Kazem Naddafi,Homa Kashani, Fatemeh Momeniha,*Sasan Faridi, Ramin Nabizadeh,Mohammad Arhami, Alireza Mesdaghinia*	
	O-030	**Exposure to PM components and biomarkers of inflammation, platelet and endothelial activation in diabetic subjects** *Antonella Zanobetti,* Heike Luttmann-Gibson, Barbara Hoffmann, Allison Cohen, Edward Horton, Brent Coull, Joel Schwartz, Helen Suh, Murray Mittleman, Ananth Karumanchi,Russell Tracey, Peter Stone, Petros Koutrakis, Diane Gold*	
	O-031	**Association between air pollution and emergency room admissions for atrial fibrillation** *Angelo G Solimini,* Matteo Renzi*	
	O-032	**Short-Term Association between Ambient Fine Particulate Matter and Atrial Fibrillation Episodes** *Marcus Dahlquist,* Emma Svennberg, Viveka Frykman, Leif Friberg, Mårten Rosenqvist, Gregory Wallenius, Petter Ljungman*	
	O-033	**miRNA expression profiles and retinal blood vessel calibers are associated with short-term particulate matter air pollution exposure** *Tijs Louwies,* Luc Int Panis, Bianca Cox, Karen Vrijens, Tim Nawrot, Patrick De Boever*	
	O-034	**Ambient Particulate Air Pollution and Adverse Changes in Fibrinogen: Effect Modification by Omega -3 (n-3) Fatty Acids and Vitamin-D** *David Q. Rich,* Daniel Croft, Scott J Cameron, Craig Morrell, Charles J Lowenstein, Frederick Ling, Wojciech Zareba, Philip K Hopke, Kelly Thevenet-Morrison, Sally W Thurston, Kristin Evans, David Chalupa, Robert Block, Mark J Utell*	
16:10 - 17:40	O.07	**Climate change, mitigation measures and co-benefits** **Session Chairs:** George Thurston and Flávia Bonolo-Dantas	Teatro Studio
	O-035	**Co-benefits of food policies: climate and health** *Paolo Vineis, Pauline Scheelbeek,* Alexandre Strapasson*	
	O-036	**Reduction of Meat Consumption: Associated Health and Environmental Benefits in Italy** *Sara Farchi,* Enrica Lapucci, Paola Michelozzi*	
	O-037	**Infectious disease related health co-benefits of climate smart food systems** *Kris Murray,* George Thurston*	
	O-038	**A modified RICE integrated assessment model that includes the health co-benefits of CO2 mitigation** *Mark Budolfson, Francis Dennig, Marc Fleurbaey, Noah Scovronick,* Asher Siebert, Rob Socolow, Dean Spears, Fabian Wagner*	
	O-039	**Review on occupational health co-benefits of climate change mitigation** *Sara De Matteis,* George Thurston*	

	O-040	**Air Quality Health Co-benefits from Climate Change Mitigation Measures** *George D. Thurston**	
16:10 - 17:40	O.08	**Advances in temporal and spatial models** **Session Chairs:** Xavier Basagana and Bindu Bhatt	Risonanze
	O-041	**Elaboration of harvesting and its implication in time-series analysis** *Honghyok Kim,* Jong-Tae Lee*	
	O-042	**A simulation study on methods for modelling lagged associations in environmental time series data** *Antonio Gasparrini**	
	O-043	**A doubly robust additive model for the probability of dying from air pollution exposure** *Yan Wang*, Mihye Lee, Joel Schwartz*	
	O-044	**A Transfer Entropy Model for the Inference of Influenza Dispersion Networks** *Yang Liu,* Maria Sundaram, Matteo Convertino*	
	O-045	**Modeling spatially varying effects of chemical mixtures** *Jenna Czarnota,* Chris Gennings, David Wheeler*	
	O-046	**A Standard Exposure Assessment Protocol for Environmental Epidemiology: Isn't It Time?** *John Nuckols**	
16:10 - 17:40	O.09	**Earth, Wind and Fire: Environmental Factors Related To Active Travel** **Session Chairs:** Hanna Boogaard and Lori Hoepner	Sala Ospiti
	O-047	**Health Impacts of Transport: Methods for modelling physical activity and road traffic injuries** *James Woodcock**	
	O-048	**Health co-benefits from mitigating climate change through mass rapid transit system: A case study in Kuala Lumpur, Malaysia** *Soo Chen Kwan,* Marko Tainio, James Woodcock, Jamal Hisham Hashim*	
	O-049	**Understanding the interrelations between the natural environment and health- the role of quantitative and qualitative characteristics, time spent in the natural environment, and perceptions** *Hanneke Kruize,* Irene Van Kamp, Magdalena Van den Berg, Elise Van Kempen, Wanda Wendel-Vos, Annemarie Ruijsbroek, Wim Swart, Jolanda Maas, Chris Gidlow, Graham Smith, Margarita Triguero, Regina Gražuleviien, Mark Nieuwenhuijsen*	
	O-050	**Spatial Determinants of Bike Mode Share in American Cities: Potential for Health and Environmental Co-Benefits** *Jonah Lipsitt,* James Milner, Gavin Tansley, Paul Wilkinson*	
	O-051	**Air Pollution, Social Disadvantage, and Walking in Six United States Cities: the Multi-Ethnic Study of Athero sclerosis** *Yeh-Hsin Chen, Sara Adar, Julian Marshall, Jana Hirsch, Daniel Rodriguez, Kelly Evenson, Paul Sampson, Sheryl Magzamen, Joel Kaufman, Ana Diez-Roux, Marie O'Neill**	
	O-052	**Residential Greenness and Incident Overweight in a Cohort of U.S. Women** *Rachel F. Banay, Peter James, Jaime E. Hart,* Francine Laden*	
16:10 - 17:40	S.05	**Ethical Challenges for Epidemiologists in the Legal Process** **Session Chairs:** Raymond R Neutra and Shira Kramer	Studio 1
	S-021	**The Pros and Cons of Serving as a Legal Expert Witness** *Shira Kramer**	
	S-022	**Doing Epidemiology as a Friend of the Court** *Tony Fletcher**	
	S-023	**What ethical behavior do judges, juries, plaintiff and defense lawyers expect of expert witnesses?** *Carl Cranor**	
	S-024	**Epidemiology on criminal trials** *Luca Masera**	
	S-025	**Role of Epidemiology in Boicide Deaths in a Korean Law Suit** *Domyung Paek**	
	S-026	**What Could ISEE do to Improve Expert Legal Testimony?** *Raymond R Neutra**	

16:10 - 17:40 | 0.10 | **INDOOR AIR: from observations to interventions** | Studio 2
Session Chairs: Isabella Annesi-Maesano and Undarmaa Enkhbat

O-053 **Air pollution and pulmonary health: Effects of short-term indoor air quality intervention with portable air purifier**
Ming Kei Chung, Xiaoxing Cui, Lin Fang, Jianbang Xiang, Feng Li, Jinhan Mo, Pamela Ohman-Strickland, Charles J Weschler, Jan Sundell, Yinping Zhang, Junfeng Zhang*

O-054 **Household Air Pollution and Cardiovascular Disease Risk: Results from the Prospective Urban and Rural Epidemiological Study**
Perry Hystad, Mylinh Duong, Andrew Larkin, Michael Brauer, Salim Yusuf*

O-055 **Patterns of environmental tobacco smoke exposure and their association with asthma in adoles cence**
Edith Milanzi, Bert Brunekreef, Gerard H Koppelman, Alet H Wijga, Lenie van Rossem, Judith M Vonk, Henriëtte A Smit, Ulrike Gehring*

O-056 **Developing a predictive model for indoor particulate matter concentrations in urban households in Durban, South Africa**
Busisiwe Shezi, Nkosana Jafta*

O-057 **A randomized trial of the efficacy of interventions in improving indoor air quality and health in children with asthma: final results**
Erin Semmens, Paul Smith, Solomon Harrar, Luke Montrose, Emily Weiler, Marcy Ballman, Tony Ward, Curtis Noonan*

O-058 **Home Energy Efficiency Interventions and Cold-Related Mortality in England, 2000-2010**
Paul Wilkinson, Ian Hamilton, Roberto Picetti, Ai Milojevic, Michael Davies, Ben Armstrong*

16:10 - 17:40 | 0.11 | **Endocrine disruption from birth through childhood** | Studio 3
Session Chairs: Dario Consonni and Whitney Cowell

O-059 **Male exposure to bis-phenol A (BPA) and semen quality in a prospective, preconception cohort**
Christina Porucznik, Kyley Cox, Diana Wilkins, Douglas Carrell, Joseph Stanford*

O-060 **Prenatal exposure to phthalates and anogenital distance among male and female infants**
Mahsa Yazdy, Susan Schantz, Andrea Aguiar, Xiaoyun Ye, Antonia Calafat, Susan Korrick*

O-061 **Phthalate exposure in pregnancy is associated with preterm birth in the Mexico City PROGRESS cohort**
Allan Just, Andrea Baccarelli, Dana Barr, Joseph Braun, Chris Gennings, Adriana Mercado-Garcia, Martha Téllez Rojo, Robert Wright, Heather Burris*

O-062 **Prenatal Exposure to Phthalates and Risk of Childhood Obesity at age 12**
Kim Harley, Stephen Rauch, Karen Huen, Katherine Kogut, Ye Xiaoyun, Brenda Eskenazi, Nina Holland*

O-063 **Associations of urinary phthalates and phenols with menarche among a multiethnic cohort of young girls**
Mary S Wolff, Ashley Pajak, Susan M Pinney, Gayle C Windham, Maida Galvez, Michael Rybak, Antonia M Calafat, Lawrence H Kushi, Frank M Biro, Susan L Teitelbaum,*

O-064 **Exposure to phytoestrogens in utero and age at menarche in a contemporary British cohort**
*Ethel Taylor, Kristin Marks, Michele Marcus, Terry Hartman , Amy Wolkin**

17:40 - 19:20 | **PLENARY SESSION** | Sala Sinopoli

ISEE 2016 Awards night
Session Chairs: Francine Laden and Annette Peters

Best Environmental Epidemiology Paper Award
Gasparrini A. et al. "Mortality risk attributable to high and low ambient temperature: a multicountry observational study " Lancet 2015; 386(9991):369-75

Rebecca James Baker Memorial Prize
Ana Maria Mora, Central American Institute for Studies on Toxic Substances (IRET) Universidad Nacional, Costa Rica

Tony McMichael Mid-Term Career Award
Award presenter: Robyn Lucas, The Australian National University, Canberra, Australia

Mireille Toledano, Imperial College, London, UK
Marc Weisskopf, Harvard T.H. Chan School of Public Health, Boston, USA

John Goldsmith Award for Outstanding Contributions to Environmental Epidemiology

PL-03 **Environmental epidemiology – lost in translation?**
Philippe Grandjean, University of Southern Denmark, Odense, Denmark

19:30 - 21:30 **Cocktail Reception** Foyer

20:00 **Science Slam** Foyer

Inequity in noise pollution in the United States
Joan A Casey – UC San Francisco/UC Berkeley
Some grounding for DAGs and confounding
Frauke Hennig – Heinrich-Heine-University of Düsseldorf
Epidemiological Investigation of Weather-related Mortality in Rural India
Vijendra Ingole, KEM Hospital Research Centre, Pune, India; Umeå University, Umeå, Sweden; IN DEPTH Network, Accra, Ghana
Zombies are among us! Do we have to fight or run away?
Matteo Renzi, Lisa Bauleo, Silvia Narduzzi – Department of Epidemiology, Lazio Regional Health Service
Kidneys and traffic pollution
Anne M. Weaver – Richard M. Fairbanks School of Public Health, Department of Environmental Health Science, Indiana University-Purdue University Indianapolis

FRIDAY, SEPTEMBER 2

07:30 -18:00 **Registration**

07:30 - 08:30 **EARLY MORNING SESSIONS**

07:30 - 08:30 E.01 **The use of satellite data in air pollution exposure assessment: new opportunities for environmental epidemiology and global methodological challenges** Teatro Studio
Session Chairs: Massimo Stafoggia and Itai Kloog

E-01

Satellite data for PM exposure in environmental epidemiology studies – A summary of methods and results from different Countries
*Alexandra Shtien**
Fine Spatio-Temporal Resolution of PM_{10} and $PM_{2.5}$ Concentrations in Italy (2006-2012) using Satellite Data and Several Land Use Variables
Massimo Stafoggia, Itai Kloog, Chiara Badaloni, Giorgio Cattani, Alessandra Gaeta, Francesco Forastiere, Gianluca Leone, Joel Schwartz*
Spatio-temporal data available in Europe on land-use, industrial emissions, meteorology and population – Opportunities for a European-wide collaboration
*Kees de Hoogh**
Satellite data for PM exposure in environmental epidemiology studies – Methodological challenges and future perspectives
*Joel Schwartz**

07:30 - 08:30 E.02 **Old risks, new diesel engine technologies and the public health impacts** Risonanze
Session Chairs: Rashid Shaikh and Dan Greenbaum

Introduction
Rashid Shaikh
Diesel Vehicles in Europe Today: The State of Controls and Emissions from Diesel Vehicles
Peter Mock
Looking Forward Discussion
Dan Greenbaum

07:30 - 08:30 E.03 **Improving impact of epidemiology on public health policy: lessons from risk assessment and systematic reviews** Sala Ospiti
Session Chairs: Breanna Alman and Katherine Walker

Introduction
Breanna Alman
How systematic reviews will accelerate the use of epidemiology in policy making – a case study of PBDEs and neurodevelopmental outcomes
Juleen Lam
Case study on the use of systematic review in the development of the proposed WHO Guidelines on Sanitation and Health
Sophie Boisson

Discussants:
Bert Brunekreef and Marie-Eve Héroux

07:30 - 08:30 E.04 **Supporting Creative Minds - The European Research Council (ERC)** Studio 1
Session Chairs: Immaculada Aguilera

E-02

Supporting Creative Minds – The European Research Council (ERC)
Immaculada Aguilera

07:30 - 08:30 E.05 **Creating Healthy City Environments** Studio 2
Session Chairs: Mark Nieuwenhuijsen

The role of urban planning in healthy city environments
Razieh Zandieh
The role of transport planning in healthy city environments
Haneen Khreis
The role of environmental science in Health City Environments
Erik van Nunen

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

The role of public health in healthy city environments
Natalie Müller

07:30 - 08:30 E.06 **An interactive ethics workshop for Young Researchers - a joint session between the ISEE Ethics and Philosophy Commitee and the SNRN** Studio 3
Session Chairs: Raymond Neutra

Panelists:
Martin Tondel, Benedetto Terracini, Colin Soskolne

08:30 - 10:15 **PLENARY SESSION** Sala Sinopoli

New Issues in Environmental Health
Session Chairs: Paola Michelozzi and Nino Kunzli

PL-04 **Gender-based analysis of environmental factors**
Donna Mergler, Université du Québec à Montréal

PL-05 **What does the science behind hydraulic fracturing headlines tell us about health risk?**
Donna Vorhees, Health Effects Institute

PL-06 **Facing the challenge of climate change-the prospects for health following the Paris agreement**
Andy Haines, London School Hygiene & Tropical Medicine, UK

10:15 - 10:45 Morning Break Foyer

10:15 - 10:45 **CONNECTION CORNER** Foyer

Mike Brauer, University of British Columbia
Carmen Marsit, Emory University
Margaret Karagas, Dartmouth University
Kimberly Gray, NIEHS, Children's Environmental Health
David Balshaw, NIEHS, Exposure, Response, and Technology
Gwen Collman, NIEHS, Extramural Research and Traianing
Gary Ellison, NCI, Environmental Epidemiology

10:45 - 12:15 **PARALLEL SESSIONS**

10:45 - 12:15 S.06 **New frontiers for environmental epidemiology in a changing world** Sala Sinopoli
Session Chairs: Cathryn Tonne and Mark Nieuwenhuijsen

S-027 **Smart Phones to Satellites to Sensors: Future Tools and Directions for External Exposure Assess ment**
*Perry Hystad**

S-028 **Novel biomarkers of internal exposure**
*Roel Vermeulen**

S-029 **New health outcomes and novel health assessment methods in the future of environmental epidemiology**
*Jennifer Weuve**

S-030 **New frontiers for studies of the effects of early life exposures and later health effects (DOHaD) in humans**
Rémy Slama, Marie-Aline Charles, Valérie Siroux, Cathryn Tonne*

S-031 **Big data and new statistical methods**
Xavier Basagaña, Rémy Slama, Roel Vermeulen, Jennifer Weuve, Perry Hystad, Mark Nieuwenhuijsen, Cathryn Tonne*

10:45 - 12:15 O.12 **Air pollution, diabetes, and metabolism** Sala Petrassi
Session Chairs: Lucas Neas and Anne M Weaver

O-065 **Associations between long-term exposure to air pollution, glycosylated hemoglobin and diabetes**
Trent Honda, Vivian Pun, Justin Manjourides, Helen Suh*

O-066 **Cord plasma insulin and early life exposure to particulate air pollution**
Narjes Madhloum, Bram Janssen, Nelly Saenen, Esmée Bijnens, Wilfried Gyselaers, Joris Penders, Charlotte Vanpoucke, Wouter Lefebvre, Michelle Plusquin, Tim Nawrot*

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

O-067 **The longitudinal effects of ambient air pollution exposure on obesity and risk factors for type 2 diabetes in Los Angeles Latino children**
Tanya Alderete, Rima Habre, Claudia Toledo-Corral, Zhanghua Chen, Kiros Berhane, Fred Lurmann, Marc Weigensberg, Michael Goran, Frank Gilliland*

O-068 **Ambient Fine Particulate Matter, Outdoor Temperature and Risk of Metabolic Syndrome**
Elena Colicino, Rachel Wallwork, Jia Zhong, Itai Kloog, Brent Coull, Pantel Vokonas, Joel Schwartz, Andrea Baccarelli*

O-069 **Ambient fine particulate matter is an independent predictor of insulin resistance in non-diabetic adults in the PURSE-HIS Cohort, Tamil Nadu, India**
Kevin Lane, Kalpana Balakrishnan, Michael Brauer, Sadagopan Thanikachalam, Mohan Thanikachalam*

O-070 **The Association between Air Pollution Exposure and Glucose and Lipids Levels**
Maayan Yitshak Sade, Itai Kloog, Idit Liberty, Joel Schwartz, Victor Novack*

10:45 - 12:15 O.13 **Air pollution and fetal growth** Teatro Studio
Session Chairs: Ulrike Gehring and Varada Sarovar

O-071 **Maternal Exposure to Particulate Air Pollution and Congenital Metabolic Disorders in Korea**
Youn-Hee Lim, Changwoo Han, Hyun Joo Bae, Yun-Chul Hong*

O-072 **Traffic-related Air and Noise Pollution, Birth Outcomes and Infant Mortality in London**
Rachel B Smith, John Gulliver, Daniela Fecht, Marta Blangiardo, Sean Beevers, David Dajnak, Rebecca Ghosh, Anna Hansell, Frank Kelly, H Ross Anderson, Mireille B Toledano*

O-073 **Air pollution and fetal growth- a study on ultrasound measures of Swedish children**
Ebba Malmqvist, Zeyan Liew, Lars Rylander, Beate Ritz*

O-074 **Identifying sensitive windows for prenatal particulate air pollution exposure and mitochondrial DNA copy number in cord blood**
Maria José Rosa, Allan Just, Marco Sánchez Guerra, Itai Kloog, Adriana Mercado García, Deepjyoti Deb, Kasey Brennan, Rosalind J. Wright, Martha Maria Téllez Rojo, Andrea Baccarelli, Robert Wright*

O-075 **Prenatal air pollution exposure, infant growth and placental mtDNA content in the INMA birth cohort**
Diana B.P. Clemente, Maribel Casas, Bram G. Janssen, Aitana Lertxundi, Loreto Santa-Marina, Carmen Iñiguez, Sabrina Llop, Tim S. Nawrot, Martine Vrijheid*

O-076 **Impact of air pollution to genome of newborns**
Radim J. Sram, Pavel Rossner, Jr., Andrea Rossnerova, Alena Milcova, Antonin Ambroz, Katerina Honkova, Vlasta Svecova, Veronika Vlkova, Jana Pulkrabova, Jana Hajslova, Milos Veleminsky, Hans Gmuender*

10:45 - 12:15 O.14 **Extreme weather events and health effects (Climate change and Health)** Risonanze
Session Chairs: Rupa Basu and Kouassi Richard M'Bra

O-077 **A Statistical Framework to Evaluate Extreme Weather Definitions from a Health Perspective: A Demonstration Based on Extreme Heat Events**
Ambarish Vaidyanathan, Scott Kegler*

O-078 **Role of El Niño Southern Oscillation (ENSO) in Extreme Event Related Adverse Health Outcomes in Maryland, USA**
*Sutyajeet Soneja, Chengsheng Jiang, Jared Fisher, David Blythe, Clifford Mitchell, Amy Sapkota, Amir Sapkota**

O-079 **A comprehensive picture of extreme-heat related health outcomes in King County, WA. USA**
Tania Busch Isaksen, Miriam Calkins, Richard Fenske, Michael Yost*

O-080 **The potential change on health impacts of extreme weather events in coastal areas of Bangladesh**
Russell Kabir, Hafiz Khan, Emma Ball, Kay Caldwell*

O-081 **Extreme temperatures increase the years of life lost for diabetes deaths in two temperate and subtropical cities, China**
Yonghong Li, Yinlong Jin, Li Lan, Shuquan Luo*

10:45 - 12:15 O.15 **Chemicals and Children's Health** Sala Ospiti
Session Chairs: Veronica Vieira and Sara Farchi

O-082 **Prenatal levels of Polybrominated Diphenyl Ethers (PBDEs) in association with Autism Spectrum Disorder**
Gayle Windham, Kristen Lyall, Martin Kharrazi, Lauren Weiss, Lisa Croen*

O-083 **Behavioral problems in 7- year old Faroese children in relation to pre- and postnatal exposure to perfluorinated alkyl substances**
Youssef Oulhote, Ulrike Steuerwald, Pal Weihe, Philippe Grandjean*

O-084 **Cardiometabolic Risk in Preschool-aged Children in Relation to Prenatal Persistent Pollutant Exposures**
Damaskini Valvi, David Martinez, Ferran Ballester, Jesus Ibarluzea, Carmen Iñiguez, Jordi Sunyer, Martine Vrijheid*

O-085 **Early-life exposure to lithium in drinking water and infant thyroid function.**
Florencia Harari, Anna Karin Bernhardsson, Brita Palm, Esperanza Casimiro, Ying Lu, Marie Vahter*

O-086 **Blood lead levels among young children in a rural area of Ghana**
Kwaku Poku Asante, Charles Zandoh, Kofi Tchum, Seth Owusu-Agyei*

O-087 **Influence of early childhood antibiotics use on asthma and allergic diseases at the age of five years**
Kiwako Yamamoto-Hanada, Limin Yang, Masami Narita, Yukihiro Ohya*

10:45 - 12:15 S.07 **Atmospheric aerosols and health: Results of the Supersite project in Emilia-Romagna region (Italy)** Studio 1
Session Chairs: Antonella Zanobetti and Bart Ostro

Friday

S-032 **Systematic review and meta-analysis of epidemiological time series studies of fine particle components and daily mortality and hospital admissions**
Richard Atkinson, Inga Mills, Heather Walton, H Ross Anderson*

S-033 **Supersite Project: Physical and chemical characteristics of atmospheric aerosols**
Vanes Poluzzi, Isabella Ricciardelli, Giovanni Bonafè, Silvia Ferrari, Stefano Zauli, Fabiana Scotto, Arianna Trentini, Dimitri Bacco, Claudio Maccone, Claudia Zigola, Maria Cristina Facchini, Maria Chiara Pietrogrande, Stefania Gilardoni*

S-034 **Supersite Project: Toxicological profiles of atmospheric aerosol**
Annamaria Colacci, Maria Grazia Mascolo, Monica Vaccari, Stefania Perdichizzi, Cristina Zanzi, Francesca Rotondo, Stefania Serra, Laura Polacchini, Sandro Grilli*

S-035 **Supersite Project: Epidemiological findings on short-term and long-term effects**
Andrea Ranzi, Serena Broccoli, Simone Giannini, Michele Cordioli, Federica Parmagnani, Francesco Forastiere, Michela Baccini, Silvia Candela,Paolo Giorgi Rossi, Paolo Lauriola, Paola Angelini*

S-036 **Methodological aspects of epidemiological studies of particle components**
*Gerard Hoek**

10:45 - 12:15 O.16 **Women's Health and Environmental Inequalities?** Studio 2
Session Chairs: Julie Cwikel and Nelson Gouveia

O-088 **$PM_{2.5}$ mass and black carbon from biomass-burning cookstoves in relation to diabetic status and metabolic syndrome among Honduran women**
Sarah Rajkumar, Maggie L. Clark, Bonnie N. Young, Megan L. Graham, Annette M. Bachand, Robert Brook, Tracy L. Nelson, John Volckens, Stephen J. Reynolds, Sebastian Africano, Christian L'Orange, Anibal B. Osorto Pinel, Jennifer L. Peel*

O-089 **Atmospheric pollution and menstrual cycle**
Lise Giorgis-Allemand, Jean Bouyer, Lyliane Rosetta, Jean-Christophe Thalabard, Rémy Slama*

O-090 **Green spaces, high temperature, air pollution and adverse pregnancy outcomes risk in Rome, 2001 -2013**
Patrizia Schifano, Federica Asta, Chiara Badaloni, Marina Davoli, Paola Michelozzi*

O-091 **Exposure to $PM_{2.5}$ and Ozone and Progression of Subclinical Atherosclerosis among Women Transitioning through Menopause**
Chunzhe Duan, Evelyn Talbott, Maria Brooks, Rachel Broadwin, Karen Matthews, Emma Barinas-Mitchell*

O-092 **Serum dioxin levels and neuropsychological functioning in the Seveso Women's Health Study**
Jennifer Ames, Marcella Warner, Paolo Mocarelli, Paolo Brambilla, Stefano Signorini, Brenda Eskenazi*

O-093 **School Location and Environmental Justice: Outdoor NO_2 Air Pollution in the United States**
Matthew Bechle, Dylan Millet, Julian Marshall*

10:45 - 12:15 O.17 **Linking risk assessment with risk communication for better evidence informed policy making** Studio 3
Session Chairs: Roberto Bertollini and Samuel Fuhrimann

O-094 **Disease burden due to gastrointestinal pathogens in wastewater along the major wastewater system in Kampala, Uganda**
Samuel Fuhrimann, Mirko Winkler, Michelle Stalder, Charles Niwagaba, Mohammed Babu, Narcis Kabatereine, Abdullah Halage, Jürg Utzinger, Guéladio Cissé, Maarten Nauta*

O-095 **Development of an operational model for risk assessment in case of environmental and food chain contamination from dioxins**
Pietro Salizzoni, Massimo Marro, Ubaldo Natangelo, Rosanna Desiato, Elisa Baioni, Ivana Bottazzi, Simona Possamai, Giuseppe Ru*

O-096 **A Natural Experiment: Closure of an Oil Refinery & Influence on Local Hospitalizations**
Hwashin Shin, Wesley Burr, Robert Dales, Marc Smith-Doiron, Branka Jovic, Lisa Kauri, Ling Liu, Dave Stieb*

O-097 **The economics of environment and health: Cost of mortality and morbidity due to $PM_{2.5}$ in Europe**
Marco Martuzzi, Nils Axel Braathen, Frank George*

O-098 **Contextual factors and environmental health risk perception**
Jaime Madrigano, Nada Petrovic, Lisa Zaval*

ETH-04 **Linking risk assessment with risk communication for better evidence informed policy making: Ethical Discussions**
*Martin Tondel**

12:15 - 13:00 Lunch — Foyer

13:00 - 14:15 **POSTER SESSION 2** — Poster Areas
(See poster detail on page 75)

14:15 - 15:45 **PARALLEL SESSIONS**

14:15 - 15:45 S.08 **Environment and Ageing** — Sala Sinopoli
Session Chairs: Annette Peters and Andrea Baccarelli

S-037 **Environment and Ageing – Introduction into the topic**
*Annette Peters**

S-038 **Long-term air pollution exposure is associated with molecular markers of accelerated molecular ageing**
Cavin Ward-Caviness, Kathrin Wolf, Simone Wahl, Josef Cyrys, Christian Gieger, Annette Peters*

S-039 **Lead, cadmium and cardiovascular health in aging populations: opportunities for prevention**
Ana Navas-Acien, Maria Tellez-Plaza*

S-040 **Air pollution stress and the ageing phenotype over the life span**
*Tim S. Nawrot**

S-041 **Research Needs**
*Andrea Baccarelli**

14:15 - 15:45 O.18 **Traffic noise and novel health outcomes** — Sala Petrassi
Session Chairs: Mette Sorenson and Maria Foraster Pulido

O-099 **Association of long-term average levels of night-time road, railway, and aircraft noise and noise intermittency with arterial stiffness in the Swiss SAPALDIA cohort**
Maria Foraster, Ikenna C. Eze, Danielle Vienneau, Mark Brink, Christian Cajochen, Harris Héritier, Emmanuel Schaffner, Simon Endes, Arno Schmitt-Trucksäss, Jean-Marc Wunderli, Martin Röösli, Nicole Probst-Hensch*

O-100 **Road Traffic Noise, Blood Pressure and Heart Rate: Pooled Analyses of Harmonized Data from 91,718 Participants**
Wilma Zijlema, Yutong Cai, Dany Doiron, Stephane Mbatchou, Isabel Fortier, John Gulliver, David Morley, Kees de Hoogh, Susan Hodgson, Paul Elliott, Timothy Key, Havard Kongsgard, Kristian Hveem, Amadou Gaye, Paul Burton, Anna Hansell, Ronald Stolk, Judith Rosmalen*

O-101 **Source-specific transportation noise mortality from heart failure and myocardial infarction in Switzerland**
Danielle Vienneau, Harris Héritier, Maria Foraster, Ikenna Eze, Mark Brink, Christian Cajochen, Jean-Marc Wunderli, Nicole Probst-Hensch, Martin Röösli*

O-102 **Traffic noise and risk for incident atrial fibrillation**
Mette Sørensen, Maria Monrad, Ahmad Sajadieh, Jeppe Christensen*

O-103 **Road traffic noise exposure in relation to waist circumference, diabetes and hypertension - A longitudinal study**
Adndrei Pyko, Charlotta Eriksson, Agneta Hilding, Natalia Mitkovskaya, Mikael Ögren, Claes-Göran Östenson, Alva Wallas, Göran Pershagen*

O-104 **Association between long-term noise exposure from traffic noise measured indoor and outdoor and cognitive function in participants the Heinz Nixdorf Recall study**
Lilian Tzivian, Martha Jokisch, Winkler, Maria Foraster, Christian Weimar, Frauke Hennig, Kateryna Fuks, Dorothea Sugiri, Nico Dragano, Raimund Erbel, Karl-Heinz Jöckel, Susanne Moebus, Barbara Hoffmann*

14:15 - 15:45	S.09	**The health impact of industrially contaminated sites, a global environmental health challenge** **Session Chairs:** Ivano Iavarone and Marco Martuzzi	Teatro Studio
	S-042	**Assessing environmental exposure in industrially contaminated areas, GIS-based approaches** *Kees de Hoogh**	
	S-045	**Environmental health inequalities in contaminated industrial areas in Brazil** *Nelson Gouveia,* Mateus Habermann, Luis Sergio Ozorio Valentim*	
	S-043	**Industrially contaminated sites in Greece: use of biomarkers and the exposome paradigm** *Dimosthenis Sarigiannis**	
	S-044	**Long term effects of industrial pollution: a residential cohort approach in the Civitavecchia area (Central Italy)** *Carla Ancona,* Lisa Bauleo, Stefania Massari, Roberto Sozzi, Marina Davoli, Francesco Forastiere*	
		Commentary: epidemiology in industrially contaminated sites: way forward *Manolis Kogevinas**	
14:15 - 15:45	O.19	**Natural and anthropogenic air pollution: a global perspective with different health indicators** **Session Chairs:** Giovanni Viegi and Dongni Ye	Risonanze
	O-105	**Long-Term $PM_{2.5}$ Exposures and Cardiovascular, Respiratory, and Cancer Mortality among Medicare Enrollees** *Vivian Pun, Fatemeh Kazemiparkouhi, Justin Manjourides, Helen Suh, Ki-Do Eum**	
	O-106	**Exposure to Traffic and Fine Particulate Matter and CT Measures of Lung Volume, Mass, Density, and Airway Size in the Framingham Heart Study** *Mary Rice,* Kirsten Dorans, Wenyuan Li, Elissa Wilker, Petter Ljungman, Diane Gold, Joel Schwartz, Petros Koutrakis, George O'Connor, Murray Mittleman, George Washko*	
	O-107	**Associations between air pollution and respiratory symptoms in 380,000 European adults** *Dany Doiron,* Kees de Hoogh, Nicole Probst-Hensch, Stéphane Mbatchou, Marloes Eeftens, Isabel Fortier, Amadou Gaye, Ronald Stolk, Anna Hansell*	
	O-108	**Historic air pollution exposure and cause-specific mortality risks in England and Wales** *Rebecca Ghosh,* Marta Blangiardo, Chloe Perkins, Danielle Vienneau, Kayoung Goffe, David Briggs, John Gulliver, Anna Hansell*	
	O-109	**Ambient particulate matter, landscape fire smoke and emergency ambulance dispatches in Australia** *Farhad Salimi,* Geoff Morgan, Sarah Henderson, Bin Jalaludin, Fay Johnston*	
	O-110	**Saharan dust and associations between different outcomes in Sicily** *Matteo Renzi,* Massimo Stafoggia, Stefano Zauli Sajani, Achille Cernigliaro, Salvatore Scondotto, Francesco Forastiere*	
14:15 - 15:45	O.20	**Exposure to trace elements and child's health** **Session Chairs:** Monica Guxens and Daniela D'Ippoliti	Sala Ospiti
	O-111	**Prenatal exposure to outdoor airborne trace elements and cognitive and psychomotor development during childhood in four European birth cohorts** *Malgorzata Lubczynska,* Jordi Sunyer, Henning Tiemeier, Daniela Porta, Claudia Klümper, Vincent Jaddoe, Francesco Forastiere, Barbara Hoffman, Mark Nieuwenhuijsen, Gerard Hoek, Kees de Hoogh, Göran Pershagen, Bert Brunekreef, Mònica Guxens*	
	O-112	**Tooth manganese and neurobehavior in Italian children: sex-specific windows of susceptibility** *Julia Anglen,* Birgit Claus Henn, Manish Arora, Christine Austin, Roberto Lucchini, Donald Smith, Brent Coull, Silvia Zoni, Chiara Fedrighi, Chiara Benedetti, Robert Wright*	
	O-113	**Child growth and development in relation to long-term arsenic exposure through drinking water and food in rural Bangladesh** *Marie Vahter**	
	O-114	**Prenatal but not postnatal cadmium exposure negatively associated with adiposity in adolescents** *Meghan Moynihan,* Martha Maria Tellez-Rojo, Peter X.K. Song, Alejandra Cantoral, Karen E. Peterson*	
	O-115	**Prenatal exposure to metals and essential trace elements and the risk of childhood obesity: a prospective pregnancy cohort study** *Leda Chatzi,* Maria Kippler, Marina Vafeiadi, Eirini Pentheroudaki, Theano Roumeliotaki, Georgia Chalkiadaki, Eleni Fthenou, Katerina Sarri, Maria Vassilaki, Manolis Kogevinas,Marie Vahter*	
	O-116	Moved to Poster Session 3	

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

14:15 - 15:45	0.21	**Air pollution biomarkers** **Session Chairs:** Rashid Shaikh and Karin van Veldhoven	Studio 1
	O-117	**A sex-specific blood transcriptome signature predicts particulate matter exposure among middle-aged men and women** *Karen Vrijens,* Ellen Winckelmans, Maria Tsamou, Willy Baeyens, Patrick De Boever, Danyel Jennen, Theo De Kok, Elly Den Hond, Wouter Lefebvre, Michelle Plusquin, Hans Reynders, Greet Schoeters, Nic Van Larebeke, Charlotte Van Poucke, Jos Kleinjans, Tim Nawrot*	
	O-118	**Associations between urinary polycyclic aromatic hydrocarbons in pregnant women and a panel of inflammation, oxidative stress, and angiogenesis biomarkers** *Kelly Ferguson,* Thomas McElrath, David Cantonwine, John Meeker*	
	O-119	**Prenatal exposure to ambient air pollution predicts telomere length and mitochondrial DNA content in 7-year old children** *Diana B.P. Clemente,* Martine Vrijheid, Dries S. Martens, Regina Grazuleviciene, Asta Danileviciute, Rosie R.C. McEachan, John Wright, Leda Chatzi, Marina Vafeiadi, Stephanou Euripides, Rémy Slama, Kristine B. Gutzkow, Per E. Schwarze, Marta Cirach, Mark Nieuwenhuijsen, Tim S. Nawrot*	
	O-120	**Traffic-Related Air Pollution and Telomere Length in Children and Adolescents Living in Fresno, CA** *Eunice Lee**	
	O-121	**Association of Urine Zinc with Prevalent and Incident Diabetes in the Strong Heart Study** *Martha Powers,* Nisa Marathur, Barbara V Howard, Jason G Umans, Elisa T Lee, Lyle G Best, Ana Navas-Acien*	
	ETH-05	**Air pollution biomarkers: Ethical discussions** *Raymond Neutra**	
14:15 - 15:45	0.22	**Participatory epidemiology to improve policy implementation** **Session Chairs:** Martin Tondel and Christina H Fuller	Studio 2
	O-122	**Epidemiology without primary prevention: the emblematic story of Gela, Sicily, Italy** *Fabrizio Bianchi,* Liliana Cori, Fabrizio Minichilli, Anna Pierini, Michele Santoro*	
	O-123	**Trends in motorcycle use in Latin America and the Caribbean: addressing policy implications** *Agnes Soares da Silva,* Eugênia Maria Silveira Rodrigues*	
	O-124	**Community engagement in development of a community air monitoring network in Imperial County, California** *Alexa Wilkie,* Esther Bejarano, Galatea King, Humberto Lugo, Dan Meltzer, Luis Olmedo, Michelle Wong, Paul English*	
	O-125	**Lead in drinking water is coming to a city near you** *Ronnie Levin**	
	O-126	**Environmental protection as an ethical requirement for community health** *Gamil Saleh**	
	ETH-06	**Ethical and Philosophical Dimensions of Participatory Epidemiology** *Colin L Soskolne**	
14:15 - 15:45	0.23	**Temperature, health and climate change: a global perspective** **Session Chairs:** Antonio Gasparrini and Jia Coco Liu	Studio 3
	O-127	**High-mortality heat waves: projections and sources of uncertainty in simulations over the 21st century in 83 US communities** *Elizabeth Barnes, Bryan Jones, Roger D. Peng, G. Brooke Anderson**	
	O-128	**The association between temperature variability and mortality: an international collaborative study** *Yuming Guo,* Antonio Gasparrini, Ben Armstrong, Benjawan Tawatsupa, Aurelio Tobias, Eric Lavigne, Micheline de Sousa Zanotti Stagliorio Coelho Coelho, Xiaochuan Pan, Ho Kim, Masahiro Hashizume, Yasushi Honda, Yue-Liang Leon Guo, Chang-Fu Wu, Antonella Zanobetti, Joel D. Schwartz, Michelle L. Bell, Ala V. Overcenco, Kornwipa Punnasiri, Shanshan Li, Linwei Tian, Paulo Saldiva,Gail Williams, Shilu Tong*	
	O-129	**Temperature-related morbidity and mortality in Sub-Saharan Africa: a systematic review of the empirical evidence** *A. Kofi Amegah,* Giovanni Rezza, Jouni Jaakkola*	
	O-130	**Projections of temperature-attributed mortality under climate change scenarios: an analysis of 395 locations in 15 countries** *Antonio Gasparrini,* Yuming Guo, Francesco Sera, Swarna Khare, Clare Heaviside, Aurelio Tobias, Masahiro Hashizume, Eric Lavigne, Antonella Zanobetti, Joel Schwartz, Daniel Oudin Astrom, Bertil Forsberg, Paola Michelozzi, Matteo Scortichini, Xerxes Seposo, Yue-Liang Leon Guo, Chang-fu Wu, Haidong Kan, Tran Ngoc Dang, Do Van Dung, Micheline de Sousa Zanotti Stagliorio Coelho, Paulo Hilario Nascimento Saldiva, Shilu Tong, Yasushi Honda, Ho Kim, Vardoulakis, Shakoor Hajat, Ben Arm strong*	

O-131 **Critical evaluation of current techniques for modelling heat-related mortality adaptation under climate change**
Simon Gosling, David Hondula, Aditi Bunker, Xinxin Zhang, Junguo Liu, Rainer Sauerborn*

ETH-07 **Temperature, health and Climate change: Ethical concepts**
*Wael Al-Delaimy**

15:45 - 16:10 Afternoon Break — Foyer

16:10 - 17:40 **PARALLEL SESSIONS**

16:10 - 17:40 O.24 **Neurodevelopmental/degenerative Disorders and Air Pollution** — Sala Sinopoli
Session Chairs: Beate Ritz and Liliana Tzivian

O-132 **Placental canonical transient receptor potential channel 6 expression and gestational trimester-specific fine particle air pollution exposure in the ENVIRONAGE birth cohort**
Leen J. Luyten, Karen Vrijens, Nelly D. Saenen, Harry A. Roels, Florence Debacq-Chainiaux, Tim S. Nawrot*

O-133 **Traffic-related air pollution and hyperactivity, dyslexia and dyscalculia in German adolescents**
Elaine Fuertes, Marie Standl, Joan Forns, Dietrich Berdel, Judith Garcia-Aymerich, Iana Markevych, Gerd Schulte-Koerne, Dorothee Sugiri, Carla M T Tiesler, Joachim Heinrich*

O-134 **Association of Sources of Fine Particulate Matter ($PM_{2.5}$) and Cognitive Health within Older Puerto Ricans**
Renee Wurth, Marianthi Kioumourtzoglou, Katherine Tucker, Helen Suh*

O-135 **Long-term exposure to air pollution and the incidence of dementia, Alzheimer's disease and cognitive impairment**
Paul Villeneuve, Yanyiang Yu, Shirley Mills, Scott Weichenthal, Dan Crouse, Randall Martin, Aaron van Donkelaar, Joan Lindsay*

O-136 **Ambient air pollution and risk of Parkinson's disease: a nationwide study in Taiwan**
Pei-Chen Lee, Li-Ling Liu, Yu Sun, Yu-An Chen, Chih-Ching Liu, Chung-Yi Li, Hwa-Lung Yu, Beate Ritz*

O-137 **Exposure to traffic pollution and increased risk of depressive and anxiety symptoms in older adults**
*Vivian Pun, Justin Manjourides, Helen Suh, Trent Honda**

16:10 - 17:40 O.25 **Causal Inference in Environmental Epidemiology** — Sala Petrassi
Session Chairs: Marc Weisskopf and Kelly M Bakulski

O-138 **Transporting established insights from classical experimental design, implemented using methods that rely on modern computing to address causal questions in environmental epidemiology**
Marie-Abele Bind, Donald Rubin*

O-139 **Epidemiological accuracy and validity tradeoffs in the age of the exposome; or why studies of ambient air pollution work**
Marc Weisskopf, Thomas Webster*

O-140 **Does DNA-methylation mediate the effect of maternal smoking on birth weight? The potential for inflated indirect effects in the presence of exposure measurement error in environmental epigenetic studies**
Linda Valeri, Sarah Reese, Shanshan Zhao, Brent Coull, Stephanie London*

O-141 **Application of targeted maximum likelihood estimation technique to assess the impact of prenatal exposure to nitrogen dioxide and ozone on stillbirth in a California cohort study**
Varada Sarovar, Rupa Basu, Brian Malig, Mark van der Laan, Maya Petersen*

O-142 **Correlation between Air Pollution and Hospital Admissions of Lung Cancer: Grey Incidence Analysis**
*Qun Guo, Liqun Liu, Xuying Wang, Lin Tian, Shi Chen, Xiaochuan Pan**

O-143 **A Direct Estimate of the Effect of $PM_{2.5}$ on Life Expectancy using Doubly Robust Quantile Regression**
*Joel Schwartz**

16:10 - 17:40 O.26 **Methodological advances in air pollution exposure assessment** — Teatro Studio
Session Chairs: Michael Jerrett and Mariej Strak

O-144 **3D Variability of Different Particle Metrics in Urban Areas**
Stefano Zauli Sajani, Arianna Trentini, Sabrina Rovelli, Isabella Ricciardelli, Stefano Marchesi, Dimitri Bacco, Claudio Maccone, Silvia Ferrari, Fabiana Scotto, Andrea Cattaneo, Paolo Lauriola, Vanes Poluzzi, Roy Harrison*

O-145 **Visualising and evaluating objective citizen-contributed environmental information: the CITI-SENSE Citizens' Observatory Toolbox**
Tom Cole-Hunter, Leonardo Santiago, Alexander Arpaci, David Broday, Nuria Castell, Karen Galea, Milena Jovasevic-Stojanovic, Tania Martinez, Johanna Robinson, Vlasta Svecova, Hans Keune, Fintan Hurley, Hai-Ying Liu, Arne Berre, Mark Nieuwenhuijsen, Alena Bartonova*

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

O-146 **Exposure to Black Carbon in a free-living population in London and the influence of transport mode choice**
Juan Pablo Orjuela, Michelle Laeremans, Evi Dons, Ione Avila-Palencia, Mark Nieuwenhuijsen, Luc Int-Panis, Audrey de Nazelle*

O-147 **Optimal Deployment of a Heterogeneous Environmental Sensor Network**
Uri Lerner, Or Hirshfeld, Barak Fishbain*

O-148 **Land use regression for Ultrafine Particles; model development and evaluation in six European areas**
Erik van Nunen, Roel Vermeulen, Kees Meliefste, Ming Tsai, Alessio Naccarati, Mark Nieuwenhuijsen, David Morley, Leda Chatzi, Jelle Vlaanderen, John Gulliver, Paolo Vineis, Gerard Hoek*

O-149 **How Representative Are Current Particulate Matter Concentrations of Historical Levels? An Evaluation of Stability Over 10-Years in the US**
Sara Adar, Jennifer D'Souza*

16:10 - 17:40 S.10 **Atlanta to Asia: Measuring the effectiveness of air quality actions** Risonanze
Session Chairs: Hanna Boogaard and Kwaku Poku Asante

S-046 **Interventions for reducing ambient air pollution and their effects on health: A Cochrane systematic review**
Jacob Burns, Hanna Boogaard, Lisa Pfadenhauer, Stephanie Polus, Annemoon van Erp, Anke Rohwer, Ruth Turley, Eva Rehfuess*

Demonstrating the Child Health Benefits of Adopting Clean Cooking
Kwaku Poku Asante

S-048 **Impacts of Emission Changes on Air Quality and Acute Health Effects in the Southeast 1993-2013**
Armistead Russell, Paige Tolbert, Lucas Henneman, Cong Liu, Mitchel Klein, Joseph Abrams, James Mulholland, Yongtao Hu, Talat Odman, Howard Chang, Stefanie Sarnat, Matthew Strickland*

S-049 **Causal inference for Evaluating National or Regional Air Quality Interventions**
Corwin Zigler, Christine Choirat, Francesca Dominici*

S-050 **Study Designs, Lessons Learned and Future Research Directions to Assess Health Effects of Air Quality**
*Arden Pope**

16:10 - 17:40 O.27 **Household biomass use and health** Sala Ospiti
Session Chair: Ennio Cadum and Giulia Cesaroni

O-150 **The impact of $PM_{2.5}$ exposure due to outdoor smoke on inflammatory biomarkers**
Martine Dennekamp, Lahn Straney, Tom O'Dwyer, Michael Abramson, Kazuaki Negishi, Fabienne Reisen, Amanda Wheeler, Fay Johnston*

O-151 **Cancer risk of PAHs in particles emitted from biomass combustion**
Dimosthenis Sarigiannis, Spyridoula Nikolaki, Dimitrios Zikopoulos, Marianthi Kermenidou, Spyros Karakitsios*

O-152 **Urinary biomarkers of exposure to polycyclic aromatic hydrocarbons and volatile organic compounds among rural Guatemalan women using biomass for cooking**
John Weinstein, Lisa Thompson, Renee Asteria-Peñaloza, Anaite Diaz-Artiga, Gilberto Davila, Neal Benowitz*

O-153 **In utero household air pollution and lung development: Evidence from the Ghana Randomized Air Pollution and Health Study (GRAPHS)**
Kaali Seyram, Darby Jack, Kenneth Asayah, Patrick Kinney, Abena Yawson, Steven Chillrud, Seth Owusu-Agyei, Kwakupoku Asante, Alison Lee*

O-154 **Integrating field measurements and global models to estimate the contribution of solid fuel cooking and heating on air quality, disease burden, and climate in China**
Ellison Carter, Scott Archer-Nicholls, Michael Brauer, Aaron Cohen, Mohammad Forouzanfar, Joseph Forstad, Rajesh Kumar, Alexandra Lai, Yang Liu, Kun Ni, Hongjiang Niu, James Schauer, Majid Ezzati, Christine Wiedinmyer, Qingyang Xiao, Xudong Yang, Jill Baumgartner*

O-155 **Impacts of wildfire smoke plumes on regional air quality**
Ana Rappold, Alexandra Larsen, Brian Reich*

16:10 - 17:40 O.28 **Climate change and health (Non-temperature-related impact)** Studio 1
Session Chairs: Kris Ebi and Ai Milojevic

O-156 **Weather variability and seasonal influenza among different age groups in Queensland, Australia: A Bayesian spatio temporal analysis**
Wenbiao Hu, Xiadodong Huang*

O-157 **How Rainfall Matters? The Association between Rainfall and Rotavirus and Norovirus infection in Hong Kong**
Pin Wang, William Goggins*

O-158 **Linking malaria in Limpopo province, South Africa to climate using self-organizing maps**
Takayoshi Ikeda, Swadhin Behera, Yushi Morioka, Noboru Minakawa, Ataru Tsuzuki, Philip Kruger*

O-159 **Alteration in plant phenology and hay fever prevalence among US adults: combined evidence from satellite data and National Health Interview Survey 2002-2013**
Amir Sapkota, Jennifer Parker, Lara Akinbami, Frank Curriero, Sangram Ganguly, Lewis Ziska, Raghu Murtugudde, Chengsheng Jiang*

O-160 **Does flooding affect mental health? - analysis of General Practices prescribing data in England**
Ai Milojevic, Paul Wilkinson*

O-161 **The effect of rainfall and temperature on road traffic injuries in Rome, Italy**
Matteo Scortichini, Sara Farchi, Francesca Katherine de'Donato, Paola Michelozzi*

16:10 - 17:40 S.11 **Environmental Health Challenges in Africa: The IRS dilemma** Studio 2
Session Chairs: Jonathan Chevrier and Nosiku Sipilanyambe Munyinda

S-051 **Indoor air DDT levels following indoor residual spraying for malaria vector control**
*Riana Bornman**

S-052 **Prenatal exposure to DDT and neonatal thyroid hormone levels in an area sprayed for malaria control: The VHEMBE Study**
Jonathan Chevrier, Riana Bornman, Stephen Rauch, Madelein Crause, Muvhulawa Obida, Brenda Eskenazi*

S-053 **Prenatal exposure to DDT for malaria control and neurodevelopment among VHEMBE study participants, South Africa**
Brenda Eskenazi, Jonathan Chevrier, Stephen Rauch, Angelina Maphula, Madelein Crause, Vhuli Obida, Sookee An, Dana Barr, Riana Bornman*

S-054 **Socioeconomic Predictors of Pest Control Chemical Exposure in selected communities of Zambia**
*Nosiku Sipilanyambe Munyinda**

16:10 - 17:40 0.29 **Waste and Soil Contamination** Studio 3
Session Chairs: Anna Hansell and Juan P. Arrebola

O-162 **The potential impact of a new waste incineration plant on local dairy and agricultural products**
Gaia Fallani, Alessandra Rampini, Elisa Mariani, Rosanna Giordano, Maurizio Impallomeni*

O-163 **Persistent Organic Pollutant (POP) levels in human breast milk and Municipal Waste Incineration (MWI)**
Philippa Douglas, Brandon Parkes, Danielle Ashworth, Evie Kritioti, Emily Amezdroz, Vincenzo Salerno, Anna Hansell, Paul Elliott, Mireille Toledano*

O-164 **Newcastle Allotments Lead Biomonitoring Study: an investigation into the relationship between urban agriculture site soil lead concentrations and the blood lead concentration of gardeners**
Lindsay Bramwell, Jackie Morton, Jane Entwistle, Phil Hartley, Tanja Pless-Mulloli*

O-165 **Substantial decline of polychlorinated biphenyls (PCBs) serum levels 10 years after public health interventions in a population living near a contaminated site in Northern Italy**
Michele Magoni, Francesco Donato, Fabrizio Speziani, Carmelo Scarcella, Pietro Apostoli, Grazia Orizio, Lucia Leonardi, Alice Gaia*

O-166 **Follow-up study in a population cohort resident near a urban incinerator First results of the SPoTT surveillance program on metal levels in urine**
Ennio Cadum, Alessandro Alimonti, Antonella Bena, Beatrice Bocca, Monica Chiusolo, Elena Farina, Martina Gandini, Maria Rowinski, Manuela Orengia, Anna Pino, Enrico Procopio, Giuseppe Salamina*

O-167 **Increased risk of respiratory diseases among people living close to municipal waste landfills**
Francesca Mataloni, Carla Ancona, Chiara Badaloni, Martina Nicole Golini, Andrea Bolignano, Simone Bucci, Roberto Sozzi, Marina Davoli, Francesco Forastiere*

17:40 - 19:00 **ISEE GENERAL MEMBERS MEETING** Teatro Studio

19:00 - 19:30 Bus to Conference Dinner

19:30 - 23:30 **CONFERENCE DINNER**

23:00 - 24:00 Bus to Hotels and Auditorium

SATURDAY, SEPTEMBER 3

07:30 - 18:00 **REGISTRATION**

07:30 - 08:30 **EARLY MORNING SESSIONS**

07:30 - 08:30 E.07 **The end of big birth cohorts?** Teatro Studio
Session Chairs: Brenda Eskenazi

Birth cohorts in the USA: what was done, what went wrong, what is the future?
Kimberley Gray
Collaboration of European birth cohorts
Martine Vrijheid
Birth cohorts in Asia: why are new big cohorts functioning in Asia?
Reiko Kishi
Big data and the use of new technologies in birth cohort research
Perry Hystad
Ethics and the Long Term Prospective Study
Raymond Neutra
An integrative discussion of worldwide experiences in study design of birth cohorts
Brenda Eskenazi and Martine Vrijheid

07:30 - 08:30 E.08 **Ultrafine particles and airports - exposure and health effects** Risonanze
Session Chairs: Nicole Janssen

Health Effects of Short- and Long-Term Exposure to Ultrafine Particles
Annette Peters
Airport related impacts on ambient UFP concentrations and size in Los Angeles and Boston and their implications for exposure assessment
Neelakshi Hudda
The relationship between aviation activities and ultrafine particle concentrations near airports
Giorgio Cattani
Feasibility of studies into health effects of UFP from aircrafts: examples from the Netherlands
Danny Houthuijs

07:30 - 08:30 E.09 **Cheating and Environmental Health** Sala Ospiti
Session Chairs: Ronnie Levin

Lead in drinking water, testing, and health risks: Flint, Michigan and Washington, DC
Simoni Trianatafyllidou and Ronnie Levin
Dieselgate: Volkswagen and beyond. The EU damage
Anna Gerometta
Misfuelling-decieving the customer, deceived by the customer
Joel Schwartz

07:30 - 08:30 E.10 **Arsenic in Food: Exposure, Microbiome and Health Impacts** Studio 1
Session Chairs: Michelle Mendez

Estimating early life exposure to arsenic via food and water and its health impacts
Marie Vahter
In utero and infant arsenic exposure and its relation with immunity and the microbiome
Margaret Karagas
Arsenic, genetics and the link to diabetes
Ana Navas-Acien
Inorganic arsenic and cardiometabolic risk in adults from China and Mexico
Michelle A Mendez

07:30 - 08:30 E.11 **A damaged foundation: How environmental exposures disrupt the immune system** Studio 2
Session Chairs: Bonnie Joubert

Associations between arsenic exposure and systemic immune responses in children and adults in the U.S. and Bangladesh
Molly Kile

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

E-05

Infant Infections and Inflammatory Markers in Relation to in utero Arsenic Exposure in a U.S. Pregnancy
Shohreh Farzan
Prenatal POPs exposures and their relation to infants' response to vaccines in China: Methodologic challenges and solutions
Parveen Bhatti

07:30 - 08:30 E.12 **Building your network: how to connect and make it count** Studio 3
Session Chairs: Kateryna Fuks

Panelists:
Yi Wang, Ying Zhang, Tong Zhu, Kristie Ebi

08:30 - 10:15 **PLENARY SESSION** Sala Sinopoli

Methodological Challenges in Environmental Epidemiology
Session Chairs: Roberta Pirastu, Robert Devlin

Causal inference in environmental epidemiology
Joel Schwartz, Harvard University, USA

PL-07 **OMICs and Environmental Health; Delineation of exposure to disease**
Roel Vermeulen, Utrecht University, The Netherlands

PL-08 **Taking Sides in the Courtroom: The Epidemiologist as Expert and Advocate**
Shira Kramer, Epidemiology International, Inc. USA

10:15 - 10:45 Morning Break Foyer

10:15 - 10:45 **CONNECTION CORNER** Foyer

Jordi Sunyer, CREAL/ISGlobal
Bonnie Joubert, NIEHS, Extramural Epidemiology Program
Claudia Thompson, Branch Chief for Susceptibility and Population Health

10:45 - 12:15 **PARALLEL SESSIONS**

10:45 - 12:15 S.12 **Health effects of ozone exposure: recent evidence, new pathways of research and future concerns** Sala Sinopoli
Session Chairs: Klea Katsouyanni and Annette Peters

S-055 **Concentration-response functions for ozone in health impact assessment- time-series evidence systematic review and subsequent expert committee recommendations**
Heather Walton, Sujin Kang, Richard Atkinson, Inga Mills, Ross Anderson*

S-056 **Long-term exposure to ambient ozone and mortality: a quantitative systematic review and meta-analysis of evidence from cohort studies**
Richard Atkinson, Barbara Butland, Sani Dimitroulopoulou, Mat Heal, John Stedman, Nicola Carslaw, Deborah Jarvis, Claire Heaviside, Sotiris Vardoulakis, Heather Walton, H Ross Anderson*

S-057 **Effects of exposure to ozone on children's respiratory health**
Evangelia Samoli, Anna Karakatsani, Sophia Rodopoulou, Konstantina Dimakopoulou, Despoina Papakosta, Georgios Grivas, John Douros, Klea Katsouyanni*

S-058 **The impact of climate change on tropospheric ozone and subsequent human health**
*Michelle Bell**

S-059 **Future approaches for studying health effects of ozone**
*Annette Peters**

10:45 - 12:15 O.30 **Early life exposures and DNA methylation markers** Sala Petrassi
Session Chairs: Lorenzo Richiardi and Elaine Fuertes

O-168 **450K genome-wide DNA methylation study in human placenta identifies novel loci associated with maternal tobacco smoking: implications for birth weight**
Eva Morales, Nadia Vilahur, Lucas A Salas, Valeria Motta, Mariana F Fernandez, Mario Murcia, Sabrina Llop, Adonina Tardón, Guillermo Fernandez-Tardon, Loreto Santa-Marina, Mara Gallastegui, Valentina Bollati, Xavier Estivill, Nicolás Olea, Jordi Sunyer, Mariona Bustamante*

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

O-169 **Air pollution and temperature on associations with DNA methylation in a mother-child cohort: an epigenome-wide analysis using penalization methods**
Emilie Abraham, Marie-Abèle Bind, Lise Giorgis-Allemand, Jorg Tost, Julien Galineau, Agnes Hulin, Remy Slama, Johanna Lepeule*

O-170 **Associations of Paternal Urinary Phthalates with Genome-Wide DNA Methylation of Sperm**
Haotian Wu, Molly Estill, Stephen A. Krawetz, Cynthia K. Sites, Rahil Tayyab, J. Richard Pilsner*

O-171 **Epigenome-wide analyses of prenatal perfluoroalkyl acids exposure on cord blood DNA methylation: the Hokkaido study**
Sachiko Kobayashi, Ryu Miura, Chihiro Miyashita, Atsuko Araki, Mayumi Ishizuka, Hiroyuki Nakazawa, Yoichi Ito, Takeo Kubota, Reiko Kishi*

O-172 **Lower Placental Leptin DNA Methylation through Gestational Exposure to Particulate Matter Air Pollution**
Nelly D. Saenen, Karen Vrijens, Bram G. Janssen, Harry A. Roels, Kristof Neven, Wim Vanden Berghe, Wilfried Gyselaers, Charlotte Vanpoucke, Patrick De Boever, Tim S. Nawrot*

O-173 **Persistent DNA methylation changes link prenatal mercury exposure and cognitive performance in childhood**
Andres Cardenas, Sheryl L. Rifas-Shiman, Marie-France Hivert, Augusto A. Litonjua, Golareh Agha, Dawn L. DeMeo, Xihong Lin,Matthew W. Gillman, Emily Oken, Andrea A. Baccarelli*

10:45 - 12:15 O.31 **Exposure Assessment** Teatro Studio
Session Chairs: Denis Sarigiannis and Ana Paula Sacone

O-174 **Assessing health impacts of hazardous waste: the exposome paradigm**
Dimosthenis Sarigiannis, Spyros Karakitsios*

O-175 **Coupling a human cohort (SEPAGES) and a toxicological experiment to decipher the relations between the Exposome, omics markers and child health**
Sarah Lyon-Caen, Johanna Lepeule, Claire Philippat, Marion Ouidir, Céline Vernet, Pascale Hoffmann, Blandine deLauzon-Guillain, Sabine Plancoulaine, Nicole Le Moual, Raphaëlle Varraso, Sarah Valentino, Anne Tarrade, Délphine Ralliard-Rousseau, Flemming Cassee, Joane Quentin, Pascale Chavatte-Palmer, Isabelle Pin, Valérie Siroux, Rémy Slama**

O-176 **Lead exposure from home and school environments: influence of diet on blood lead levels**
Ana Paula Sacone da Silva Ferreira, Isabelle Nogueira Leroux, Flávio Ferreira Bezerra, Júlia Prestes da Rocha Silva, Fábio Ferreira da Silva, Fernanda Junqueira Salles, Maciel Santos Luz, Nílson Antonio de Assunção, Maria Regina Alves Cardoso, Kelly Polido Kaneshiro Olympio*

O-177 **Metabolic effects of environmental pollutants in pregnant women -an exposome approach**
Lea Maitre, Oliver Robinson, Mireille B. Toledano, Jesús Ibarluzea, Loreto Santa Marina, Jordi Sunyer, Cristina Villanueva, Martine Vrijheid, Muireann Coen*

O-178 **Metabolomic and inflammatory responses to in-vehicle traffic pollution in a panel of car commuters**
*Chandresh Ladva, Rachel Golan, Roby Greenwald, Karan Uppal, Donghai Liang, ViLinh Tran, Tianwei Yu, Dean Jones, Jeremy Sarnat**

O-179 **Personal exposure monitoring to environment-related factors during early life and childhood**
David Donaire-Gonzalez, Xavier Basagaña, Rosemary McEachan, Audrius Dedele, Leda Chatzi, Remy Slama, Berit Granum, Cyntia Manzano, Maribel Casas, Oliver Robinson, Martine Vrijheid, Mark J Nieuwenhuijsen*

10:45 - 12:15 S.13 **Climate change and health in Africa: Challenges with Water-related and Vector-borne Diseases** Risonanze
Session Chairs: Guéladio Cissé and Bernadette Ramirez

S-060 **Health risks associated to vulnerability of water and sanitation systems in face of climate extreme events in a West African medium-sized city**
Guéladio Cissé, Brama Koné, Kouassi Richard Mbra, Yao Etienne Kouakou, Adjoua Nadège Boko*

S-061 **Increasing Resilience to Malaria and Schistosomiasis from an Ecohealth perspective on the Sahel Band: A Case Study in Côte d'Ivoire and Mauritania**
Brama Koné, Mouhamadou Chouaïbou, Sid'Ahmed Dahdi, Bernadette Ramirez, Bassirou Bonfoh, Juerg Utzinger, Guéladio Cissé*

S-062 **Social, environment and climate change impacts on vector-borne diseases in arid areas of southern Africa**
Moses Chimbar, Samson Mukaaratirwa, Peter Furu, Barbara Ngwenya, Alexio Mbereko, Owen Rubaba, Tawanda Manyangadze, Margaret Macherera, Resign Gunda, Rosemary Musesengwa, White Soko, Zibusiso Jokomo, Muhuburi Kabuyaya*

S-063 **Pesticide usage risks for ecosystems and human health under climate change in the Western Cape, South Africa**
Lucinda Fairhurst-Bremer, Guéladio Cissé, Aqiel Mohamed Dalvie, Martin Röösli*

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

S-064 **Water, climate, and health risks in West Africa: Perspectives from a regional water quality program**
Simeon Kenfack, M Beguere, L Boukerrou*

S-065 **Research uptake on vector-borne diseases and climate change**
Bernadette Ramirez, Johannes Sommerfeld, Florence Fouque, Diarmid Campbell-Lendrum, Magaran Bagayoko, Thierry Baldet, Yeya Toure*

10:45 - 12:15 O.32 **Occupational and environmental exposures and non malignant diseases** Sala Ospiti
Session Chairs: Giorgio Assennato and Nadine Steckling

O-180 **The employment history of people with and without asthma**
Rebecca Ghosh, Paul Cullinan, David Strachan, Deborah Jarvis*

O-181 **The health effects of working in waste disposal incinerators and landfill: a systematic review**
Maria Grazia Lourdes Monaco, Amalia Mattiello, Mariarosaria Muoio, Rossella Uccello, Paolo Chiodini, Salvatore Panico*

O-182 **Occupational Exposures and Symptoms among Firefighters and Police responding to Wildfire**
Eric Amster, Shahar Fertig, Manfred Green, Rafi Carel*

O-183 **Chimney sweeps in Sweden: a questionnaire-based assessment of long-term changes in work conditions and current eye and airway symptoms**
Ayman Alhamdow, Per Gustavsson, Kristina Jakobsson, Lars Rylander, Håkan Tinnerberg, Karin Broberg*

O-184 **Occupational Heat Exposures and Health Implications – Epidemiological evidence from select India workplaces**
Vidhya Venugopal, Jeremiah Chinnadurai, Kumaravel K, Latha PK, Manikandan K, Rekha S*

O-185 **Occupational Pesticide Exposures and Risk of Depression in Central California**
Zeyan Liew, Kimberly Paul, Shilpa Narayan, Pei-Chen Lee, Beate Ritz*

10:45 - 12:15 O.33 **Prenatal and early life dioxin exposure and children's health** Studio 1
Session Chairs: Brenda Eskenazi and Ana Maria Mora

O-186 **In Utero Dioxin Exposure and Birth Outcomes in the Seveso Second Generation**
Brenda Eskenazi, Jennifer Ames, Paolo Mocarelli, Paolo Brambilla, Stefano Signorini, Marcella Warner*

O-187 **In Utero Dioxin Exposure and Obesity in the Seveso Second Generation**
Marcella Warner, Caitlin Turner, Jennifer Ames, Paolo Mocarelli, Paolo Brambilla, Stefano Signorini, Brenda Eskenazi*

O-188 **Perinatal Exposure to Dioxins and Dioxin-like Compounds and Infant Growth and Body Mass Index at Seven Years: A Pooled Analysis of Three European Birth Cohorts**
*Nina Iszatt, Hein Stigum, Eva Govarts, Lubica Palkovicova Murinova, Greet Schoeters, Tomas Trnovec, Juliette Legler, Cathrine Thomsen, Gudrun Koppen, Merete Eggesbø**

O-189 **Prenatal Dioxin Exposure and Neurocognitive Functioning in the Seveso Second Generation Study**
Jennifer Ames, Marcella Warner, Paolo Mocarelli, Paolo Brambilla, Stefano Signorini, Brenda Eskenazi*

O-190 **Maternal dietary exposure to dioxins and PCBs and neurodevelopmental outcomes in 3 year old children in MoBa**
Ida H. Caspersen, Margaretha Haugen, Anne Lise Brantsæter, Helen Engelstad Kvalem, Helle Margrete Meltzer, Jan Alexander, Helle K. Knutsen*

ETH-08 **Characterization of long-term or intergenerational risks from environmental hazards**
*Ellen Wells**

10:45 - 12:15 O.34 **Integrating environmental risk factors in cancer etiology, surveillance and prevention** Studio 2
Session Chair: Pietro Comba

O-191 **Urinary trace metals and breast cancer: a prospective Danish cohort study**
Kirsten Thorup Eriksen, James Harrington, Keith E. Levine, Mette Sørensen, Anne Tjønneland, Jaymie R. Meliker, Ole Raaschou-Nielsen*

O-192 **In Utero DDT exposure and breast density before age 50**
Barbara Cohn, Piera Cirillo, Nickilou Krigbaum*

O-193 **Cadmium exposure and risk of breast cancer by subtype**
Loreta Strumylaite, Rima Kregzdyte, Algirdas Bogusevicius, Lina Poskiene, Dale Baranauskiene, Darius Pranys*

O-194 **Health effects from use of coal for cooking among Asian women**
Qing Lan, Wei Jie Seow, Xiao-Ou Shu, Christopher Kim, Yong-Bing Xiang, Bryan Bassig, Wei Hu, Dean Hosgood, Bu-Tian Ji,Qiuyin Cai, Yutang Gao, Wei Zheng, Nathaniel Rothman*

O-195 **Mesothelioma surveillance and asbestos exposure detection in Italy**
Lucia Fazzo, Marco De Santis, Caterina Bruno, Pietro Comba, Amerigo Zona*

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

O-195b **Health Implications of Environmental and Occupational Exposure to Organics and Metals in Northern Vietnamese Female Electronic Waste (E-waste) Recyclers**
Linda Birnbaum, J Kincaid, A Schecter, H.T. Ouynh, H. Clair, M. Cave, M Gagnier*

10:45 - 12:15 O.35 **Metals and health** Studio 3
Session Chairs: Susan Hodgson and Beth Feingold

O-196 **Cadmium exposure and associated factors among an adult population from Southern Brazil**
Ana Carolina Bertin de Almeida Lopes, Ana Navas-Acien, Ellen Kovner Silbergeld, Maria de Fatima H Carvalho, Marcia Liane Buzzo, Tiago Severo Peixe, Mariana Ragassi Urbano, Monica Maria Bastos Paoliello*

O-197 **Declining Exposures to Lead and Cadmium Contribute to Explain the Reduction of Cardiovascular Mortality in the United States Population, 1988-2004**
Maria Tellez-Plaza, Ana Navas-Acien, Roberto Pastor-Barriuso, Ciprian M. Crainiceanu, Josep Redon, Eliseo Guallar, Adrian Ruiz-Hernandez*

O-198 **Lead intoxicated children in Kabwe / Zambia**
Stephan Bose-O'Reilly, John Yabe, Jack Caravanos, Joseph Makumba*

O-199 **Lead, blood pressure and hypertension**
Angela Gambelunghe, Gerd Sallsten, Yan Borné, Niklas Forsgard, Bo Hedblad, Björne Fagerberg, Gunnar Engström, Lars Barregard*

O-200 **Metals in urine and oxidative stress biomarkers in an adult population from Spain: the Hortega Study**
Inma Galan-Chilet, Maria Grau-Perez, M. Carmen Tormos, Raul Lopez-Izquierdo, Isabel Gonzalez-Manzano, Ana Navas-Acien, Guillermo T. Saez, Javier F. Chaves, Juan C. Martin-Escudero, Josep Redon, Maria Tellez-Plaza*

O-201 **The joint effect of prenatal exposure to metal mixtures on neurodevelopmental outcomes at 20-40 months of age: evidence from rural Bangladesh**
Linda Valeri, Maitreyi Mazumdar, Jennifer Bobb, Birgit Claus Henn, Ema Rodrigues, Omar Sharif Ibne Hasan, Molly Kile, Quazi Quamruzzaman, Sakila Afroz, Golam Mostofa, Chitra Amarasiriwardena, David Bellinger, David Christiani, Brent Coull, Robert Wright*

12:15 - 13:00 Lunch Foyer

13:00 - 14:15 **POSTER SESSION 3** Poster Areas
(see poster details on page 91)

14:15 - 15:45 **PARALLEL SESSIONS**

14:15 - 15:45 O.36 **Air Pollution and Cancer** Sala Sinopoli
Session Chairs: Dana Loomis and Mariana Tavares Guimaraes

O-202 **Long-term Exposure to Air Pollution from Power Plants and Mortality in a Cohort of People Living in an Industrial Area of Southern Italy**
Lisa Bauleo, Carla Ancona, Angela Morabito, Stefano Spagnolo, Alessandra Nocioni, Tiziano Pastore, Giuseppe Spagnolo, Susi Epifani, Lucia Bisceglia,Roberto Giuia, Giorgio Assennato, Marina Davoli, Francesco Forastiere, on behalf of the CSA Puglia group*

O-203 **Air pollution and incidence of gastric and upper aerodigestive tract cancer in 15 European cohorts**
Gudrun Weinmayr, Jule Munkenast, Giulia Cesaroni, Sara Grioni, Gerard Hoek, Andrea Jaensch, Bente Oftedal, Michelle Plusquin, Andrei Pyko, Fulvio Ricceri, Fulvio Ricceri, Johan Sommar, Mette Sørensen, Ibon Tamayo, Ole Raaschou-Nielsen, Gabriele Nagel, Gabriele Nagel*

O-204 **Ambient Air Pollution and Non-Lung Cancer Mortality in the Cancer Prevention Study-II (CPS-II)**
Michelle C. Turner, Daniel Krewski, W. Ryan Diver, C. Arden Pope III, Richard T. Burnett, Michael Jerrett, Julian Marshall, Susan M. Gasptur*

O-205 **Mortality for Respiratory Cancer and Traffic-related Air Pollution in Sao Paulo**
Adeylson Ribeiro, Samuel Almeida, Adelaide Nardocci*

O-206 **Long-term Exposure to Ambient Air Pollution and Incidence of Brain Tumor in 12 European Cohorts: the European Study of Cohorts for Air Pollution Effects (ESCAPE)**
Zorana Jovanovic Andersen, Marie Pedersen, Gudrun Weinmayr, Claudia Galassi, Massimo Stafoggia, Johan N Sommar, Bente Oftedal, Andrea Jaensch, Andrei Pyko, Fulvio Ricceri, Sara Grioni, Gerard Hoek, Ole Raschou-Nielsen*

O-207 **Ambient Air Pollution and Bladder Cancer Incidence in 15 European Cohorts Within the ESCAPE Project**
Marie Pedersen, Massimo Stafoggia, Johan Sommar, Bente Oftedal, Andrei Pyko, Mette Sørensen, Rob Beelen, Michelle Plusquin, Andrea Jaensch, Giulia Cesaroni, Sara Grinoni, Fulvio Ricceri, Ibon Tamayo, Gerard Hoek, Ole Raaschou-Nielsen for the ESCAPE study group*

14:15 - 15:45	S.14	**Air pollution and brain health: the role of neuroimaging** **Session Chairs:** Jordi Sunyer and Monica Guxens	Sala Petrassi
	S-066	**Use of Magnetic Resonance Imaging Within a Molecular Epidemiologic Study of Air Pollution** *Frederica Perera* Bradley Peterson, Virginia Rauh*	
	S-067	**Air pollution exposure during pregnancy and brain morphology in young children: a population-based prospective birth cohort study** *Mònica Guxens,* Malgorzata J Lubczynska, Ryan Muetzel, Albert Dalmau, Vincent W. Jaddoe, Frank C Verhulst, Gerard Hoek, Tonya White, Bert Brunekreef, Henning Tiemeier, Hanan El Marroun*	
	S-068	**Urban air pollution affects structural and functional processes of brain maturation in children** *Jordi Sunyer,* Marion Mortamais, Jesús Pujol, Jordi Sunyer*	
	S-069	**Neurotoxicity of Ambient Air Pollution on Brain Structure of Older Women** *Jiu-Chiuan Chen,* Ramon Casanova, Xinhui Wang, Yadong Xu, Jeanette Reyes, Marc Serre, William Vizuete, Ira Driscoll, Helena Chui, Susan Resnick, Mark Espeland*	
14:15 - 15:45	O.37	**GIS and exposure assessment of air pollution** **Session Chairs:** Kees De Hoogh and Kirsten Thorup Eriksen	Teatro Studio
	O-208	**A Conceptual Framework for the Assessment of Cumulative Exposure to Air Pollution at a Fine Spatial Scale** *Wahida Talantikite,* Cindy Padilla, Denis Zmirou-Navier, Olivier Blanchard, Geraldine LeNir, Philippe Quenel, Severine Deguen*	
	O-209	**Assessing air pollution exposure and health impacts using mobile phone activity** *Audrey de Nazelle,* Juan Pablo Orjuela, Markus Schläpfer*	
	O-210	**Comparison of Ultrafine Particles and Black Carbon Concentrations from a Mobile and Short-Term Land-Use Regression Model** *Jules Kerckhoffs,* Gerard Hoek, Kees Meliefste, Bert Brunekreef, Roel Vermeulen*	
	O-211	**Development of a GIS based exposure metric to assess environmental dioxin exposure and comparison with an urban Gaussian model** *Fervers Beatrice,* Coudon Thomas, Faure Elodie, Aurélie Danjou, Pietro Salizzoni*	
	O-212	**Lessons Learned from Extensive Mobile Air Quality Monitoring with Google Street View Cars** *Kyle P Messier,* Shahzad Gani, Roel Vermeulen, Steven P Hamburg, Joshua S Apte*	
	O-213	**Use of mobile phone traffic data for the assessment of air pollution exposure of urban population** *Claudio Gariazzo,* Armando Pelliccioni, Andrea Bolignano*	
14:15 - 15:45	O.38	**Green Spaces, Built Environment, and Human Health** **Session Chairs:** Payam Dadvand and Jasneth Asher Mullings	Risonanze
	O-214	**Association between urbanicity and biomarkers of early vascular aging in the PURSE-HIS cohort in Chennai, India** *Kevin Lane,* Eleanor Stokes, Sadagopan Thanikachalam, Mohan Thanikachalam, Michelle Bell*	
	O-215	**Association of early life exposure to tree pollen with the development of allergic sensitization, asthma, wheeze, and rhinitis in the New York City Neighborhood Allergy and Asthma Study** *Kate Weinberger,* Gina Lovasi, Matthew Perzanowski, Daniel Sheehan, Luis Acosta, Iyad Kheirbek, Thomas Matte, Patrick Kinney*	
	O-216	**Interrelationships between Walkability, Air Pollution, Greenness, and Adiposity** *Peter James,* Marianthi-Anna Kioumourtzoglou, Jaime Hart, Rachel Banay, Itai Kloog, Francine Laden*	
	O-217	**Lifelong Exposure to Green Space and Attentional Development: A Prospective Birth Cohort Study** *Payam Dadvand,* Christina Tischer, Marisa Estarlich, Sabrina Llop, Albert Dalmau-Bueno, Monica López-Vicente, Antònia Valentín, Mireia Gascon, Monica Guxens, Xavier Basagaña, Mark J Nieuwenhuijsen, Ferran Ballester, Jordi Sunyer*	
	O-218	**Natural environments and depressive symptoms in adolescents living in the United States** *Carla Bezold,* Peter James, Rachel Banay, Jaime Hart, Stacey Missmer, Francine Laden*	
	O-219	**Natural outdoors environments and prostate and breast cancer risk: a case-control in Spain** *Cristina O'Callaghan-Gordo,* Antònia Valentin, Marta Cirach, Gemma Castaño-Vinyals, Esther Gràcia-Lavedan, Echezarreta, Jone M Altzibar,Nuria Aragonés, Eva Ardanaz, Trinidad Dierssen, Vicente Martín, Victor Moreno, Rosana Peiró, Marina Pollán, Adonina Tardón, Manolis Kogevinas, Mark J. Nieuwenhuijsen*	

14:15 - 15:45	S.15	**Environmental exposures and women's perinatal health: implications for chronic disease risk** **Session Chairs:** Ami R Zota and Tamarra James-Todd	Sala Ospiti
	S-070	**Perinatal psychological distress as a potential modifier of the association between prenatal exposure to endocrine-disrupting chemicals (PBDEs, PCBs, and PFASs) and measures of thyroid function during pregnancy and postpartum** *Ami Zota,* Susanna Mitro, Kimberly Coleman-Phox, Nancy Adler, Barbara Laraia, Elissa Epel*	
	S-071	**Trimester-specific urinary phthalate metabolite concentrations and glucose tolerance in pregnant women** *Tamarra James-Todd,* Chiu Yu-Han, Carmen Messerlian, Lidia Mínguez-Alarcón, Jennifer Ford, Myra Keller, John Petrozza, Williams Paige, Russ Hauser*	
	S-072	**Mechanisms of endocrine disruptor action in the etiology of preeclampsia** *Kelly Ferguson,* David Cantonwine, Thomas McElrath, John Meeker*	
	S-073	**Association of high temperature and humidity with preterm delivery in extreme climate.** *Mohammad AlSeaidan,* Susan Korrick, Tamarra James-Todd, James Ware, Costas Christophi, Douglas Dockery*	
14:15 - 15:45	O.39	**Children's pesticide exposure, endocrine disruption, and neurodevelopmental effects** **Session Chairs:** Berna van De Wendel and Deborah Watkins	Studio 1
	O-220	**Pesticide exposure and thyroid hormones during pregnancy in the Infants' Environmental Health Study (ISA)** *Emelie Rietz,* Christian H Lindh, Ana María Mora, Berna van Wendel de Joode*	
	O-221	**Early-Life Insecticide Exposure and Motor Function in Infants** *Monica K Silver,* Jie Shao, Binquan Zhu, Minjian Chen, Yankai Xia, Betsy Lozoff, John D Meeker*	
	O-222	**Prenatal Pesticide Exposure and Autism in Children – a California Statewide Population Based Study** *Ondine von Ehrenstein,* Chenxiao Ling, Xin Cui, Andrew Park, Myles Cockburn*	
	O-223	**Social cognition in adolescents from the CHAMACOS study exposed prenatally to organophosphate pesticides** *Sharon Sagiv,* Maria Harris, Kim Harley, Kathrine Kogut, Julianna Deardorff, Kimberley Parra, Asa Bradman, Brenda Eskenazi*	
	O-224	**Update on Project TENDR: Targeting Environmental Neuro-Development Risks, translating science into policy** *Irva Hertz-Picciotto,* Maureen Swanson*	
	ETH-09	**Ethical and Philosophical Dimensions of Pesticide Exposure Among Children** *Colin L Soskolne**	
14:15 - 15:45	O.40	**Health impact assessment of air pollution and environmental exposures** **Session Chairs:** Marco Martuzzi and David Rojas-Rueda	Studio 2
	O-225	**Projecting Fine Particulate Matter-related Mortality in East China** *Lina Madaniyazi, Tatsuya Nagashima, Yuming Guo, Weiwei Yu, Shilu Tong**	
	O-226	**The health impacts of current urban and transport planning practices: A morbidity and burden of disease assessment** *Natalie Mueller,* David Rojas-Rueda, Xavier Basagaña, Marta Cirach, Tom Cole-Hunter, Payam Dadvand, David Donaire-Gonzalez, Maria Foraster, Mireia Gascon, David Martinez, Cathryn Tonne, Margartia Triguero-Mas, Antònia Valentín, Mark Nieuwenhuijsen*	
	O-227	**The mortality impacts of fine particles in France and health gains of alternative scenarios of reduction of air pollution** *Mathilde Pascal,* Perrine de Crouy Chanel, Claude Tillier, Vérène Wagner, Sylvia Medina*	
	O-228	**Health impacts and economic costs of air pollution in the metropolitan area of Skopje** *Gerardo Sanchez Martinez,* Pierpaolo Mudu* Dimitrios Chapizanis, Vladimir Kendrovski, Mihail Kochubovski, Margarita Spasenovska*	
	O-229	**Air pollution-related health damages and environmental justice impacts by economic sector in the United States** *Christopher Tessum,* Kimberley Mullins, Nathaniel Springer, Jason Hill, Julian Marshall*	
	ETH-10	**Health Impact Assessment of Air Pollution and Environmental Exposure** *Raymond Neutra**	

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

14:15 - 15:45	O.41	**Environmental disasters and evidence of health risks: cases from different continents** **Session Chairs:** Gueladio Cisse and Yadav Joshi	Studio 3
	O-230	**Leptospirosis outbreak following the 2014 major flooding event in Kelantan, Malaysia- a spatial-temporal Analysis** *Mohd Firdaus Mohd Radi,* Mohd Hasni Jaafar, Rozita Hod, Norfazilah Ahmad, Azmawati Nawi, Gul Muhammad Baloch, Rohaida Ismail, Jamal Hisham Hashim*	
	O-231	**Oil refineries and their potential risks for water bodies in Latin American and Caribbean regions.** *Flávia Bonolo-Dantas,* Mariana Tavares Guimarães, Maria Regina Alves Cardoso, Agnes Soares da Silva*	
	O-232	**Health risk assessment of severe winter disaster, dzud, in Mongolia** *Shinji Otani,* Abir Majbauddin, Tserenpurev Bat-Oyun, Kazunari Onishi, Hiroki Amano, Youichi Kurozawa, Masato Shinoda*	
	O-233	**Respiratory Health of the Children in the Hebei Spirit Oil Spill** *Yeonhee Chu,* Myung-sook Park, Seung-Hwa Lee, Jung-Ah Kim, Young-Hyun Choi, Hae-Kwan Cheong, Mina Ha*	
	ETH-11	**On the ethics of environmental disasters** *Alhaji A Aliyu**	
15:45 - 16:10		Afternoon Break	Foyer
16:10 - 17:40		**PARALLEL SESSIONS**	
16:10 - 17:40	S.16	**Causal inference methods for estimating health impacts of environmental policies** **Session Chairs:** Tarik Benmarhnia and Francesca Dominici	Sala Sinopoli
	S-074	**The new era of causal identification strategies for a more consequential environmental epidemiology** *Jay Kaufman**	
	S-075	**Does reducing $PM_{2.5}$ levels below the Annual National Ambient Air Quality Standards Causally Reduce Deaths and Hospitalizations?** *Francesca Dominici,* Maggie Makar, Joseph Antonelli, Qian Di, David Cutler, Joel Schwartz*	
	S-076	**A difference-in-differences approach to assess the effect of a heat action plan on heat-related mortality and equity in Montreal, Quebec** *Tarik Benmarhnia**	
	S-077	**Applying sensor-based knowledge to large population surveys to simulate the impact of interventions on urban and transport systems** *Ruben Brondeel,* Yan Kestens, Basile Chaix*	
16:10 - 17:40	O.42	**New Applications of Land Use Regression Modeling** **Session Chairs:** Gerard Hoek and Frauke Hennig	Sala Petrassi
	O-234	**Development of land-use regression models for ultrafine particles in Rome, Italy** *Giorgio Cattani,* Alessandra Gaeta, Alessandro Di Menno di Bucchianico, Antonella De Santis, Raffaela Gaddi, Mariacarmela Cusano, Giulia Cesaroni, Carla Ancona, Francesco Forastiere, Claudio Gariazzo, Camillo Silibello, Roberto Sozzi, Marco Inglessis, Elisabetta Salvatori, Fausto Manes*	
	O-235	**Optimal monitoring network design for a land use regression study in Lanzhou, China** *Lan Jin,* Jesse Berman, Kangning Huang, Yawei Zhang, Xibao Xu, Michelle Bell*	
	O-236	**Impact of error in land use regression model predictors on exposure predictions and health effect estimates** *Jelle Vlaanderen,* Lützen Portengen, Marc Chadeau-Hyam, Ulrike Gehring, Bert Brunekreef, Gerard Hoek, Roel Vermeulen*	
	O-237	**Development of Land Use Regression (LUR) models for assessment of annual average PM_{10} and endotoxin exposure levels in ambient air in a livestock dense area** *Myrna de Rooij,* Dick Heederik, Isabella Oosting, Gerard Hoek*	
	O-238	**Land-use regression modelling of ultrafine particles in Augsburg, Germany** *Kathrin Wolf,* Josef Cyrys, Alexandra Schneider, Tatiana Harciníková, Jianwei Gu, Thomas Kusch, Annette Peters*	
	O-239	**Community Monitoring around the Porter Ranch Natural Gas Leak Disaster** *Michael Jerrett**	

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

16:10 - 17:40 O.43 **Temperature and mortality - environmental and socioeconomic impacts** Teatro Studio
Session Chairs: Alexandra Schneider and Patrizia Schifano

O-240 **Heat and cold related-mortality in France: from time-series studies to prevention**
*Magali Corso, Vérène Wagner, Mathilde Pascal**

O-241 **Spatial variability in the effect of high temperature on mortality within the Athens Metropolitan Area, Greece**
Antonis Analitis, Christos Giannakopoulos, Anna Karali, Konstantinos Varotsos, Iphigenia Keramitsoglou, Chris Kiranoudis, Klea Katsouyanni, Klea Katsouyanni*

O-242 **The interactive effect of temperature and air pollution: a time series analysis in Rome, Italy**
Matteo Scortichini, Massimo Stafoggia, Francesco Forastiere, Paola Michelozzi*

O-243 **Socio-environmental factors associated with heat and cold related mortality in Vadu Health and Demographic Surveillance System, western India: A population based case-crossover study**
Vijendra Ingole, Sari Kovats, Barbara Schumann, Shakoor Hajat, Joacim Rocklöv, Sanjay Juvekar, Ben Armstrong*

O-244 **A time-series analysis of temperature-related mortality in South Africa between 1997 and 2012**
Noah Scovronick, Fiorella Acquaotta, Francesco Sera, Diego Garzena, Antonio Gasparrini*

O-245 **Socio-economic Position, Urban Heat Island and Green Areas as Factors that Modify Heat-related Mortality in Rome, Italy**
Francesca de'Donato, Chiara Badaloni, Massimo Stafoggia, Marina Davoli, Paola Michelozzi*

16:10 - 17:40 O.44 **Early Life Exposure to Air Pollution on Lung Function in Children** Risonanze
Session Chairs: Tom Bellander and Yi Wang

O-246 **Decreased Lung Function in 7-year-old Children Living in Proximity to Agricultural Applications of Elemental Sulfur**
Rachel Raanan, Robert Gunier, Balmes John, Alyssa Beltran, Harley Kim, Asa Bradman, Brenda Eskenazi*

O-247 **Air pollution and children's lung function growth in Hong Kong**
Lixing Tan, Xudong Liu, Zilong Zhang, Xiangqian Lao*

O-248 **Joint effects of traffic-related air pollution and lower respiratory tract infections on lung function in children from a French birth cohort**
Nicolas Bougas, Fanny Rancière, Malika Viola, Isabelle Momas*

O-249 **Measurement error in prenatal air pollution exposure estimates due to residential mobility**
Audrey Pennington, Matthew Strickland, Mitchel Klein, Xinxin Zhai, Armistead Russell, Craig Hansen, Lyndsey Darrow*

O-250 **Exposure to Traffic and Regional Air Pollution Throughout the Life Course on Lung Function**
Robert Urman, Rima Habre, Ed Rappaport, Jim Gauderman, Fred Lurmann, Rob McConnell, Frank Gilliland*

ETH-12 **Air Pollution and Children: how can we protect their health and prevent social inequality?**
*Sylvia Medina**

16:10 - 17:40 S.17 **Is it build it and they will come? New insights on strategies, tools and policy approaches to promote active travel** Sala Ospiti
Session Chairs: Francesca Racioppi and Esther Anaya Boig

Introduction
*Francesca Racioppi**

S-078 **What works? Combining research and stakeholder perspectives on active transport promotion**
Audrey de Nazelle, Emilia Smeds, Esther Anaya, Julian Sanchez, Evi Dons, Jurgen Buekers, Sonja Kahlmeier, Ilonka Horvath, Francesco Iacorossi, Thomas Götschi, Sandra Wegener*

S-079 **How does it work in practice? Approaches to supporting policy and action for active environments in 5 countries – the SPACE project**
Sonja Kahlmeier, Nick Cavill, Charlie Foster, Susana Aznar Lain, Radu Colt, Rosina Ndukwe, Tanja Onatsu, Zane Silina, Diane Crone*

S-080 **Propensity to Cycle Tool – a new way to reach policy makers?**
*Rachel Aldred**

S-081 **Beyond HIA: integrating outcomes in policy-making about cycling using system dynamics modelling**
*Alexandra Macmillan**

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

16:10 - 17:40 | 0.45 | **Occupational exposures and cancer** | Studio 1
Session Chairs: David Goldsmith and Octavio Jiménez-Garza

0-251 **A Meta-Analysis of Occupational Titanium Dioxide Exposure and Lung Cancer Mortality**
Hien Le, John Tomenson, Peter Morfeld, David Warheit, Brian Coleman, Kim Kreckmann, Stanley Miller*

0-252 **Asbestos-related diseases in Parana': The Brazil-Italy project**
Carolina Mensi, Luciana Puchalski Kalinke, Nen Nalú Alves das Mercês, Maria de Fátima Mantovani, Luciana Andreia Strobel, Elver Moronte, Dario Consonni, Leila Maria Mansano Sarquis*

0-253 **Epidemiological surveillance of sinonasal cancer in Italy and etiological issues**
Alessandra Binazzi, Davide Di Marzio, Marisa Corfiati, Silvia Eccher, Anna Maria Cacciatore, Jana Zajacovà, Carolina Mensi, Paolo Galli, Lucia Miligi, Roberto Calisti, Cristiana Pascucci, Barbara Dallari, Elisa Romeo, Alessandro Marinaccio*

0-254 **Malignant mesothelioma in Lazio railroad company workers**
Elisa Romeo, Laura Ancona, Valeria Ascoli, Lisa Bauleo, Elio Munafò*

0-255 **A pooled cohort analysis on cancer risk among former asbestos-exposed workers: role of asbestos clearance in explaining long-term mortality trend for pleural cancer**
Corrado Magnani, Francesco Barone-Adesi, Daniela Ferrante, Laura Ancona, Antonio Baldassarre, Vittoria Bressan, Tiziana Cena, Elisabetta Chellini, Francesco Cuccaro, Patrizia Legittimo, Ferdinando Luberto, Alessandro Marinaccio, Stefano Mattioli, Simona Menegozzo, Enzo Merler, Lucia Miligi, Dario Mirabelli, Marina Musti, Enrico Oddone, Venere Pavone, Patrizia Perticaroli, Aldo Pettinari, Roberta Pirastu, Alessandra Ranucci, Elisa Romeo, Orietta Sala, Corrado Scarnato, Stefano Silvestri, Working Group*

0-256 **Cancer incidence in the AGRICAN cohort study (2005-2011)**
Clémentine LeMarchand Séverine Tual, Noémie Levêque-Morlais, Stéphanie Perrier, Aurélien Belot, Michel Velten, Anne-Valérie Guizard, Elisabeth Marcotullio, Alain Monnereau, Bénédicte Clin, Isabelle Baldi, Pierre Lebailly*

16:10 - 17:40 | 0.46 | **Persistent organics: Longitudinal studies in adults and newborns** | Studio 2
Session Chairs: Tony Fletcher and Charline Warembourg

0-257 **Association of Fish Consumption and Persistent Organic Pollutant with Cause-specific Mortality---Results from the Great Lakes Fish Consumption Study cohort**
Yangyang Liu, Mary Turyk, Victoria Persky, Henry Anderson, Angelica Sanchez*

0-258 **Mixture Effects of 35 Environmental Contaminants on Incident Metabolic Syndrome – A Prospective Study**
Lars Lind, Erik Lampa, Samira Salihovic, Bert vanBavel, Monica Lind*

0-259 **Perfluoroalkyl acids (PFAA) is associated with future cholesterol levels - results from a Swedish prospective cohort study**
Anna Jöud, Anders Glynn, Sara Holmberg, Anders Thelin, Bo AG. Jönsson, Christian Lindh, Anna Rignell-Hydbom, Peter Ridefelt, Lars Rylander*

0-260 **Prenatal exposures to perfluoroalkyl and polyfluoroalkyl substances are associated with sex-specific differences in infant size and body composition: The Healthy Start Study**
Anne Starling, John Adgate, Richard Hamman, Katerina Kechris, Xiaoyun Ye, Antonia Calafat, Dana Dabelea*

0-261 **Exposure to perfluoroalkyl substances and mid-childhood lipids and liver enzymes in Project Viva**
Ana Maria Mora, Abby F. Fleisch, Emily Oken, Sheryl L. Rifas-Shiman, Jennifer A. Woo Baidal, Thomas F. Webster, Matthew W. Gillman, Sharon K. Sagiv*

0-262 **Association between prenatal exposure to perflourinated compounds (PFAS) and symptoms of infections at age 1-4 years among 359 children in the Odense Child Cohort**
Tina Kold Jensen, Louise Dalager, Nikolas Christensen, Philippe Grandjean*

16:10 - 17:40 | 0.47 | **Early-life exposure to PFAS and metals and health effects** | Studio 3
Session Chairs: Marie O'Neill and Florencia Harari

0-263 **Placental expression of KLRK1, encoding the cytotoxic NKG2D receptor, is associated with maternal cadmium exposure**
Todd M. Everson, David A. Armstrong, Brian P. Jackson, Tracy Punshon, Margaret R. Karagas, Carmen J. Marsit*

0-264 **Altered cord blood mitochondrial DNA abundance and perinatal lead exposure in the PROGRESS cohort**
Marco Sanchez-Guerra, Letizia Trevisi, Jia Zhong, Cheng Peng, Katherine Svensson, Ander Wilson, Adriana Mercado-García, Maritsa Solano-Gonzalez, Chitra J. Amarasiriwardena, Martha Maria Téllez-Rojo, Robert O Wright, Andrea A. Baccarelli*

O-265 **Perinatal lead exposure and white matter microstructure in children**
*Megan Horton, Paul Curtin, Chris Gennings, Victoria Wang, Erika Proal, Lourdes Schnaas, Martha María Téllez-Rojo, Ernesto Roldan-Valadez, Francisco Xavier Castellanos, Cheuk Tang, Roberta White, Robert Wright**

O-266 **Mercury exposure of late pregnancy contributes to early childhood intelligence at 60 months**
Ji Young Shin, Eui Jung Kim, Mina Ha, Hye-sook Park, Yun-Chul Hong, Yang-ho Kim, Eunhee Ha*

O-267 **Children's white blood cell counts in relation to developmental exposure to mercury and persistent organic pollutants**
Youssef Oulhote, Zaiba Shamim, Philippe Grandjean, Pal Weihe, Carsten Heilmann*

O-268 **Cardiometabolic Risk in Young Adults Exposed to Perfluoroalkyl Substances during Critical Developmental Periods**
Damaskini Valvi, Pal Weihe, Philippe Grandjean*

17:40 - 18:45 **CLOSING PLENARY SESSION** Sala Sinopoli

After glyphosate: evidence evaluation for public health policy
Session Chairs: Michal Krzyzanowski and Manolis Kogevinas

PL-09 **The hazards of hazard identification**
Rodolfo Saracci, IARC, Lyon, France

Discussants:
Erik Lebret and Mireille B. Toledano

18:45 Meeting Adjourns

PL → Plenary Speaker Eth→Ethics Discussant O→Oral Contributed Paper S → Symposia P→Poster

POSTER SESSION 1

Thursday, September 1, 13:00 - 14:15

AREA 1—Air Pollution

HIGHLIGHTED POSTERS (P1-001—P1-017)

P1-001* **Pollen exposure and hospital admissions for asthma in London, UK 2005-11**
Nicholas Osborne, Ian Alcock, Ben Wheeler, Mat White, Bernd Eggen, Sotiris Vardoulakis, Shakoor Hajat, Deborah Hemming, Yolanda Clewlow, Rachel McInnes, Lora Fleming*

P1-002* **Short-Term Effects Of Airport-Associated Ultrafine Particle Exposure On Lung Function And Inflammation**
Rima Habre, Sandrah Eckel, Scott Fruin, Temuulen Enebish, Hui Zhou, Robert Urman, Ed Rappaport, Frank Gilliland*

P1-003* **Time-varying short-term effects of air pollution in Rome from 1998-2014**
Matteo Renzi, Massimo Stafoggia, Annunziata Faustini, Giulia Cesaroni, Giorgio Cattani, Marina Davoli, Francesco Forastiere*

P1-004* **Exposure to Traffic-related Air Pollution and Risk of Development of Childhood Asthma: A Systematic Review and Meta-analysis**
*Haneen Khreis**

P1-005* **Short term exposure to traffic-related air pollution and daily mortality and hospitalizations in London, U.K**
Evangelia Samoli, Richard Atkinson, Antonis Analitis, Gary Fuller, David Green, Ian Mudway , H Ross Anderson, Frank Kelly*

P1-006* **Effects of long-term exposure to metal components of particulate matter and mortality in a large cohort**
Chiara Badaloni, Giulia Cesaroni, Francesco Cerza, Marina Davoli, Francesco Forastiere*

P1-007* **Long-term air pollution at residence and urinary albumin excretion**
Kathrin Wolf, Wenjia Wei, Regina Hampel, Carsten A. Böger, Wolfgang Koenig, Bernhard K. Krämer, Josef Cyrys, Annette Peters, Schneider Alexandra*

P1-008* **Long-term ambient $PM_{2.5}$, household air pollution exposure, and blood pressure in the Prospective Urban and Rural Epidemiological (PURE) Study**
Raphael Arku, Perry Hystad, Michael Brauer, Salim Yusuf*

P1-009* **Long-term effects of objective and subjective measures of exposure to air pollution and noise at residence on blood pressure and hypertension**
Regina Hampel, Anitha Thulasi Raman, Kathrin Wolf, Josef Cyrys, Annette Peters, Alexandra Schneider*

P1-010* **Long-term Exposure to Fine Particulate Matter Air Pollution and Hospital Admissions for Stroke**
Thuan Quoc Thach, Hilda Tsang, King Pan Chan, Siu Yin Lee*

P1-011* **Ambient $PM_{2.5}$ and Risk of Emergency Room Visits for Myocardial Infarction: Impact of Regional $PM_{2.5}$ Oxidative Potential: A Case-Crossover Study**
Scott Weichenthal, Eric Lavigne, Greg Evans, Krystal Pollitt, Rick Burnett*

P1-012* **Distributed-lag models of long-term health effects of exposure to industrial air pollution in the Taranto area (Southern Italy)**
Ester Rita Alessandrini, Massimo Stafoggia, Simona LeoGrande, Francesca Mataloni, Lucia Bisceglia, Roberto Giuia, Antonia Mincuzzi, Sante Minerba, Angela Morabito, Stefano Spagnuolo, Giorgio Assennato, Marina Davoli, Francesco Forastiere, CSA Study Group*

P1-013* **Impact of carbon monoxide and nitrogen dioxide on cardiovascular biomarkers in the Study of Women's Health Across the Nation**
Xiangmei Wu, Rupa Basu, Rachel Broadwin, Brian Malig, Ellen Gold, Lihong Qi, Carol Derby, Rochelle Green*

P1-014* **Short-term effects of Asian dust in patients with a history of disease: A case-crossover study among the elderly men and women in Japan**
Saori Kashima, Takashi Yorifuji, Etsuji Suzuki, Yuuki Tsuchihashi, Akira Eboshida*

P1-015* **Association between long-term exposure to air pollution and urban green and incidence of type2 diabetes**
Matteo Renzi, Giulia Cesaroni, Francesco Cerza, Nera Agabiti, Riccardo Di Domenicantonio, Silvia Cascini, Marina Davoli, Francesco Forastiere*

P1-016* **Associations of air pollution with hypertension, heart attack and stroke morbidity in a large national health survey**
Jochem Klompmaker, Gerard Hoek, Lizan Bloemsma, Ulrike Gehring, Bert Brunekreef, Erik Lebret, Maciek Strak, Nicole Janssen*

P1-017* **Multi-City Case-Crossover Analysis of Air Pollution and Out-of-Hospital Cardiac Arrest**
Auriba Raza, Tom Bellander, Martin Jonsson, Marcus Dahlquist, Tomas Lind, Petter Ljungman*

P1-018 **Acute Effects of Air Pollution on Influenza-like Illness in Nanjing, China**
*Lei Huang**

P1-019 **Associating respiratory mortality with prolonged high PM_{10} events in Northeast Asia**
Satbyul Estella Kim, Ho Kim, Michelle Bell, Masahiro Hashizume, Yasushi Honda, Haidong Kan*

P1-020 **Association between Outdoor Air Pollution and Lung Function among Female Non-smokers in China**
Yun Zhou, Yuewei Liu, Yuanchao Song, Jungang Xie, Xiuqing Cui, Bing Zhang, Jing Yuan, Weihong Chen*

P1-021 **Associations between ambient air pollution concentrations and respiratory emergency department visits among all age groups in the U.S**
Heather Strosnider, Howard Chang, Lyndsey Darrow, Yang Liu, Ambarish Vaidyanathan, Matthew Strickland*

P1-022 **Characterization of concentration-response curves for ozone and respiratory emergency department visits in 5 US cities**
Vaughn Barry, Mitchel Klein, James A Mulholland, Paige E Tolbert, Stefanie Ebelt Sarnat*

P1-023 **Coarse Particulate Air Pollution Associated with Increased Risk of Hospital Admissions for Respiratory Diseases in a Tropical City, Kaohsiung, Taiwan.**
Chun-Yuh Yang, Shang-Shyue Tsai, Meng-Hsuan Cheng*

P1-024 **Contribution of coal-fired power plant emissions on respiratory symptom and disease prevalence**
Eric Amster, Maayan Haim, Jonathan Dubonov, David Broday*

P1-025 **Determinating associations between multiple air pollutants and lipid peroxidation within elderlys in China**
Yiqun Han, Tao Xue, Tong Zhu, Wei Huang, Yunfang Ji, Shuna Gao, Tianjia Guan, Jun Liu*

P1-026 **Effect modifiers of desert dust exposure to allergic symptoms - From an adjunct study of Japan Environment and Children Study (JECS) -**
Kumiko Kanatani, Yuichi Adachi, Kei Hamazaki, Kazunari Onishi, Takeo Nakayama*

P1-027 **Estimated short-term effects of air pollutants on daily respiratory emergency visits in three Swedish cities**
Kadri Meister, Bertil Forsberg*

P1-028 **Exposure to birch pollen and ozone and the fraction of exhaled nitrogen oxide (FENO)**
Susanna Lohman, Hanne Krage Carlsen, Anna-Carin Olin*

P1-029 **Factors relating to windblown dust in associations between $PM_{2.5}$ and mortality across the United States**
Kristen Rappazzo, Breanna Alman, Jeanette Reyes, Lucas Neas*

P1-030 **Formaldehyde, FeNO and oxidative stress in traffic policemen working in two cities of northern Italy**
Roberto Bono, Roberta Tassinari, Bellisario Valeria, Giulia Trucco, Massimiliano Bugiani, Pavilio Piccioni, Elena Grignani, Angelo Corsico*

P1-031 **'Hotspots' of livestock farms may influence lung function of neighboring residents**
Floor Borlée, Joris Yzermans, Bernadette Aalders, Jos Rooijackers, Esmeralda Krop, Kitty Maassen, Francios Schellevis, Dick Heederik, Lidwien Smit*

P1-032 **Incidence Rates of Cause-Specific Mortality Associated with Yearly Ozone Concentrations: An Analysis of over 15 Million Medicare Beneficiaries between 2000-2008**
Fatemeh Kazemiparkouhi, Vivian Pun, Ki-Do Eum, Justin Manjourides, Helen Suh*

P1-033 **Incinerator Health Surveillance Project of Parma: Survey branch in asthmatic patients**
Elisa Mariani, Rosanna Giordano, Alessandra Rampini, Gaia Fallani, Maurizio Impallomeni*

P1-034 **Joint effects of criteria pollutants in four US cities**
Stefanie Sarnat, Andrea Winquist, Mitchel Klein, James Mulholland, Armistead Russell, Paige Tolbert*

P1-035 **Long term effects of air pollution on hospital admissions. Results from the Italian cohort in the LIFE MED HISS project. (LIFE12 ENV/IT/000834)**
Martina Gandini, Cecilia Scarinzi, Giovanna Berti, Moreno Demaria, Maria Rowinski, Paolo Carnà, Teresa Spadea, Stefania Ghigo, Stefano Bande, Gaia Righini, Giuseppe Costa, Gabriele Zanini, Ennio Cadum*

P1-036 **Lung function is associated with short term changes in air pollution**
Michelle Laeremans, Eline Provost, Tijs Louwies, Patrick De Boever, Arnout Standaert, Evi Dons, Luc Holmstock, Tim Nawrot, Luc Int Panis*

P1-037 **Main Air Pollutants and COPD: A Systematic Review and Meta-analysis**
Jinhui Li, Shengzhi Sun, Robert Tang, Hong Qiu, Linwei Tian*

P1-038 **Modeling approaches linking acute health outcomes and reactive oxygen species-generating potential of ambient particulate matter**
Joseph Abrams, Josephine Bates, Mitchel Klein, Rodney Weber, Armistead Russell, James Mulholland, Stefanie Sarnat, Howard Chang, Paige Tolbert*

P1-039 **Modification of ambient air pollution health associations by residential air exchange rates in multiple US cities**
Donghai Liang, Jeremy Sarnat, Andrea Winquist, James Mulholland, Paige Tolbert, Stefanie Sarnat*

P1-040 **Modification of the acute respiratory effects of ambient air pollution by ambient temperature**
Lyndsey Darrow, Mitch Klein, James Mulholland, Paige Tolbert, Stefanie Sarnat*

P1-041 **Ozone Exposure and Lung Function in an Elderly Population with COPD**
Mary Rice, Stephanie Grady, Jaime Hart, Marilyn Moy, Brent Coull, Joel Schwartz, Francine Laden, Petros Koutrakis, Eric Garshick*

P1-042 **Particulate Matter, Pulmonary Function, and Oxidative Stress in COPD**
Stephanie Grady, Petros Koutrakis, Jaime Hart, Junfeng Zhang, Marilyn Moy, Brent Coull, Joel Schwartz, Francine Laden, Eric Garshick*

P1-043 **Patients with systemic lupus erythematosus may modify the association between exposure to particles and the risk of chronic obstructive pulmonary disease: a nested case-control study**
Chau-Ren Jung, Bing-Fang Hwang*

P1-044 **PM_{10} and NO_2 Levels Affect on Presenting the Hospital with a Lag Effect among Nonsmoking Stable Asthmatics in South Korea: Results from Soonchunhyang Asthma Cohort Data**
Sol Yu, Choon-Sik Park, Sungroul Kim*

P1-045 **$PM_{2.5}$ and Emergency Room Visits for Respiratory Illness: Effect Modification by Oxidative Potential**
Scott Weichenthal, Eric Lavigne, Greg Evans, Krystal Pollitt, Rick Burnett*

P1-046 **Precipitation scavenging effect in Air Pollution and Mortality in Bogotá**
Luis Camilo Blanco Becerra, Leticia Hernández Cadena , Magali Hurtado Díaz , Isabelle Romieu*

P1-047 **Proximity to Concentrated Animal Feeding Operations and Allergic Disease**
*Amy Schultz**

P1-048 **Residential proximity to livestock farms reduces the risk of atopic sensitization**
Floor Borlée, Joris Yzermans, Esmeralda Krop, Kitty Maassen, Francois Schellevis, Dick Heederik, Lidwien Smit*

P1-049 **Study on the benefits of children's health from air quality improved in XX city**
*Yanping Zhang, Tian Sang, Zhao Yang, Baoxin Zhao, Jinliang Zhang**

P1-050 **Study on the concentration-response relation between Air pollution and outpatient/ Emergency Room Visits during haze episode**
Jinliang Zhang, Yanping Zhang, Zhaoxing Tian, Tiansen Zou*

P1-051 **Susceptibility factors and long term effects of air pollution: mortality among 3 sub-cohorts of the Italian Longitudinal Study. Results of the LIFE MED HISS project (LIFE12 ENV/IT/000834)**
Cecilia Scarinzi, Martina Gandini*, Moreno Demaria, Giovanna Berti, Paolo Carnà, Teresa Spadea, Stefania Ghigo, Stefano Bande, Antonio Piersanti, Gaia Righini, Giuseppe Costa, Ennio Cadum**

P1-052 **The effects of PM_{10} on the admission of patients with respiratory disease in Seoul, Korea**
Haeyong Pak, Yunsuk Pak, Eun-Cheol Park*

P1-053 **A Human Intervention Trial: Effects of Fine Concentrated Ambient Particles on Cardiac Autonomic Dysfunction and Inflammation Are Mitigated by B Vitamin Supplementation**
Jia Zhong, Letizia Trevisi, Bruce Urch, Xinyi Lin, Mary Speck, Brent Coull, gary liss, Aaron Thompson, Petros Koutrakis, Frances Silverman, Diane Gold, Andrea Baccarelli*

P1-055 **Airborne Pollen Concentrations and Emergency Room Visits for Myocardial Infarction: A Multi-City Case-Crossover Study in Ontario, Canada**
Scott Weichenthal, Eric Lavigne, Paul Villeneuve, Francois Reeves*

P1-056 **Association between long-term exposure to ambient air pollution and cardiovascular diseases among elderly people: a Japanese population-based study**
Kenichi Azuma, Haruya Sakai, Tazuko Morikawa, Akiyoshi Ito, Tsuyoshi Ito, Hiroshi Koike, Hiroki Kishikawa, Masaji Ono, Satoshi Nakai, Iwao Uchiyama*

P1-057 **Association between modelled estimates of ambient $PM_{2.5}$ concentrations and biomarkers of early vascular aging in the PURSE-HIS cohort, Tamil Nadu, India**
Kevin Lane, Kalpana Balakrishnan, Doug Brugge, Michelle Bell, Michael Brauer, Santu Ghosh, Sankar Sam bandam, Sadagopan Thanikachalam, John Durant, Mohan Thanikachalam*

P1-058 **Associations between black carbon, particulate matter, combustion-derived particles and ischemic heart disease**
Leo Stockfelt, Eva Andersson, Peter Molnár, Lars Gidhagen, Annika Rosengren, Lars Barregard, Gerd Sallsten*

P1-059 **Biomass Burning as a Source of Ambient Fine Particulate Air Pollution and Hospital Admissions for Acute Myo cardial Infarction: A Case-Crossover Study**
Scott Weichenthal, Ryan Kulka, Eric Lavigne, David van Rijswijk, Michael Brauer, David Stieb, Lawrence Joseph, Rick Burnett*

P1-060 **Carotid Artery Thickness is Associated with Long-Term Exposure to Traffic-Related Air Pollution in Middle-Aged Adults of Taiwan**
*Chu-Chih Chen**

P1-061 **Comorbidity of respiratory and cardiovascular diseases among the elderly residing close to mine dumps: A cross-sectional study**
Janine Wichmann, Vusumuzi Nkosi, Kuku Voyi*

P1-062 **Do factors related to combustion-based sources explain heterogeneity in PM-mortality associations across the United States?**
Breanna Alman, Kristen Rappazzo, Jeannette Reyes, Lucas Neas*

P1-063 **Does air pollution reduce weight loss and metabolic benefits of bariatric surgery?**
*Rakesh Ghosh, James Gauderman, Hilary Minor, Heekoung Youn, Fred Lurmann, Kevin Cromar, Britney Belcher, Christine Ren Fielding, Rob McConnell**

P1-064 **Effects of weather and particulate matter on emergency ambulance calls for elevated arterial blood pressure**
Jone Vencloviene, Ruta Babarskiene, Paulius Dobozinskas, Audrius Dedele, Agne Braziene*

P1-065 **Elemental composition of fine particulate matter and risk for hypertension**
Fuks Kateryna, Frauke Hennig, Dorothee Sugiri, Ulrich Quass, Susanne Moebus, Raimund Erbel, Karl-Heinz Jöckel, Barbara Hoffmann*

P1-066 **Estimating acute cardiovascular effects of ambient $PM_{2.5}$ water-soluble metals**
Dongni Ye, Mitchel Klein, James Mulholland, Armistead Russell, Rodney Weber, Eric Edgerton, Howard Chang, Jeremy Sarnat, Paige Tolbert, Stefanie Sarnat*

P1-067 **Exposure to low ambient concentrations of criteria air pollutants in Ontario, Canada, and the incidence of acute myocardial infraction and congestive heart failure, 1996-2012**
Hong chen, Jeffrey Kwong, Ray Copes, Mark Goldberg, Paul Villeneuve, Aaron van Donkelaar, Perry Hystad, Michael jerrett, Robert Brook, Randall Martin, Hong Lu, Jeffrey Brook, Jack Tu, Alexander Kopp, Richard Burnett*

P1-068 **Frailty, environmental justice and the health impact of $PM_{2.5}$**
Lucas Neas, Ana Rappold, Alice Cates*

P1-069 **Genetic Susceptibility to Air Pollution-Induced Inflammation, and Hemo-adaptation in a Birth Cohort in South Africa**
Prishani Nansook, Rajendra Naidoo, Prithiksha Ramkaran, Sheena Muttoo, Anil Chuturgoon*

P1-070 **Long-term air pollution exposure and diabetes prevalence in a large Dutch national health survey**
Maciek Strak, Nicole Janssen, Rob Beelen, Oliver Schmitz, Ilonca Vaartjes, Derek Karssenberg, Carolien van den Brink, Danny Houthuijs, Michiel Bots, Martin Dijst, Bert Brunekreef, Gerard Hoek*

P1-071 **Long-term air pollution exposures and retinal arteriolar diameters over 8 years of follow-up in the Multi-Ethnic Study of Atherosclerosis (MESA)**
Michael Young, Sara D. Adar, Mary Frances Cotch, Lianne Sheppard, Adam Szpiro, Tien Yin Wong, Ronald Klein, Barbara Klein, Joel D. Kaufman*

P1-072 **Long-term Effects of Fine Particulate Matter Exposures on Major Adverse Cardiovascular Events**
Juhwan Noh, Jungwoo Sohn, Jaelim Cho, Changsoo Kim, Dong Chun Shin*

P1-073 **Long-term exposure to air pollution and incident hypertension in post-menopausal women**
Trent Honda, Melissa Eliot, Charles B. Eaton, Lina Mu, Helen Suh, Adam Szpiro, Joel Kaufman, Sverre Vedal, Gregory A. Wellenius*

P1-074 **Long-term exposure to air pollution and mortality and hospital admissions: a nationwide small area study in Spain (LIFE MED HISS LIFE12 ENV/IT/000834)**
Xavier Basagaña, David Agis, Gustavo Arévalo, Stefania Ghigo, Stefano Bande, Èrica Martínez-Solanas, Jose Barrera-Gómez, Joan Benach, Baldasano Jose Maria, Ennio Cadum*

P1-075 **Long-term exposure to particulate matter air pollution and leukocyte count in Taiwanese adults: a repeated-measures analysis**
Zilong Zhang, Alexis KH Lau, Tony HW Tam, Ly-yun Chang, Xiang Qian Lao*

P1-076 **Long-term urban air pollution exposures and chronic kidney disease in the elderly population in Taiwan**
Szu-Ying Chen, Da-Chen Chu, Jui-Huan Lee, Ya-Ru Yang, Chang-Chuan Chan*

P1-077 **Metabolomic assessment of ultrafine particle exposure in the CAFEH cohort**
Douglas Walker, Kevin Lane, Allison Patton, Caitlin Collins, John Durant, Dean Jones, Kurt Pennell, Doug Brugge*

P1-078 **Mortality and Emergency room visits Associated with Particulate Matter Constituents in Metropolitan Taipei**
Yu-Chun Wang, Yu-Kai Lin**

P1-079 **Ozone and $PM_{2.5}$ in the air pollution mixture differentially impact cardiopulmonary pathophysiologic mechanisms**
Drew Day, Jianbang Xiang, Jinhan Mo, Feng Li, Mingkei Chung, Jicheng Gong, Jan Sundell, Charles Weschler, Pamela Ohman-Strickland, Yinping Zhang, Junfeng Zhang*

P1-080 **Physical activity, air pollution and the risk of diabetes in two Danish cohorts**
Anne B Hansen, Steffen Loft, Matthias Ketzel, Ole Hertel, Ole Raaschou-Nielsen, Anne Tjønneland, Zorana J Andersen*

P1-081 **Relationships between prenatal air pollution exposure, cord blood inflammatory and metabolic markers, and infant growth**
Ashley Song, Tracy Bastain, Rima Habre, Tanya Alderate, Fred Lurmann, Frank Gilliland, Carrie Breton*

P1-082 **Residential Distance to Major Roadways and Renal Function in African Americans: Results from the Jackson Heart Study**
Anne M Weaver, Gregory A. Wellenius, Luke D. Boyle, Bessie Young, Clarissa J Diamantidis, DeMarc A Hickson, Yi Wang*

P1-083 **Satellite-based estimate of $PM_{2.5}$ and the association with the risk of death in 505,808 Taiwanese adults**
Xiang Qian Lao, Zilong Zhang, Alexis KH Lau, Tony HW Tam, Ly-yun Chang*

P1-084 **Short-term Health Effects of $PM_{2.5}$ in Diabetes Patients in Beijing, China**
Fengchao Liang, Lin Tian, Shi CHEN, Xiaobin Jin, Xiaochuan Pan**

P1-085 **Source-apportioned $PM_{2.5}$ incorporating gas-phase partitioned semi-volatile organic compounds and hospitalizations in Denver**
Sun-Young Kim, Mingjie Xie, Michael Hannigan, Steven Dutton, Jana Milford, Kelley Barsanti, Sverre Vedal*

P1-086 **The effect of $PM_{2.5}$ derived from satellite AOD and kriging interpolation method on population mortality in Beijing, China**
Xuying Wang, Guoxing Li, Xiaochuan Pan, Lin Tian, Qun Guo, Liangfu Chen*

P1-087 **Ultrafine particle and lung deposited particle surface area concentrations and daily cause-specific mortality in the Ruhr Area in Western Germany 2009-2014**
Frauke Hennig, Ulrich Quass, Heinz Kaminski, Miriam Küpper, Thomas A.J. Kuhlbusch, Dorothea Sugiri, Barbara Hoffmann*

P1-088 **Urban/rural differences in ecological studies linking mortality and air pollution (LIFE MED HISS LIFE12 ENV/IT/000834)**
Erica Martinez-Solanas, Xavier Basagaña, David Agis, Gustavo Arévalo, Stefania Ghigo, Stefano Bande, Jose Barrera-Gómez, Joan Benach, Jose Maria Baldasano, Ennio Cadum*

P1-089 **Using Telemedicine Data to Characterize Sub-Daily Associations between Particulate Matter Exposures during Dust Storms and Incident Cardiac Events**
Ronit Nirel, Uri Dayan, Bella Vakulenko-Lagun, Alon Peretz, Ilan Levy, Michal Golovner, Sara D. Adar*

P1-090 **Acute effects of particulate matter on children's hospital admission due to pneumonia in Hanoi, Vietnam**
Nhung Nguyen T-T, Christian Schindler, Nicole Probst_Hensch, Lan Vu thi Hoang, Dien Tran Minh, Laura Perez, Nino Kuenzli*

P1-091 **Air pollution and associated serial lung function and respiratory symptoms among a panel of schoolchildren**
Rajen N. Naidoo, Shumani Phaswana*

P1-092 **Air pollution and children pneumonia and influenza admissions: effect modification by sex**
Janara de Camargo Matos, Diana Dias Barboza, Emília Aparecida Alves, Vanessa Francisca da Cruz, Beatriz Berenchtein Bento de Oliveira , Ysabely de Aguiar Pontes Pamplona, Luiz Alberto Amador Pereira, Alfésio Luis Ferreira Braga, Lourdes Conceição Martins*

P1-093 **Air pollution exposure and Bronchiolitis among infants**
Maayan Yitshak Sade, Dror Yudovich, Aviv Goldblat, Asher Tal, Itai Kloog, Victor Novack*

P1-094 **Association between air pollution and rhinitis symptoms in two European cohorts**
Emilie Burte, Jean Bousquet, Valérie Siroux, Bénédicte Leynaert, Deborah Jarvis, Nino Künzli, Rachel Nadif, Bénédicte Jacquemin*

P1-095 **Asthma hospitalization in children and air pollution: effect modification by sex.**
Beatriz Berenchtein Bento de Oliveira, Alessandra Dias Fraga, Tatiane Cristina dos Santos, Janara de Camargo Matos, Ysabely de Aguiar Pontes Pamplona, Marcos Abdo Arbex , Luiz Alberto Amador Pereira, Alfésio Luis Ferreira Braga, Lourdes Conceição Martins*

P1-096 **Asthma-related Emergency Department Utilization in Children Living Near Freight Rail Yards**
Sam Soret, Rhonda Spencer-Hwang, Marco Pasco-Rubio, Mark Ghamsary, Susanne Montgomery*

P1-097 **Chronic Air Pollution Exposure on Otitis Media and Infant Bronchiolitis Clinical Encounters**
Mariam Girguis, Matthew Strickland, Xuefei Hu, Yang Liu, Scott Bartell, Veronica Vieira*

P1-098 **Daily variations in respiratory symptoms associated with fluctuations in air pollutants among schoolchildren**
Rajen N. Naidoo, Graciela Mentz, Thomas G. Robins, Stuart Batterman*

P1-099 **Effect of air pollutants on respiratory diseases in different patient groups in Shanghai**
Li Peng, Zhe Mu*

P1-100 **Effect of Exposure to Components of Particulate Matter on Children's Lung Function**
Robert Urman, Scott Fruin, Rima Habre, Jim Gauderman, Fred Lurmann, Frank Gilliland, Rob McConnell*

P1-101 **Effects on human health related to underground coal mining in Boyacá , Colombia**
Luis Herrnández, Samuel Osorio, Leonardo Quiroz, Rodrigo Sarmiento*

P1-102 **Environmental Exposure to NO_x and NO_2 and Respiratory Function in Schoolchildren from Mothers who Participated in a Randomized Clinical Trial During**
Albino Barraza-Villarreal, Consuelo Escamilla-Nuñez, Leticia Hernández-Cadena, Peter Sly, Usha Ramakrishnan, Isabelle Romieu*

P1-103 **Environmental risk factors for different allergic and ear-nose-throat diseases in preschool children.**
Salvatore Fasola, Giovanna Cilluffo, Giuliana Ferrante, Velia Malizia, Giovanni Viegi, Stefania La Grutta*

P1-104 **Exposure to fine particulate matter from traffic in early life and childhood pneumonia**
Audrey Pennington, Caitlin Kennedy, Mitchel Klein, Craig Hansen, Lyndsey Darrow, Matthew Strickland*

P1-105 **Exposure to traffic-related air pollution in early life and childhood asthma incidence**
Audrey Pennington, Matthew Strickland, Xinxin Zhai, Mitchel Klein, Josephine Bates, Craig Hansen, Armistead Russell, Paige Tolbert, Lyndsey Darrow*

P1-106 **Exposure to ultrafine particles and respiratory hospitalizations in five European cities.**
Evangelia Samoli, Zorana Jovanovic Andersen, Klea Katsouyanni, Frauke Hennig, Thomas A.J. Kuhlbusch, Tom Bellander, Giorgio Cattani, Josef Cyrys, Francesco Forastiere, Bénédicte Jacquemin, Markku Kulmala, Timo Lanki, Steffen Loft, Andreas Massling,Aurelio Tobias, Massimo Stafoggia*

P1-107 **High risk of pleural plaques in the general population exposed to natural carcinogenic fibres: preliminary data**
Caterina Ledda, Dario Mangano, Andrea Musumeci, Margherita Ferrante, Lucrezia Fago, Andrea Marconi, Valentina Costanzo, Vincenzo Ricceri, Venerando Rapisarda*

P1-108 **Individual variability in response to air pollution and weather in children with atopic dermatitis**
Hae-Kwan Cheong, Su Ryeon Noh, Jinseob Kim, Eun-Hye Kim, Byoung-Hak Jeon, Young-Min Kim, Jihyun Kim, Youngshin Han, Kangmo Ahn*

P1-109 **Ozone and childhood respiratory disease in three US cities: evaluation of effect measure modification by neighborhood socioeconomic status using a Bayesian hierarchical approach**
Cassandra O'Lenick, Howard H. Chang, Michael R. Kramer, Andrea Winquist, James Mulholland, Mariel Friberg, Stefanie Ebelt Sarnat*

P1-110 **Peak flow rate and its association with asthma, respiratory symptoms and weekly ambient air pollutants among 14 years old schoolchildren in Malaysia**
Mohammad Adam Adman, Jamal Hisham Hashim*

P1-111 **Personal Exposure to Black Carbon and Nitrogen Dioxide and Childhood Asthma Exacerbation in Seaport-Adjacent Communities**
Robert Laumbach, Chang Ho Yu, Zhihua (Tina) Fan, Molly Greenberg, Ana Baptista, Ivelisse Mincey, Clarimel Cepeda, Pamela Ohman-Strickland, Kathleen Black, Howard Kipen, Nancy Fiedler*

P1-112 **Short-term relationships between emergency hospital admissions and fine particulate air pollution in Beirut, Lebanon**
Myriam Mrad Nakhlé, Wehbeh Farah, Nelly Ziade, Maher Abboud, Kouame Kouadio, Isabella Annesi-Maesano*

P1-113 **Spirometric evaluation of pregnant women exposed to air pollution in the Metropolitan Region of São Paulo**
Luciana Duzolina Manfré Pastro, Miriam Lemos, Frederico Leon Arrabal Fernandes , Silvia Regina Dias Médici Saldiva , Sandra Elisabete Vieira , Paulo Hilário Nascimento Saldiva*

P1-114 **Surveillance System of health effects and air pollution in Bogotá 2012-2014.**
Edna Katalina Medina Palacios, Rodrigo Sarmiento, Luis Jorge Hernandez Florez, Samuel Osorio*

P1-115 **The Effect of Black Carbon Exposure on Rhinoconjunctivitis Quality of Life in Peri-Urban Peruvian Children with Asthma**
Sonali Bose, Kevin Psoter, Karina Romero, Chen Chen, Deepak Kaji, D'ann Williams, Patrick Breysse, William Checkley, Nadia Hansel*

P1-116 **Traffic proximity and lung function: a cross-sectional study in outpatient children.**
Andrea Ranzi, Mauro Ferrante, Giulia Tommaso, Paolo Lauriola, Stefano De Cantis, Giovanna Cilluffo, Giuliana Ferrante, Malizia Velia, Achille Cernigliaro, Fabio Cibella, Stefania La Grutta*

AREA 2—Children, Built Environment & Waste

P1-117 **Windows of vulnerability to early life phthalate exposure and adiposity at 8 years of age**
Jessica Shoaff, George Papandonatos, Antonia Calafat, Aimin Chen, Bruce Lanphear, Kimberly Yolton, Joseph Braun*

P1-118 **A Systematic Review of Children's Environmental Health in Brazil**
Carmen Ildes Froes Asmus, Volney Camara, Philipp Landrigan, Luz Claudio*

P1-119 **Ambient Air Pollution and Sudden Infant Death Syndrome**
Nuredin I Mohammed, Jon G Ayres, Jouni J K Jaakkola, Ian J Litchfield*

P1-120 **Are Child Visual-Spatial Abilities Related to Prenatal Phthalate, Triclosan, or Bisphenol A Exposures?**
Joseph Braun, David Bellinger, Robert Wright, Russ Hauser, Aimin Chen, Antonia Calafat, Kimberly Yolton, Bruce Lanphear*

P1-121 **Associated prenatal factors of behavioral and emotional problems in 5 year-old children: The Hokkaido Study**
Machiko Minatoya, Naomi Tamura, Sachiko Ito, Chihiro Miyashita, Atsuko Araki, Reiko Kishi*

P1-122 **Association of Arsenic Exposure among Secondary School Children's Academic Scores in Kandal Province, Cambodia**
Vibol Sao, Jamal Hisham Hashim*

P1-123 **Association of overweight status with childhood asthma: results from a birth cohort study**
Limin Yang, Masami Narita , Kiwako Yamamoto-Hanada, Yukihiro Ohya*

P1-124 **Associations between outdoor fungal spores and child asthma hospitalisations**
Rachel Tham, Constance H Katelaris, Don Vicendese, Shyamali C Dharmage, Adrian J Lowe, Gayan Bowatte, Philip E Taylor, Michael J Abramson, Bircan Erbas*

P1-125 **Associations of Prenatal Urinary Bisphenol A Concentrations with Child Cognition and Behavior**
Joseph Braun*, Bruce Lanphear, Tye Arbuckle, William Fraser, Youssef Oulhote, Glenys Webster, Jean Seguin Emmanuel Oullet, Maryse Bouchard, Gina Muckle

P1-126 **Community-based In-Home Environmental Intervention of Childhood Asthma in Hawaii**
*Tomas Tamulis, PhD**

P1-127 **Early Life Triclosan Exposure and Child Adiposity at 8 Years of Age**
Geetika Kalloo, Antonia Calafat, Aimin Chen, Kimberly Yolton, Bruce P. Lanphear, Joseph M. Braun*

P1-128 **Effects of Mercury in Neurological and Cognitive Development: a Cohort Study in the Peruvian Amazon**
Helena Frischtak, Axel Berky, Ernesto Ortiz, Laura Pendergast, Minerva Cartagena Bolivar, William Pan*

P1-129 **Environmental exposures and risk of central nervous system tumors in children: new findings from a case-control study in Spain**
Rebeca Ramis, Diana Gomez-Barroso, Ibon Tamayo, Gonzalo Lopez-Abente, Elena Pardo Romaguera, Javier García-Perez*

P1-130 **Evaluation at 72 months confirms the association between PCB exposure and cochlear status evaluated by otoacoustic emissions**
Renata Sisto, Arturo Moleti, Sona Wimmerova, Irva Hertz-Picciotto , Todd A Jusko, Juraj Tihányi, Kinga Lancz, Eva Sovcikova, Beata Drobna, Lubica Palkovicovà, Dana Jureckova, Tomas Trnovec*

P1-131 **Exposure to phthalates during pregnancy and thyroid hormones in pregnant women and newborns**
Megan E. Romano, Aimin Chen, R. Thomas Zoeller, Andrew Hoofnagle, Antonia Calafat, Kimberly Yolton, Bruce Lanphear, Joseph Braun*

P1-132 **Impact of Early Life Environment on Childhood Allergic Rhinitis**
Hui Zhou, HyoBin Kim, Jeonghee Kim, Frank Gilliland*

P1-133 **Impact of the great east Japan earthquake on the body mass index of school children**
Zentaro Yamagata, Hiroshi Yokomichi*

P1-134 **Impact of Timing of Bisphenol A Exposure on Behavior, Executive Function, and Social Responses in Children**
Shaina Stacy, George Papandonatos, Antonia Calafat, Aimin Chen, Kimberly Yolton, Bruce Lanphear, Joseph Braun*

P1-135 **Increased Risk of Subclinical Hepatic Injury in Children Exposed to Thiodiglycolic Acid**
Po-Chin Huang, Chih-Wen Wang, Wei-Yen Liang, Chang-Chuan Chan, Hung-Che Chiang*

P1-136 **Is arsenic exposure during pregnancy associated with saliva cortisol in 2 years old children from Arica, Chile? Preliminary results**
Macarena Valdés, Edgardo Rojas-Mancila, Anka Labbé, Yanara Bernal, Verónica Iglesias*

P1-137 **Longitudinal associations of exposures to phenols during childhood and adiposity measurements in young girls**
Andrea Deierlein, Mary Wolff, Ashley Pajak, Susan Pinney, Gayle Windham , Maida Galvez, Xiaoyun Ye, Michael Rybak, Antonia Calafat, Lawrence Kushi, Frank Biro, Susan Teitelbaum*

P1-138 **Longitudinal Influences of Neighbourhood Green Spaces on Children's Overweight**
Regina Grazuleviciene, Inga Uzdanaviciute, Sandra Andrusaityte*

P1-139 **Long-term effects of traffic-related air pollution on attention-deficit hyperactivity disorder (AHDH) in children of a cohort from a semi-urban region in Catalonia, Spain, 2005-2012**
*Maria Barceló, Diego Varga, Gabriel Coll-de-Tuero, Marc Saez**

P1-140 **Maternal levels of perfluoroalkyl and polyfluoroalkyl substances during pregnancy and attention in the offspring**
Cathrine Carlsen Bach, Zeyan Liew, Niels Matthiesen, Tine Brink Henriksen, Ellen Aagaard Nohr, Bodil Hammer Bech, Beate Ritz, Jørn Olsen*

P1-141 **Maternal levels of perfluoroalkyl and polyfluoroalkyl substances during pregnancy and executive function in the offspring**
Cathrine Carlsen Bach, Zeyan Liew, Niels Matthiesen, Tine Brink Henriksen, Ellen Aagaard Nohr, Bodil Hammer Bech, Beate Ritz, Jørn Olsen*

P1-142 **Maternal Occupational Exposure and Breastfeeding Impact on Programming Child Allergy**
Sandra Andrusaityte, Regina Grazuleviciene*

P1-143 **Maternal urinary concentrations of free and total bisphenol A (BPA) and BPA-alternatives in the APrON birth cohort**
Jiaying Liu, Jonathan Martin, Catherine Field, Irina Dinu, Deborah Dewey*

P1-144 **Molecular Effects of In Utero Cadmium Exposure**
Elizabeth Gibson, Zhijun Zhou, Pam Factor-Litvak, Frederica Perera, Jie Yu, Deliang Tang*

P1-145 **Oxidative stress in youth as a consequence of diet quality**
Roberto Bono, Valeria Bellisario, Roberta Tassinari, Giulia Trucco, Pavilio Piccioni*

P1-146 **Parabens and Asthma Morbidity Among Children 6-19 Years of Age with Asthma: NHANES (2005-2010).**
Lesliam Quiros-Alcala, Nadia N. Hansel, Elizabeth C. Matsui*

P1-147 **Parental exposures and Childhood Acute Leukaemia**
*Chiara Guastadisegno, Nicola Santoro, Domenica Cavone, Valerio Cecinati, Graziana Intranuovo, Elena V Buononato, Maria Congedo, Nunzia Schiavulli, Nicola Dipasquale, Marilena ciciriello, Brigida Pappalardi, Patrizia Corsi, Luciana Lorusso, Angela Ribatti,Domenico De Mattia, Giovanni Maria Ferri**

P1-149 **Perfluoroalkyl acid levels in first-time mothers and outcomes of birth and growth of offspring up to 5 years of age**
Irina Gyllenhammar, Barbro Diderholm, Jan Gustafsson, Urs Berger, Peter Ridefelt, Sanna Lignell, Anders Glynn*

P1-150 **Perfluoroalkyl substances and thyroid hormones in cord blood**
Meng-Shan Tsai, Ching-Chun Lin, Mei-Huei Chen, Wu-Shiun Hsieh, Pau-Chung Chen*

P1-151 **Prenatal and postnatal phthalate exposure and sex hormone changes in a 12-year follow-up birth cohort study**
*Lillian Sie, Hui-Ju Wen, Pen-Hua Su, Chien-Wen Sun, Shu-Li Wang**

P1-152 **Prenatal exposure to DDT and neurodevelopment between 42 and 60 months of age: benefit due to omega 3 and 6 fatty acids intake**
Rafael Ogaz, Luisa Torres-Sánchez, Lourdes Schnaas , César Hernández Alcaráz , Mariano E. Cebrián García , Lizbeth López-Carrillo*

P1-153 **Prenatal Lead Exposure and Birthweight Association: Are Smaller Infants More Susceptible?**
Rodosthenis Rodosthenous, Heather Burris, Katherine Svensson, Chitra Amarasiriwardena, Alejandra Cantoral, Lourdes Schnaas, Adriana Mercado-García, Brent Coull, Robert Wright, Martha Maria Téllez-Rojo, Andrea Baccarelli*

P1-154 **Recent findings of our Japanese birth cohort study with omics analysis: Chiba study of Mother and Children's Health (C-MACH)**
Chisato Mori, Hidenobu Miyaso, Akifumi Eguchi, Yoshiharu Matsuno, Midori Yamamoto, Masahiro Watanabe, Hiroko Nakaoka, Emiko Todaka, Hideoki Fukuoka, Akira Hata, Kenichi Sakurai*

P1-155 **Risk Factors for Pediatric Enteric Infection in an Urban Slum: Examining the Contributions of the Household Environment, Neighborhood Geography, and Exposure Behaviors**
David Berendes, Juan Leon, Amy Kirby, Julie Clennon, Suraja Raj, Habib Yakubu, Katharine Robb, Arun Kartikeyan, Priya Hemavathy, Annai Gunasekaran, Ben Ghale, J. Senthil Kumar, Venkata Mohan, Gagandeep Kang, Christine Moe*

P1-156 **Risk of neuroblastoma and residential proximity to industrial and urban sites: a case-control study**
Javier García-Pérez, Antonio Morales-Piga, Diana Gómez-Barroso, Ibon Tamayo-Uria, Elena Pardo Romaguera, Pablo Fernández-Navarro, Gonzalo López-Abente, Rebeca Ramis*

P1-157 **Seasonality in notified Campylobacter jejuni infection incidence; an age-related analysis of weekly time series, Israel 1999-2010**
Alina Rosenberg, Miriam Weinberger, Shlomit Paz, Larisa Lerner, Lea Valinsky*

P1-158 **Serum Antibody Responses to Childhood Vaccinations in Children Impacted by Regional Gold Mining in Madre de Dios, Peru**
Lauren Wyatt, Sallie Permar, Genevieve Fouda, Ernesto Ortiz, Axel Berky, Chris Woods, Heileen Hsu-Kim, William Pan*

P1-159 **Skin test reactivity to common allergens is associated with asthma symptoms among school children in an urban environment in a developing country**
Janine Wichmann, Joyce Shirinde, Kuku Voyi*

P1-160 **The formation of the colonization resistance of the intestinal microflora in newborns in different ecological areas of southern Kyrgyzstan.**
*Asel Toichueva**

P1-161 **The use of structural equation modeling to estimate the effect of low-level arsenic exposure on birth weight in Chilean newborns**
Macarena Valdés, Victor Pedreros, Brittney Baumert, María Pía Muñoz, Verónica Iglesias*

P1-162 **Update of the World Health Organization Global Air Quality Guidelines**
*Marie-Eve Héroux, Nadia Vilahur**

P1-164 **Energy Generation through Waste Water as a Remedy for Better Governance: A Case Study of the City of Lagos, Nigeria**
Timothy Oluwagbenga Ajayi, Grace Jadesola Ajayi*, Oluwatosin Ajoke Ayeni*, Ayodele Olomieja*

P1-165 **Hazardous waste and health impact: a systematic review of the scientific literature**
Lucia Fazzo, Fabrizio Minichilli, Michele Santoro, Alessandra Ceccarini, Maurella Della Seta, Fabrizio Bianchi, Pietro Comba, Marco Martuzzi*

HIGHLIGHTED POSTERS (P1-166 - P1-179)

P1-166* **Challenges of population-based interventions to promote physical activity through active transportation by bicycle in Colombia**
Rodrigo Sarmiento-Suárez, Luis Fernando Gómez, Carlos Felipe Pardo, Gómez Olga Lucía, Diana Parra*

P1-167* **Exposure to traffic-related air pollution and serum inflammatory cytokines in children**
Olena Gruzieva, Simon Kebede Merid, Anna Gref, Charles Auffray, Stéphane Ballereau, Bruna Gigante, Juha Kere, Nathanael Lemonnier, Erik Melén, Göran Pershagen*

P1-168* **Fetal Thyroid Function and In Utero Exposure to Fine Particle Air Pollution: a Birth Cohort Study**
Bram Janssen, Nelly Saenen, Harry Roels, Narjes Madhloum, Wilfried Gyselaers, Wouter Lefebvre, Joris Penders, Charlotte Vanpoucke, Karen Vrijens, Tim Nawrot*

P1-169* **Prenatal Triclosan Concentrations during Fetal Development and Birth Outcomes**
Taylor Etzel, Antonia Calafat, Xiaoyun Ye, Aimin Chen, Bruce Lanphear, David Savitz, Kimberly Yolton, Joseph Braun*

P1-170* **Secondhand tobacco smoke exposure from fetal life to adolescence and the development of persistent and adolescent-onset asthma and rhinoconjunctivitis**
Jesse Thacher, Thomas Keil, Ulrike Gehring, Olena Gruzieva, Erik Melén, Göran Pershagen, Inger Kull, Dieter Maier, Marie Standl, Susanne Lau, Alet Wijga, Henriette Smit, Andrea von Berg, Irina Lehmann, Joachim Heinrich, Ulrich Wahn, Anna Bergström*

P1-171* **The association of dampness and mould with respiratory health – a longitudinal approach.**
Marie Standl, Christina Tischer, Carla Tiesler, Olga Ivina, Ulrike Gehring, Alet Wijga, Göran Pershagen, Jesse Thacher, Maties Torrent, Jordi Sunyer, Thomas Keil, Isabella Annesi-Maesano, Josep M Anto, Joachim Heinrich*

P1-172* **Air pollution and replacement of bus fleet in Salvador, BA, Brazil**
Nelzair Vianna, Elaine Gomes*

P1-173* **Land use regression models for active travel: Spatial estimates of walking and biking for exposure assessment**
Steve Hankey, Greg Lindsey*

P1-174* **Making Air Pollution Visible: Development of an Interactive Map of Near Highway Ultrafine Particle Concentrations**
Doug Brugge, Carolyn Wong, Allison Patton, Susan Koch-Weser, Ekaterina Galkina, Andrew Dufilie, Hsin-Ching Wu, Joss Stubblefield, William Mass, Georges Grinstein*

P1-175* **$PM_{2.5}$ and mortality: Effect modification by urban microclimate**
Shengzhi Sun, Linwei Tian, Hong Qiu, Tonya G. Mason, Robert Tang, Chit-Ming Wong*

P1-176* **Residential Greenness, Asthma, Allergic Rhino-conjunctivitis, and Obesity among Children in a Chinese City**
Linyan Li, Jaime Hart*, Brent Coull, John Spengler, Gary Adamkiewicz**

P1-177* **The association of outdoor vegetation with ADHD-related behavior among children living in an urban community**
Mahsa Yazdy, Jaime Hart, Kathleen Bush, Laura Jackson, Alexandra Mackey, Anthony Wilson, Susan Korrick*

P1-178* **Prenatal exposure to phthalates and eczema in male children**
Munawar Hussain Soomro, Carl-Gustaf Bornehag, Nour Baiz, Claire Philippat, Céline Vernet, Valerie Siroux, Remy Slama, Isabella Annesi-Maesano*

P1-179* **Quantitative health risk assessment in a historical contaminated area – exposure- and risk characterization**
Ingela Helmfrid, Helen Karlsson, Gun Wingren*

P1-180 **Access to alcohol outlets, alcohol consumption and mental health**
Gavin Pereira, Lisa Wood, Sarah Foster, Fatima Haggar*

P1-181 **Active transport and urban health**
Stefano Capolongo, Lorenzo Boati*, Andrea Rebecchi, Maddalena Buffoli, Marco Gola, Marta Dell'Ovo*

P1-182 **An ecological study of the association between area level green space and adult mortality in Hong Kong.**
*William Goggins *, Lixia Xu, Chao Ren, Chao Yuan*

P1-183 **Asthma hospitalisation is associated with natural environments and their interaction with long-term pollutant exposure**
Ian Alcock, Mark Cherrie, Mathew White, Ben Wheeler, Sotiris Vardoulakis, Eveline Otte im Kampe, Lora Fleming*

P1-184 **Behaviour change towards active mobility influenced by policy interventions in East London.**
Ester Anaya Boig, Audrey de Nazelle, Sonja Kahlmeier, Thomas Goestchi, Regine Gerike, Mark Nieuwenhuijsen, Thomas Cole-Hunter, David Rojas-Rueda, Ione Avila-Palencia, Luc Int Panis*

P1-185 **Car Free Cities: Pathways to a Healthy Urban Living**
Mark Nieuwenhuijsen, Haneen Khreis*

P1-186 **Developing an evidence based zoning ordinance to reduce exposure to traffic-related ultrafine particles**
Doug Brugge, Alex Bob, Jim Newman, Noemie Sportiche, Ellin Reisner, John Durant, Wig Zamore*

P1-187 **Effects of Forest therapy Program for North Korea Refugees's Mental Health**
Sujin Park, Jeonghee Lee*

P1-188 **Effects of new motorway infrastructure on actively travelled journey stages in the local population. A retrospective repeat cross-sectional study 2009-10 to 2012-13, Scotland.**
Jonathan Olsen, Richard Mitchell, David Ogilvie*

P1-189 **Evaluation of a survey to put health priorities on the local political agenda**
Benoit Lévesque, Vicky Huppé, André Tourigny*

P1-190 **Factors Influencing Commuting Mode Choice: A Multilevel Analysis**
Minh Le, Garam Byun, Yongsoo Choi, Hyeonjin Song, Honghyuk Kim, Hyomi Kim, Jong-tae Lee*

P1-191 **Green and blue space: new opportunities for health**
*Tanja Wolf**

P1-192 **Green Roofs' Benefits in Urban Contexts: a tool for designing roofs as health promoters**
Stefano Capolongo, Annalisa Favotto*, Marco Gola, Giulia Palma Procopio*, Andrea Rebecchi, Maddalena Buffoli*

P1-193 **Greenspace in the air and on the ground: comparing greenspace estimates derived from satellites and Google street view imagery**
Andrew Larkin, Perry Hystad*

P1-194 **Inequalities in walkability in three urban neighborhoods of the city of Rome**
D'Alessandro Daniela, Letizia Appolloni, Lorenzo Capasso*

P1-195 **Is being in natural outdoor environments associated to mood, mental health, vitality and somatisation?**
Margarita Triguero-Mas, David Donaire-Gonzalez, Edmund Seto, Antònia Valentín, David Martínez, Graham Smith, Gemma Hurst, Glòria Carrasco-Turigas, Daniel Masterson, Magdalena van den Berg, Albert Ambròs, Tania Martínez -Íñiguez, Audrius Dedele, Thomas Grazulevicius, Martin Voorsmit, Naomi Ellis, Wim Swart, Marta Cirach, Jolanda Maas, Michael Jerret, Regina Gražuleviciene, Hanneke Kruize, Christopher J. Gidlow, Mark J. Nieuwenhuijsen

P1-196 **Physical inactivity in relation to accessibility and use of urban green spaces in Kaunas study**
Vilija Malinauskiene, Abdonas Tamosiunas*

P1-197 **Positive Health Effects of the Natural Outdoor environment (PHENOTYPE)**
Mark Nieuwenhuijsen, Chris Gidlow, Graham Smith, Hanneke Kruize, Jolanda Maas, Michael Jerrett, Peter van den Hazel, Roderick Lawrence, Regina Grazuleviciene*

P1-198 **Residential greenness and blood lipids in children: A longitudinal analysis**
Iana Markevych, Marie Standl, Dorothea Suguri, Carla Harris, Dietrich Berdel, Joachim Heinrich*

P1-199 **Residential Greenspace and Child Behavior at Age Seven**
Zana Percy, Cole Brokamp, Kimberly Yolton, Grace LeMasters, Patrick Ryan*

P1-200 **Street-scale green infrastructure and physical activity**
Leah Yngve, Kirsten Beyer, Kristen Malecki, Laura Jackson*

P1-201 **The Effectiveness of Physical Activity Interventions in older adults**
Richard Sharpe, Noreen Orr, Jane Smith, Cassandra Phoenix, Alison Bethel, Victoria A Goodwin, Iain Lang, Ruth Carside*

P1-202 **The effects of new urban motorway infrastructure on road traffic accidents in the local area: a retrospective longitudinal study in Scotland.**
Jonathan Olsen, Richard Mitchell, Daniel MacKay, David Humphreys, David Ogilvie*

P1-203 **The Effects of Work Environment Area on Job Stress and Heart Rate Variability**
Sujin Park, Mi-Ae Jeong, Junghee Lee, Jae-Jun Kim*

P1-204 **The influence of Proximity to City Parks and major Roads on the development of Arterial Hypertension**
Jone Vencloviene, Abdonas Tamosiunas

P1-205 **The relationship between bicycle commuting and perceived stress**
Ione Avila-Palencia, Audrey de Nazelle, Tom Cole-Hunter, David Donaire-Gonzalez, Michael Jerrett, Daniel A Rodriguez, Mark J Nieuwenhuijsen*

P1-206 **Time Spent in Outdoor Environments, Activity Levels, and Chronic Disease among American Adults**
Kirsten Beyer, Melinda Stolley, Kelly Hoormann*

P1-207 **Urban Form and NO_2 Air Pollution: Insights From Satellite-based Measurements**
Matthew Bechle, Dylan Millet, Julian Marshall*

P1-208 **Use of green spaces among adolescents**
Lizan Bloemsma, Ulrike Gehring, Gerard Hoek, Nicole Janssen, Jochem Klompmaker, Alet Wijga*

P1-209 **Using Multiple Spatial Measures to Examine Pathways between Residential Green Space and Birth Outcomes in Austin, Texas**
*Leanne Cusack**

P1-210 **Visual impact of urban greenness on birth outcomes in Greater London**
Daniela Fecht, Isobelle Anderson, Rebecca Ghosh, David Morely, Anna Freni Sterrantino, Susan Hodgson*

P1-211 **A Review of Environmental Pollutants and Mental Health: Depression, Anxiety, and Suicide**
Alexander Wu, Marc Weisskopf*

P1-212 **Who gets what, when and how: distribution modalities and perceived barriers to sustained use of LPG cook stoves and cylinders in the Ghana Rural LPG Program**
*Samuel Afari-Asiedu *, Patrick Kinney, Martha Ali Abdulai, Kenneth Ayuurebobi Ae-Ngibise, Ellen Abrafi Boamah, Seth Owusu-Agyei, Kwaku Poku Asante , Darby Jack*

P1-213 **Assessing Cancer Risk from Heavy Metals in Recycling Waste Electrical and Electronic Equipment: Preliminary Results from the WEEENMODELS European Life Programme**
*Federica Violi, Alberto Modenese, Fabriziomaria Gobba, Anna Maria Ferrari, Bianca Rimini, Rita Gamberini, Martina Pini, Paolo Neri, Tommaso Filippini, Luigi Grasselli, Pinuccia Montanari, Marco Vinceti**

AREA 3—GIS, Statistics, Equity & Women's Health

P1-214 **A coupled model for reconstruction of spatio-temporal variability of NO_2 exposure**
Michele Cordioli, Andrea Ranzi, Claudia Pironi, Eriberto De Munari, Paolo Lauriola*

P1-215 **Air Pollution per Land Use in the Eastern Caribbean**
Steve Whittaker, Michelle Bell*

P1-216 **Geostatistical Integration and Uncertainty in Pollutant Concentration Surface under Preferential Sampling**
Laura Grisotto, Dario Consonni, Lorenzo Cecconi, Dolores Catelan, Michele Carugno, Corrado Lagazio, Pier Alber to Bertazzi, Michela Baccini, Annibale Biggeri*

P1-217 **Bayesian analysis of silica exposure and lung cancer, incorporating prior information from animal studies and a model for measurement error**
Scott Bartell, Ghassan Hamra, Kyle Steenland*

P1-218 **Confounder control using incidence pattern for cancers related to tobacco and alcohol**
Tom K Grimsrud, Jan Ivar Martinsen, Kristina Kjærheim, Tor Haldorsen*

P1-219 **Confounding risk ratio: how ecological data on lifestyle and occupational factors can be used to adjust effect measures**
Luigi Castriotta, Ettore Bidoli, Valentina Rosolen, Andrea Gini, Diego Serraino, Fabio Barbone*

P1-220 **Functional Data Analysis of Core Body Temperature in Response to Environmental Heat Stress**
Vicki Hertzberg, Lisa Elon, Valerie Mac, Abby Mutic, Katherine Peterman, Nathan Mutic, J. Antonio Tovar-Aguilar, Jeannie Economos, Joan Flocks, Linda McCauley*

P1-221 **Integrating air pollution exposure in a mechanistic agent-based model of asthma: Model development and application to childhood asthma outcomes**
*Ayaz Hyder**

P1-222 **Introduction of National Environmental Health Tracking Project in China**
Jie Ban, Tiantian Li, Xiaoming Shi*

P1-223 **Lifestyle and air pollution exposure: associations and potential for confounding in large administrative data cohorts**
Maciek Strak, Nicole Janssen, Rob Beelen, Oliver Schmitz, Derek Karssenberg, Carolien van den Brink, Danny Houthuijs, Martin Dijst, Bert Brunekreef, Gerard Hoek*

P1-224 **Modeling Chemical Mixture Effects with Grouped Weighted Quantile Sum Regression**
David Wheeler, Jenna Czarnota*

P1-225 **Modelling seasonal and spatio-temporal variation in respiratory prescribing**
Eleni Sofianopoulou, Tanja Pless-Mulloli, Stephen Rushton, Peter J Diggle*

P1-226 **Sample size issues in time series regression studies**
Benedict Armstrong, Francesco Sera, Antonio Gasparrini*

P1-227 **Spatio-temporal variation of effects of short-term exposure to air pollutants on mortality in Seven Major Cities, Korea, 1998-2013**
Honghyok Kim, Hyomi Kim, Garam Byun, Jong-Tae Lee*

P1-228 **Statistical considerations for combining data across studies**
Chris Gennings, Jeanette Stingone, Ashley Pajak, Susan Teitelbaum*

P1-229 **Using microsimulation to estimate the health and economic costs of disease under climate change**
Dimity Stephen, Adrian Barnett*

P1-230 **Weighted quantile sum (WQS) regression approaches for mixture analyses in environmental epidemiology**
Paul Curtin, Carl Gustaf Bornehag, Chris Gennings**

P1-231 **Breast cancer risk among postmenopausal women in the AGRIculture & CANcer cohort**
Clémentine LeMarchand, Séverine Tual, Mathilde Boulanger, Noémie Levêque-Morlais, Stéphanie Perrier, Bénédicte Clin, Anne-Valérie Guizard, Michel Velten, Elisabeth Marcotullio, Isabelle Baldi, Pierre Lebailly*

P1-232 **An evaluation of multi pollutant profiles and cardiovascular mortality in London and Oxford.**
Anna Freni Sterrantino, David Morely, Daniela Fecht, Marta . Blangiardo, Kees De Hoogh , Anna L. Hansell, John Molitor*

P1-233 **Creating a risk index for allergic diseases with indoor and outdoor risk factors in Seoul: Implications for targeted intervention**
SungChul Seo, Ki-Youn Kim, Hanjong Ko, Dohyeong Kim*

P1-234 **Defining Peer Environmental Groups to Rank an Environmental Burden Index (EBI): A Comparison of Methods**
Jessica Kolling, Brian Lewis, Erica Adams, Andy Dent*

P1-235 **Exposure misclassification using a Geographical Information System (GIS)-based assessment of long-term ambient pesticide exposures: residential mobility and changes in pesticide use in a study of Parkinson's disease**
Xin Cui, Zeyan Liew, Chenxiao Ling, Kimberly Paul, Beate Ritz*

P1-236 **Forecasting the transmission of dengue fever in Taiwan based on spatiotemporal trend analysis**
Shiu-Yun Fu, Wenbiao Hu*, Brian McAvan, Sun Lin Ho*

P1-237 **Geographical distribution of sporadic Creutzfeldt-Jakob disease: analysis by municipality in Apulia between 1993 and 2014**
Maria Puopolo, Lorenzo Cecconi, Anna Ladogana, Dolores Catelan, Elisa Colaizzo, Dorina Tiple, Luana Vaianella, Maurizio Pocchiari, Annibale Biggeri*

P1-238 **High-risk hotspots and the relationship of neighbourhood socio-economic disadvantage with an emerging infection in Australian communities**
Aparna Lal, Ashwin Swaminathan, Teisa Holani*

P1-239 **Mobility assessment of a rural population in the Netherlands, using GPS measurements**
Gijs Klous, Roel Coutinho, Mirjam Kretzschmar, Dick Heederik, Anke Huss*

P1-240 **Particulate Matter Oxidative Potential and Mortality in 7 Million Adults - The Dutch Environmental Longitudinal Study (DUELS)**
Nicole Janssen, Marten Marra, Danny Houthuijs, Aileen Yang, Caroline Ameling, Bert Brunekreef, Gerard Hoek, Paul Fischer*

P1-241 **Socio-climatic factors and Japanese Encephalitis transmission in Shaanxi, China**
Xin Qi, Shaobai Zhang, Weiqiu Li, Guihua Zhuang*

P1-242 **Space-time Clustering of Childhood Leukaemia: A Systematic Review and Meta-Analysis**
Christian Kreis, Eliane Doessegger, Judith Lupatsch, Claudia Kühni, Ben Spycher*

P1-243 **Spatial Clustering of Childhood Leukaemia in Switzerland**
*Garyfallos Konstantinoudis**

P1-244 **Spatiotemporal analyses of ALS incidence in Denmark over three decades**
Veronica Vieira, Johnni Hansen, Ole Gredal, Marc Weisskopf*

P1-245 **The source of dioxin contamination of free-range eggs investigated through a geostatistical approach.**
Rosanna Desiato, Marco Montafia, Paolo Grandi, Ubaldo Natangelo, Elisa Baioni, Maria Cesarina Abete, Stefania Squadrone, Giuseppe Ru*

P1-246 **The utility of satellite remotely sensed water vapor information for Influenza modelling and forecasting**
*Cezar Kongoli**

P1-247 **What are the real limitations of Heat Vulnerability Mapping support to decision-making?**
*Tanja Wolf**

HIGHLIGHTED POSTERS (P1-248—P1-255)

P1-248* **Developing spatiotemporally resolved air pollution concentrations for epidemiologic study of multiple pollutants in lightly populated low-to-moderate pollution environments**
John Pearce, Raymond Boaz, Brian Neelon, Andrew Lawson*

P1-249* **Air Health Indicator: Two-Pollutant Model**
Hwashin Shin, Wesley Burr, Glen Takahara, Mamun Mahmud*

P1-250* **Survival analysis with measurement error in a cumulative exposure variable: radon progeny in relation to lung cancer mortality**
Donna Spiegelman, Polyna Khudyakov, Jonathan Samet, Charles Wiggins, Xiaomei Liao, Angela Meisner*

P1-251* **Neighborhood Socioeconomic Status and Hypertensive Disorders of Pregnancy**
*Hui Hu, Jeffrey Roth, Xiaohui Xu**

P1-252* **The Outdoor Exposome during pregnancy and its Social Determinants**
Oliver Robinson, Ibon Tamayo-Uria, Gunn Marit Aasvang, Montserrat de Castro, Audrius Dedele, Lise Giorgis-Allemand , Regina Grazuleviciene, Minas Iakovidis, Mariza Kampouri, Norun Krog, Leda Chatzi, Rosie McEachan, Remy Slama, Antonia Valentin, John Wright, Martine Vrijheid, Mark Nieuwenhuijsen, Xavier Basagaña*

P1-253* **Associations among personal care product use patterns and exogenous hormone use in the NIEHS Sister Study**
*Kyla Taylor**

P1-254* **Associations between repeated measures of thyroid hormone parameters in pregnancy and preterm birth**
Lauren E. Johns, Kelly K. Ferguson, Thomas F. McElrath, Bhramar Mukherjee, John D. Meeker*

P1-255* **Indoor air pollution exposure and health issues among women in rural areas of Maharashtra, India.**
*Neha Sharma, Sarika Davuluri**

P1-256 **Prevalence and risk factors of chronic Post-Traumatic Stress Disorder in children and adolescents after the 2012 earthquake affecting the province of Modena (Northern Italy)**
Elena Righi, Barbara Forresi, Ernesto Caffo, Gabriella Aggazzotti*

P1-257 **Maternal stress during pregnancy and neurodevelopmental outcomes of children during the first two years of life**
Kinga Polanska, Anna Krol, Dorota Merecz-Kot, Flavia Chiarotti, Gemma Calamandrei, Teresa Makowiec-Dabrowska, Wojciech Hanke*

P1-258 **A cross-disciplinary approach to analyze interactions between environmental and health inequities and socio economic development**
Daniela Marsili, Francesca Racioppi, Pietro Comba*

P1-259 **A novel approach for measuring residential socioeconomic factors associated with cardiovascular and metabolic health**
Jaime Mirowsky, Robert Devlin, David Diaz-Sanchez, Wayne Cascio, Shannon Grabich, Carol Haynes, Colette Blach, Elizabeth Hauser, Svati Shah, William Kraus, Kenneth Olden, Lucas Neas**

P1-260 **Assessing individual susceptibility to short-term effects of particulate air pollution on mortality in Seoul, Korea**
Garam Byun, Honghyok Kim, Hyomi Kim, Minh Tran Thao Le, Yongsoo Choi, Hyeonjin Song, Jong-Tae Lee*

P1-261 **Changes in NO_2 air pollution exposures by race-ethnicity, socioeconomic status, and location in the United States, 2000-2010**
Lara Clark, Julian Marshall*

P1-262 **Differences of Medical Uses and Expenditure in Young Children according to Familial Socioeconomic Status at Birth**
Hyungryul Lim, Jong Hyuk Choi, Mina Ha, Ho-jang Kwon*

P1-263 **Disentangling relationships between air pollution and the social environment on cardiovascular health in the Boston Puerto Rican Health Study**
Christina H. Fuller, Doug Brugge, Matthew C. Simon, Jeremy A. Sarnat, Howard H. Chang, Katherine L. Tucker, Marie S. O'Neill*

P1-264 **Effect of Socio-Demographic Characteristics on the Morbidity Prevalence among the Urban Poor dwelling in uninhabitable environments of a South Indian city**
Palaniappan Marimuthu, Kasi Sekar, Manoj Kumar Sharma*

P1-265 **Examining the Utility of Electronic Health Records for the Surveillance of Chronic Illness**
Max Richardson, Eric Roberts, Susan Paulukonis, Paul English*

P1-266 **Gender inequalities in environmental health: An interdisciplinary research network on relevance, interdisciplinary approaches and transdisciplinary perspectives**
Gabriele Bolte, Tatjana Paeck, Claudia Hornberg, Kerstin Palm, Marike Kolossa-Gehring , Ute Kraus*

P1-267 **Inequalities in secondhand smoke exposure among non-smoking adults with cardiovascular conditions in the United States**
Sericea Stallings-Smith, Ariana Zeka*

P1-268 **Maternal and Developmental Risks from Environmental and Social Stressors: An Environmental Health Disparities Center**
Carrie Breton, Tracy Bastain, Genevieve Dunton, Brendan Grubbs, Sandy Eckel, Kiros berhane, Claudia Toledo-Corral, Rima Habre, Jill Johnston, Frank Gilliland*

P1-269 **Neighborhood Deprivation and Telomere Length (TL): The Genetic Epidemiology of Research In Aging (GERA) Cohort**
*Stacey Alexeeff, Jun Shan, Mark Kvale, Elizabeth Blackburn, Neil Risch, Cathy Schaefer, Stephen Van Den Eeden**

P1-270 **Quantifying Associations between Environmental and Social Stressors**
Hongtai Huang, Rogelio Tornero-Velez, Timothy Barzyk*

P1-271 **Racial/ethnic disparities in the associations between environmental quality and mortality in the contiguous U.S.**
Danelle Lobdell, Yun Jian, Christine Gray, Shannon Grabich, Jyotsna Jagai, Kristen Rappazzo, Lynne Messer*

P1-272 **Relationship between neighbourhood socioeconomic position and availability of public green space applying generalized linear models. An environmental justice analysis in a large German city**
Steffen Schüle, Katharina Gabriel, Gabriele Bolte*

P1-273 **Socioeconomic and behavioral characteristics associated with exposure to atmospheric pollutants during pregnancy: a nation-wide study**
Marion Ouidir, Johanna Lepeule, Valérie Siroux, Laure Malherbe, Frederik Meleux, Cécile Zaros, Marie Cheminat, Marie-Aline Charles, Rémy Slama*

P1-274 **Socioeconomic position and air pollution exposure in Western Europe: A multi-city analysis**
Bénédicte Jacquemin, Sofia Temam, Emilie Burte, Martin Adam, Josep Maria Anto, Xavier Basagaña, Jean Bousquet, Anne Elie Carsin, Bruna Galobardes, Debie Jarvis, Dirk Keidel, Nino Künzli, Nicole Le Moual, Jordi Sunyer, Nicole Probst-Hensch*

P1-275 **PM elements and use of Assisted Reproductive Technology**
Benedicte Jacquemin, Marina Picornell Noguera, Miguel Angel Checa, Payam Dadvand, Rob Beelen, Marta Cirach Prades, Francesc Figueras, Mark Nieuwenhuijsen*

P1-276 **Wastewater Disposal Wells, Fracking and Environmental Injustice in South Texas**
Jill Johnston, emily Werder, Daniel Sebastian*

P1-277 **Novel Chemicals Identified in Pregnant Women in Northern California**
Aolin Wang, Jackie Schwartz, Roy Gerona, Thomas Lin, Marina Sirota, Tracey Woodruff*

P1-278 **The impact of the neighbourhood perceived environment on mortality inequalities in Belgium: a census-based study**
Mariska Bauwelinck, Lidia Casas Ruiz*

P1-279 **Racial Disparities in Hypertensive Disorders of Pregnancy Mediated by Neighborhood Environmental Factors**
Xiaohui Xu, Hui Hu, Jeffrey Roth*

P1-280 **Systematic Review of the Epidemiologic Study Quality on Polychlorinated Biphenyls and Endometriosis**
Aisha Dickerson, Amanda Persad, Geniece Lehmann*

P1-281 **The relationship between blood cadmium and volume of uterine fibroids in premenopausal women**
Shinhee Ye, Hye won Chung, Kyungah Jeong, Yeon-ah Sung, Hyejin Lee, Eunhee Ha*

P1-282 **The relationship between heavy metals and miscarriage: a systematic review**
Silvia Picarelli, Roberta Vallone, Barbara Buonomo, Alessandro Conforti, Pasquale De Rosa, Cira Buonfantino, Giuseppe Coppola, Giuseppe De Placido, Carlo Alviggi, Paolo Chiodini

P1-283 **The role of environmental contaminants in the development of endometriosis: a systematic review.**
Alessandro Conforti, Cira Buonfantino, Francesca Caprio, Paolo Chiodini, Giuseppe Coppol, Rosaria Borrelli, Pasquale De Rosa, Roberta Vallone, Silvia Picarelli, Giuseppe De Placido, Carlo Alviggi

AREA 4—Biomass Burning, Reproductive Health & Radiation

P1-284 **Ambulatory blood pressure monitoring demonstrates an acute association with cookstove-related carbon monoxide in a rural setting in Ghana.**
Ashlinn Quinn, Kenneth Ae-Ngibise, Darby Jack, Seyram Kaali, Blair J. Wylie, Ellen Boamah, Steven Chillrud, Joseph E. Schwartz, Marwah Abdalla, Daichi Shimbo, Mohammed Mujtaba, Oscar Agyei, Seth Owusu-Agyei, Patrick Kinney, Kwaku Poku Asante*

P1-286 **Dioxins and Furans Releases at Biomass Burning**
Anahit Aleksandryan, Vahagn Khachatryan, Artak Khachatryan, Feliks Petrosyan, Vardges Frangulyan*

P1-288 **Fueling the Fire: An Expert Survey to Explore Kindling Used for Cookstove Startup**
Kristen Fedak, Maggie Clark, Kelsey Bilsback, Christian L'Orange, Kyra Naumoff-Shields, Ethan Walker, John Volckens, Jennifer Peel*

P1-289 **Household characteristics and clean cook stove use in the middle belt of Ghana**
Francis Agbokey, Patrick Kinney, Theresa Tawiah, Rebecca Dwommoh, Seth Owusu-Agyei, Kwaku Poku Asante*

P1-290 **Impacts of an Improved Cookstove Intervention on Cooking Behaviors, Emissions, Personal Exposure, and Health**
Katherine Dickinson, Ernest Kanyomse, Ricardo Piedrahita, Evan Coffey, Rex Alirigia, Didier Muvandimwe, Yolanda Cecile-Hagar Slichter, Vanja Dukic, David Diaz-Sanchez, Michael Hannigan, Abraham Oduro, Christine Wiedinmyer*

P1-291 **Mapping Wintertime Wood Smoke Exposure in a Mountain Valley**
*John Watson**

P1-292 **Study design effect measures for biomass smoke interventions in rural and Native American communities**
Curtis Noonan, Annie Belcourt, Erin Semmens, Paul Smith, Tony Ward*

P1-293 **The relationship between stove usage, ambient and near-home concentrations, and personal exposures to $PM_{2.5}$ in rural Haryana, India**
Ajay Pillarisetti, Sneha Gautam , Ankit Yadav, David Molmen, Narendra K Arora, Kirk R Smith*

P1-294 **Understanding Adoption of clean cookstoves among the Participants of the Ghana Randomized Air Pollution and Health Study (GRAPHS)**
Rebecca Dwommoh, Patrick Kinney, Theresa Tawiah, Francis Agbokey, Seth Owusu-Agyei, Kwaku Poku Asante, Darby Jack*

P1-295 **Needs Assessment Regarding Health And Safety Intervention Among Textile Workers: A Case Study In Karachi Pakistan**
Numan Hussain, Asaad Nafees, Masood Kadir*

P1-296 **Are babies getting heavier? Birth weight trends in England and Wales 1986 to 2012**
Rebecca Ghosh, Jacob Berild, Anna Freni Sterrantino, Cristina Sanchez, Anna Hansell*

P1-297 **Association between ambient air pollution and proliferation of umbilical cord blood cells**
Isabella Karakis, Maayan Yitshak-Sade, Itai Kloog, Batia Sarov, Lena Novack, Isabella Karakis**

P1-298 **Association between noise exposure and mild hypertension in pregnant women**
Michael Friger, Michal Ashin, Eyal Sheiner*

P1-299 **Association of Birth Outcomes with Fetal Exposure to Parabens, Triclosan and Triclocarban in an Immigrant Population in New York**
Laura Geer, Benny Pycke, Joshua Waxenbaum, David Sherer, Ovadia Abulafia, Rolf Halden*

P1-300 **Determinants of environmental organophosphate pesticides exposure during pregnancy**
Katia Isabelle Sokoloff, William Fraser, Tye E. Arbuckle, Mandy Fisher, Eric Gaudreau, Alain LeBlanc, Anne-Sophie Morisset, Maryse Bouchard*

P1-301 **Effects of prenatal exposure to perfluoroalkyl acids on risk of allergic and infectious diseases in early life**
Houman Goudarzi, Chihiro Miyashita, Emiko Okada, Ikuko Kashino, Sumitaka Kobayashi, Chi-Jen Chen, Sachiko Ito, Atsuko Araki, Hideyuki Matsuura, Reiko Kishi*

P1-302 **Evaluation register study feasibility using maternal smoking as a risk factor in Finland**
Isabell Rumrich, Matti Viluksela, Kirsi Vähäkangas, Mika Gissler, Heljä-Marja Surcel, Jukka Jokinen, Otto Hänninen*

P1-303 **Examination of in utero exposure to arsenic, placental permeability and birth outcomes in South African population**
Halina Rollin, Bukola Olutola, Kalavati Channa, Jon Odland*

P1-304 **Incidence and spatial trends of idiopathic central precocious puberty in France: a nationwide epidemiologic study**
Annabel Rigou, Alain le Tertre, Perrine de Crouy-Chanel, Jean-Claude Carel, Juliane Leger, Joelle le Moal*

P1-305 **Influence of maternal diet, obesity and smoke on fetal growth: a cohort study in Italy**
Antonella Agodi, Martina Barchitta, Annalisa Quattrocchi, Andrea Maugeri, Maria Clara La Rosa, Claudia La Mastra, Maria Caruso*

P1-306 **Maternal Traumatic Stress and Infant Bronchiolitis**
Omar Elsayed-Ali, Tebeb Gebretsadik, Frances Tylavsky, Rosalind Wright, Mehmet Kocak, Edward Mitchel, Kecia Carroll*

P1-307 **Occupational solvent exposures during pregnancy and child behavior at age 6: The PELAGIE cohort study**
Rémi Béranger, Fabienne Pelé, Nathalie Costet, Florence Rouget, Christine Monfort, Sylvaine Cordier, Ronan Garlantézec, Cécile Chevrier*

P1-308 **Prenatal Exposure to Ambient Air Pollution Stimulates Preterm Birth in Brisbane, Australia**
Shanshan Li, Yuming Guo, Gail Williams*

P1-309 **Prenatal exposure to environmental tobacco smoke and neonatal adiposity**
Sharon Ng, Mya Thway Tint, Izzuddin M. Aris, Shu-E Soh, Peter Gluckman, Keith Godfrey, Seang Mei Saw, Kenneth Kwek, Yung Seng Lee, Marielle V Fortier, Oon Hoe Teoh, Mary Foong-Fong Chong, Yap-Seng Chong, Shiao-Yng Chan*

P1-310 **Prenatal Exposure to Glycol Ethers and Male Genital Anomalies**
Charline Warembourg, Jérémie Botton, Nathalie Lelong, Florence Rouget, Babak Koshnood, Rémy Slama, Marie-Aline Charles, Sylvaine Cordier, Ronan Garlantézec*

P1-311 **Self-reported psychological stress among men and semen quality in a prospective, preconception cohort**
Christina Porucznik, Eungyoung Han, Kyley Cox, Joseph Stanford, Douglas Carrell*

P1-312 **TDS indicators in France: nationwide results**
Joëlle Le Moal, Annabel Rigou, Perrine De Crouy-Chanel , Sarah Goria, Matthieu Rolland, Vérène Wagner, Yao Kudjawu, Jacques De Mouzon , Alain Le Tertre*

P1-313 **The PERSIAN birth cohort; A Work in Progress**
Payam Dadvand, Reza Malekzadeh, Hossein Poustchi , Amir Houshang Mehrparvar, Mohammad Javad Zare, Akhgar Ghassabian, Amirhossein Modabbernia, Mark J Nieuwenhuijsen, Jordi Sunyer, Roya Kelishadi*

P1-314 **Unconventional Natural Gas Development and Birth Outcomes in Texas**
Andrew Larkin, Leanne Cusack, Kevin Hobbie, Susan Carozza, Perry Hystad*

P1-315 **Thyroid cancer under 19 in Fukushima: The fourth report from the second round screening**
Toshihide Tsuda, Etsuji Suzuki, Akiko Tokinobu, Eiji Yamamoto*

HIGHLIGHTED POSTERS (P1-316—P1-323)

P1-316* **A pilot study of prenatal exposure to perfluoroalkyl substances and social cognition**
Sharon Sagiv, Sheryl Rifas-Shiman, Harris Maria, Matthew Gillman, Antonia Calafat, Ye Xiaoyun, Webster Thomas, Roberta White, Emily Oken*

P1-317* **Mortality study in the nine Italian municipalities hosting civil nuclear plants**
Francesco Bochicchio, Sara Antignani, Carmela Carpentieri, Gennaro Venoso, Chiara Badaloni, Ennio Cadum, Francesco Forastiere*

P1-318* **Neurodevelopment for the first three years following prenatal radio frequency radiation and lead exposure**
Mina Ha, Kyung-Hwa Choi, Eun-Hee Ha, Hyesook Park, Yangho Kim, Yun-Chul Hong, Ae-Kyoung Lee, Jong Hwa Kwon, Hyung-Do Choi, Nam Kim*

P1-319* **Organ dose in paediatric CTs – trends in time: results from the German cohort study**
Roman Pokora, Lucian Krille, Emilio L Gianicolo, Steffen Dreger, Choonsik Lee, Andreas Jahnen, Hajo Zeeb, Maria Blettner*

P1-320* **Challenges and successes in delivering LPG as an intervention in a randomized control trial: Experience from the Ghana Randomized Air Pollution and Health Study (GRAPHS)**
Kenneth Ae-Ngibise Ayuurebobi, Darby Jack, Kwaku Poku Asante, Blair Wylie , Ellen Abrafi Boamah, Ashlinn Quinn, Oscar Agyei, Mohammed Mujtaba, Steven Chillrud, Seth Owusu-Agyei, Patrick Kinney*

P1-322* **A life course approach to explore the multi-layer biological embedding of socioeconomic position through the inflammation**
*Raphaele Castagné, Michelle Kelly-Irving, Paolo Vineis, Marc Chadeau, Cyrille Delpierre**

P1-323* **The Application of Information Theory in Constructing Dengue Fever Prediction Model**
Yang Liu, Matteo Convertino*

P1-324 **A new approach to control for confounding and reverse causality in radiofrequency electromagnetic field re search on health related quality of life**
Milena Foerster, Christian Schindler, Martin Röösli*

P1-325 **A large prospective cohort study on mobile phone use and health in the Netherlands: repeatability of self-reported usage**
Marije Reedijk, Virissa Lenters, Pauline Slottje, Matti Rookus, Petra H. Peeters, Joke Korevaar, Bas H. Bueno-de-Mesquita, Monique Verschuren, Anouk Pijpe, Floor van Leeuwen, Hans Kromhout, Roel Vermeulen*

P1-326 **Characterisation of exposure to non-ionising electromagnetic fields in primary schools belonging to the study area of INMA-Gipuzkoa birth cohort**
Mara Gallastegi, Ana Jiménez-Zabala, Loreto Santa-Marina, Mikel Ayerdi, Juan José Aurrekoetxea, Marta Fernández, Anke Huss, Jesús Ibarluzea*

P1-327 **Electromagnetic field exposure of White stork nests and possible impacts on their breeding success and development**
Raika Durusoy, Ortaç Onmus, Hur Hassoy, Bahattin Sürücü*

P1-328 **Electromagnetic Fields and other Environmental Risk in a Cluster of Childhood Leukaemia in a District of Rome: Results of a Case Study**
Enrica Lapucci, Sara Farchi, Federica Asta, Patrizia Schifano, Claudia Marino, Daniela Orrù, Paola Michelozzi*

P1-329 **Mobile Phones, Wireless Technologies and Cognitive and Behavioural Outcomes in the SCAMP Adolescent Cohort**
Charlotte Fleming, Irene Chang, William Mueller, Iroise Dumontheil, Michael Thomas, Martin Roosli, Paul Elliott, Mireille Toledano*

P1-330 **Risk perception of Radiofrequency electromagnetic fields among INMA-Gipuzkoa birth cohort participants**
Mara Gallastegi, Ana Jiménez-Zabala, Loreto Santa-Marina, Mikel Ayerdi, Juan José Aurrekoetxea, Aitana Lertxundi, Mikel Basterrechea, Xabier Azkonobieta, Jesús Ibarluzea*

P1-331 **Secondary School Students' Mobile Phone, Tablet Computer Ownership and Associated Factors**
*Bukre Cikman, Hur Hassoy**

P1-332 **SHAMISEN - Nuclear Emergency Situations - Improvement of Medical and Health Surveillance**
*Elisabeth Cardis**

P1-333 **A socio-hydro-climatic health framework for understanding risks of occurrence of post-earthquake diarrheal diseases**
Md Rakibul Khan, Shafqat Akanda, Anwar Huq, Antarpreet Jutla, Rita Colwell*

P1-334 **An Update of the quantitative evaluation of the health impact of indoor radon in France**
Roula Ajrouche, Enora Cléro, Candice Roudier, Géraldine Ielsch, Didier Gay, Jérome Guillevic, Alain Le Tertre, Dominique Laurier*

P1-335 **Assessment of Health Risks Formed by Traffic-Related Air Pollution in Kyiv, Ukraine**
Oksana Ananyeva, Olena Turos, Arina Petrosian*

P1-336 **Bio-activation of Chlorothalonil at Environmentally Relevant Levels in Embryo Toxicity and Endocrine Effects**
Meirong Zhao, Quan Zhang, Chenyang Ji*

P1-337 **Disability weights for chronic metallic mercury vapor intoxication to improve estimates of the burden of disease resulting from mercury use in gold mining**
Nadine Steckling, Dietrich Plass, Julia Winkelnkemper, Florian Fischer, Brecht Devleesschauwer, Alexander Krämer, Claudia Hornberg, Stephan Bose-O'Reilly,*

P1-338 **Effect modification by $PM_{2.5}$ /PM_{10} ratio on the association between PM_{10} and mortality**
Yongsoo Choi, Hyomi Kim, Honghyok Kim, Garam Byun, Minh Tran Thao Le, Hyeonjin Song, Jong-Tae Lee*

P1-339 **Farms at risk of chemical contamination: a proposal for a risk-based ranking method**
Sabrina Battisti, Marcello Sala, Alessandro Ubaldi, Pasquale Rombolà, Paola Scaramozzino*

P1-340 **Incremental lifetime cancer risk to residents living in a contaminated area in Sao Paulo, Brazil**
Michele Toledo, Adelaide Nardocci*

P1-341 **Modeling microbiological risk infection associated with urban agriculture in Yamoussoukro, Côte d'Ivoire**
*Parfait Koffi Kouame**

P1-342 **Nitrogen dioxide: population-weighted exposure assessment and quantification of environmental burden of disease in Germany**
Ute Kraus, Alexandra Schneider, Susanne Breitner, Josef Cyrys, Dagmar Kallweit, Dietrich Plass, Myriam Tobollik, Dirk Wintermeyer, Volker Diegmann, Lina Neunhäuserer, Francesco Forastiere, Annette Peters*

P1-343 **Prenatal exposure to carcinogens: consideration for environmental risk assessment**
Michelle Mabson, Brenda Foos, Suril Mehta*

P1-344 **Reducing air pollution and health impact assessment. Comparison of three environmental policies using BenMAP**
Doris Durán, Macarena Valdés*

P1-345 **Should prospective studies be the priority when evaluating the health effects of arsenic?**
*Craig Steinmaus**

P1-346 **The Assessment of Quality of Life (AQoL) comparate three questionnaires: HOOS, EQ-5D and aVisual Analogue Scale (VAS)**
Maria Teresa Balducci, Simona Mudoni, Luzi Ilaria, Piera Maggiolini, Marina Torre*, Cinzia Germinario*

P1-347 **Tribal Commercial Fish Harvests in the Upper Laurentian Great Lakes Consistently Demonstrate Nutritional Importance Along with Risks**
Matthew Dellinger, Micheal Ripley*, Laura Cassidy**

P1-348 **Demographic determinants of chemical safety information recall in workers and consumers in South Africa: a cross sectional study**
Mohamed Aqiel Dalvie, Farzana Sathar, Leslie London, Hanna-Andrea Rother*

P1-349 **Environmental Observatory: a tool for the assessment of environmental risk and communication? The experience of Solignano**
Alessandra Rampini, Rosanna Giordano, Elisa Mariani, Gaia Fallani, Maurizio Impallomeni*

P1-350 **Risk perception of people involved in biomonitoring of the general population living near an Italian incinerator**
Martina Gandini, Antonella Bena, Manuela Orengia, Ennio Cadum, Maria Rowinski, Enrico Procopio, Giuseppe Salamina*

P1-351 **Sex-specific associations between arsenic exposure and DNA methylation and mRNA expression in Bangladeshi adults with arsenicosis**
Caitlin Howe, Maria Argos, Farzana Jasmine, Faruque Parvez, Mahfuzar Rahman, Muhammad Rakibuz-Zaman, Olgica Balac, Habibul Ahsan, Mary V Gamble*

AREA 5—Noise, Arsenic & Causal Inference

P1-352 **Adjusting for Long-Term Temporal Trends in Incidence Rates of All-Cause Mortality Associated with 1-year Average $PM_{2.5}$ Concentrations: An Analysis of over 20 Million Medicare Beneficiaries between 2000-2012**
Ki-Do Eum, Helen Suh, Vivian Pun, Justin Manjourides*

P1-353 **Estimated changes in risk of ischemic heart disease mortality from hypothetical interventions on occupational diesel exposures in a cohort of underground miners**
Andreas Neophytou, Sadie Costello, Sally Picciotto, Michael Attfield, Aaron Blair, Roel Vermeulen, Debra Silverman, Ellen Eisen*

P1-354 **Estimation of causal effects: industrial pollution and mortality in the Taranto area, Southern Italy**
Simona Leogrande, Ester Rita Alessandrini, Massimo Stafoggia, Francesca Mataloni, Lucia Bisceglia, Roberto Giua, Antonia Mincuzzi, Sante Minerba, Angela Morabito, Stefano Spagnolo, Giorgio Assennato, Francesco Forastiere, CSA Puglia Study Group*

P1-355 **How to translate prevalence to incidence in the setting of screening: an application of steady-state dynamic population model**
Etsuji Suzuki, Toshihide Tsuda, Eiji Yamamoto*

P1-356 **Potential population relocation and respiratory diseases in children, is there any gaining? Results from a mining community in Chile**
Ronald Herrera, Ursula Berger, Ondine S. von Ehrenstein, Ivan Diaz, Stella Cifuentes, Daniel Moraga Muñoz, Katja Radon*

P1-357 **Rethinking the Role of Analogy in Causal Inference**
*Douglas Weed**

P1-358 **Smoking, cadmium and atherosclerotic plaques – a mediation analysis**
Eva Andersson, Bjorn Fagerberg, Gerd Sallsten, Lars Barregard*

P1-359 **Association between individual annoyance and environmental noise levels for two metropolitan city in Korea – population based study**
Ji-Ho Lee, Inbo Oh, Joo-Hyun Sung, Chang Sun Sim*

P1-360 **Associations of road traffic noise with carotid intima-media thickness and blood pressure: the Whitehall II and SABRE study cohorts**
Cathryn Tonne, Halonen Jaana, Hakim Dehbi, Anna Hansell, John Gulliver, Daniela Fecht, Marta Blangiardo , Frank Kelly, Nishi Chaturvedi, Mika Kivimäki*

P1-361 **Chronic exposure to aircraft noise and self-measured blood pressure - field study (adults) in the vicinity of a large airport in Germany**
Anja zur Nieden, Doreen Ziedorn, Karin Römer, Jan Spilski, Ulrich Möhler, Susanne Harpel, Dirk Schreckenberg, Thomas Eikmann*

P1-362 **Determination of Sleep Disorders in the inhabitants exposed to traffic noise in 13th Street in Bogota D. C. 2014-2015**
Lina Callejas, Katalina Medina, David Muñoz, Jhon Abella*

P1-363 **First extensive Japanese healthy survey on wind turbine noise; Relationship between hearing wind turbine noise and prevalence of sleep disturbance using self-administered questionnaires**
Yoshitaka Morimatsu, Yoshihisa Fujino, Tatsuhiko Kubo, Kunio Hara, Nanae Kushino, Miyako Inoue, Mihoko Mori, Yuuki Matsumoto, Tatsuya Ishitake*

P1-364 **High traffic noise in residential buildings, annoyance and auto-perceived health problems in a sample from Santiago City, Chile**
Antonio Marzzano, Mauricio Fuentes, Karla Yohannessen*

P1-365 **Is aircraft noise exposure associated with cardiovascular disease and hypertension? Results from a cohort study in Athens Greece**
Konstantina Dimakopoulou, Konstantinos Koutentakis, Ifigeneia Papageorgiou, Maria-Iosifina Kasdagli, Panayota Sourtzi, Evangelia Samoli, Danny Houthuijs, Wim Swart, Anna Hansell, Klea Katsouyanni*

P1-366 **Land use regression models of road traffic noise for frequency components in Taichung, Taiwan**
Ta-Yuan Chang, Chih-Hsiang Liang*

P1-367 **Monitoring of noise-induced hearing threshold shifts among adolescents: The relevance of exposure to leisure noise in the prospective Ohrkan cohort study**
Sandra Walser, Doris Gerstner, Dorothee Twardella, Christina Reiter, Valerie Matthäus, Carmelo Perez-Alvarez, Thomas Steffens, Stefanie Kolb, Caroline Herr*

P1-368 **Noise and Cardiovascular Disease in a Nationwide Cohort Study**
Peter James, Rachel Banay, Daniel Mennitt, Kurt Fristrup, Julia Africa, Jaime Hart, Francine Laden*

P1-369 **Perception of environmental stressors and psychosocial distress: a cross-sectional study of non-urban populations in Denmark**
Manuella Lech Cantuaria, Per Løfstrøm, Victoria Blanes-Vidal*

P1-370 **Prevalence of hearing loss in adolescents and young adults as a result of social noise exposure: a systematic review and meta-analysis**
*Ana Paula Marques, Adalberto Miranda-Filho, Gina Torres Monteiro**

P1-371 **Relationship between long-term residential transportation noise characteristics and incident diabetes in the SAPALDIA study.**
Ikenna Eze, Maria Foraster, Emmanuel Schaffner, Danielle Vienneau, Harris Héritier, Mark Brink, Medea Imboden, Christian Schindler, Christian Cajochen, Jean-Marc Wunderli, Martin Röösli, Nicole Probst-Hensch*

P1-372 **Road traffic noise and saliva cortisol levels in adolescents**
Alva Wallas, Charlotta Eriksson, Olena Gruzieva, Andrei Pyko, Mikael Ögren, Göran Pershagen*

P1-373 **Road traffic noise exposure and systemic inflammation**
Anu W Turunen, Pekka Tiittanen, Tarja Yli-Tuomi, Pekka Taimisto, Pekka Jousilahti, Annette Peters, Timo Lanki*

P1-374 **The burden of exposure to leisure noise among adolescents: what does the Ohrkan first follow-up study tell us?**
*Doris Gerstner, Dorothee Twardella, Christina Reiter, Valerie Matthäus, Stefanie Kolb, Caroline Herr**

P1-375 **The distribution of noise pollution along racial and socioeconomic lines in the United States**
Joan Casey*, Rachel Morello-Frosch, Daniel Mennitt, Kurt Fristrup, Peter James

P1-376 **The Evaluation of Noise Pollution from Railways**
Aukse Miskinyte, Audrius Dedele, Migle Keblyte*

P1-377 **The exposure to traffic noise and markers of obesity in Slovakia**
Lubica Argalasova, Jana Jurkovicova, Zuzana Stefanikova, Diana Vondrova, Alexandra Filova, Daniela Krajcova, Katarina Hirosova, Ludmila Sevcikova*

P1-378 **World Health Organization Environmental Noise Guidelines for the European Region: from scientific evidence to formulation of recommendations**
Marie-Eve Heroux, Jos Verbeek*

P1-379 **Arsenic Metabolism and One-Carbon Metabolism at Low-Moderate Arsenic Exposure: Evidence from the Strong Heart Study**
Miranda Spratlen, Chin-Chi Kuo, Maria Grau, Lyle Best, Joseph Yracheta, Mary Gamble, Kevin Francesconi, Walter Goessler, Jason Umas, Barbara Howard, Ana Navas-Acien*

P1-380 **Arsenic, diabetes-related genes and diabetes prevalence in a general population from Spain: The Hortega Study**
Maria Grau Pérez, Ana Navas Acien, Inmaculada Galan Chilet, Raul López Izquierdo, Isabel González Manzano, Juan Carlos Martín Escudero, Josep Redón i Mas, Felipe Javier Chaves Martínez, María Téllez Plaza*

P1-381 **Association of arsenic in drinking water and the occurrences of type 2 diabetes and acute coronary syndrome, data from Zrenjanin municipality, Serbia**
Dragana Jovanovic, Katarina Paunovic, Zorica Rasic-Milutinovic, Branko Jakovljevic, Milena Vasic, Miljan Rancic, Dragan Manojlovic, Biljana Dojcinovic*

P1-382 **Biological monitoring of inorganic arsenic exposure: An effective monitoring even in people with seafood ingestion**
Akihisa Hata, Hidetoshi Kurosawa, Yoko Endo, Kenzo Yamanaka, Takenori Yamauchi, Yuko Yamano, Noboru Fujitani, Ginji Endo*

P1-383 **Characteristic features of studies attributing chronic disease to low concentrations of arsenic in drinking water**
Allan Smith, Yan Yuan, Jane Liaw*

P1-384 **Estimating the population exposed to arsenic from groundwater-sourced private drinking water supplies in Cornwall, UK**
Helen Crabbe, Rebecca Close, Giovanni Leonardi, Micheal Watts, Louise Ander, Elliott Hamilton, Daniel Middleton, Pauline Smedley, Martin Gregory, Stephen Robjohns, Ovnair Sepai, David Polya, Tony Fletcher*

P1-385 **Inorganic Arsenic and Obesity: Findings from the National Health and Nutrition Examination Survey**
Sithembile Mabila, Catherine Bulka, Mary Turyk, Maria Argos*

P1-386 **Inorganic Arsenic Exposure is not associated with Type-2 Diabetes Prevalence in Cycle 2 of the Canadian Health Measures Survey**
Patrick Levallois, Elhadji Anassour-Laouan-Sidi, Pierre Ayotte*

P1-387 **Inorganic Arsenic from Food and Basal Cell Carcinoma: A Case-control Study**
Giovanni Leonardi, Patrizia Gnagnarella, Tony Fletcher*

P1-388 **Poultry Consumption and Arsenic Exposure in the U.S. Population**
Anne Nigra, Keeve Nachman, David Love, Maria Grau-Perez, Ana Navas-Acien*

P1-389 **Risk of bladder and kidney cancer from exposure to low levels of arsenic in drinking water, Nova Scotia – Canada**
Nathalie Saint-Jacques, Patrick Brown, Laura Nauta, Louise Parker, Trevor JB Dummer*

POSTER SESSION 2

Friday, September 2, 13:00 - 14:15

AREA 1—Air Pollution, Chemicals & Methods

HIGHLIGHTED POSTERS (P2-001—P2-021)

P2-001* **Air pollution, Acculturation and Neural Tube Defects**
Amy Padula, Wei Yang, Suzan Carmichael, Fredrick Lurmann, John Balmes, S. Katharine Hammond, Gary Shaw,*

P2-002* **Ambient air pollution and adverse birth outcomes: differences by maternal comorbidities**
Eric Lavigne, Abdool Yasseen, David Stieb, Perry Hystad, Aaron Van Donkelaar, Randall Martin, Jeffrey Brook, Daniel Crouse, Richard Burnett, Hong Chen, Scott Weichenthal, Markey Johnson, Paul Villeneuve, Mark Walker*

P2-003* **Contributions to Low Birth Weight by Different Components of Ambient Air Pollution during Gestation**
Kelvin Fong, Qian Di, Anna Kosheleva, Itai Kloog, Joel Schwartz*

P2-004* **Low Birth Weight and Increased Susceptibility to Particulate Air Pollution Exposure during Gestation**
Kelvin Fong, Itai Kloog, Anna Kosheleva, Joel Schwartz*

P2-005* **Preterm birth and fine particulate matter: replication of a new longitudinal design in Connecticut, New York and Western Australia**
Gavin Pereira, Michael B. Bracken, Michelle L. Bell*

P2-006* **Stillbirth and traffic-related air pollution: Would effects differ if air quality improved from changes to the national air quality standard?**
*Gavin Pereira **

P2-007* **Associations between exposure to air pollutants and childhood autism spectrum disorder in Taiwan**
*Shu-Yuan Wang, Ya-Yun Cheng, Shao-Wei Yang, Yen-Cheng Tseng, How-Ran Guo **

P2-008* **Early-life exposure to ambient benzene, toluene, ethylbenzene and xylene and ADHD-related behaviors and diagnosis among a nationally-representative sample of kindergarten children.**
Jeanette Stingone, Luz Claudio*

P2-009* **Neighborhood air pollution concentrations are associated with mental health in a large longitudinal cohort of Swedish children and adolescents**
Anna Oudin, Lennart Bråbäck, Daniel Oudin Åström, Magnus Strömgren, Bertil Forsberg*

P2-010* **Prenatal and Postnatal Exposure to Air Pollution and Child Attentional Function at age 4-5 years**
*Alexis Sentís, Jordi Sunyer, Albert Dalmau, Ainara Andiarena, Ferran Ballester, Marta Cirach, Marisa Estarlich, Ana Fernández-Somoano, Jesús Ibarluzea, Carmen Íñiguez, Aitana Lertxundi, Adonina Tardón, Mark Nieuwenhuijsen, Martine Vrijheid, Mònica Guxens**

P2-011* **Relationships between Prenatal Air Pollution and Cognitive Function in Pre-School Age Mexican Children**
Hsiao-Hsien Leon Hsu, Yeuh-Hsiu Mathilda Chiu, Ander Wilson, Brent A. Coull, Allan C. Just, Itai Kloog, Katherine Svensson, David Bellinger, Joel Schwartz, Martha María Téllez-Rojo, Lourdes Schnaas, Robert O. Wright*

P2-012* **Air Pollution and Suicide in Seoul, Tokyo, and Taipei: A Time-Stratified Case-Crossover Analysis**
Yoonhee Kim, Chris Fook Sheng Ng, Ho Kim, Yasushi Honda, Yue Leon Guo, Youn-Hee Lim, Bing-Yu Chen, Masahiro Hashizume*

P2-013* **Long-term exposure to air pollution and incidence of Parkinson's disease**
Francesco Cerza, Giulia Cesaroni, Matteo Renzi, Nera Agabiti, Riccardo Di Domenicantonio, Marina Davoli, Francesco Forastiere*

P2-014* **Long-Term Exposure to Traffic-Related Air Pollutants and Cognitive Trajectories in the Cardiovascular Health Study**
Erin Semmens, Annette Fitzpatrick, Sun-Young Kim, Helene Margolis, Fred Lurmann, Adam Szpiro, W.T. Longstreth, Victor Van Hee, Casey Olives, Amanda Gassett, Mark Richards, Michael Young, Joel Kaufman*

P2-015* **$PM_{2.5}$ exposure and olfactory dysfunction among older US adults**
Gaurav Ajmani, Helen Suh, Kristen Wroblewski, L. Philip Schumm, David Kern, Martha McClintock, Jeffrey Yanosky, Jayant Pinto*

P2-016* **Study on the effects of air pollution on odor identification and cognitive impairment**
Hannah Merz, Anke Hüls, Barbara Hoffmann, Sabine Stolz, Andrea Vierkötter, Ursula Krämer, Tamara Schikowski*

P2-017* **Short-term exposure to ultrafine particles and cardiovascular hospitalizations: A multicity analysis.**
Benedicte Jacquemin, Xavier Basagaña, Aurelio Tobias, Noemi Perez, Evangelina Samoli, Juha Pekkanen, Markku Kulmala, Andersen Zorana Jovanovic , Thomas Ellermann, Tom Bellander, Annunziata Faustini, Giorgio Cattani, Massimo Stafoggia*

P2-018* **Changes in Olfactory discrimination associated to environmental Manganese in Adolescents**
Roberto Lucchini, Stefano Guazzetti, Silvia Zoni, Donald Smith, Marco Peli, Filippo Donna, Chiara Fedrighi, Chiara Benedetti, Giusi Cagna, Anna Falzarano*

P2-019* **A gene-environment interaction analysis of plasma selenium and lipids: The Hortega Study**
Inmaculada Galan Chilet, Eliseo Guallar, Alejandro Dominguez Lucas, Isabel González Manzano, Raúl López Izquierdo, Juan C Martín Escudero, Josep Redón, F. Javier Chaves, Maria Tellez Plaza **

P2-020* **Environmental exposure to arsenic, lead, and cadmium in people living near Janghang copper smelter in Korea**
Heon Kim, Yong-Dae Kim, Sang-Yong Eom, Dong-Hyuk Lim, Byung-Sun Choi, Jung-Duck Park*

P2-021* **Health effects of fine particle sources and dimensional fractions: a 3-year time-series study in an urban area of Northern Italy**
Andrea Ranzi, Simone Giannini, Elisa Stivanello, Fabiana Scotto, Arianna Trentini, Stefano Zauli-Sajani, Marta Ottone, Laura Bonvicini, Ferdinando Luberto, Paola Angelini, Paolo Lauriola*

P2-022 **A study of long-term exposure of outdoor PM_{10} and depression**
Hyeonjin Song, Jong-Tae Lee, Hyomi Kim, Honghyok Kim, Garam Byun, Yongsu Choi, Minh Tran Thao Le*

P2-023 **Ambient Fine Particulate Matter, Metal Constituents, and Brain Morphology**
Sheila Tripathy, Brett Tunno, Drew Michanowicz, Ellen Kinnee, Jessie Shmool, Peter Gianaros, Jane Clougherty*

P2-024 **Ambient Nitric Oxide Associated with Increased Risk of Emergency Hospital Admission for Subarachnoid Hemorrhage**
Yang Yang, Linwei Tian, Hong Qiu, Shengzhi Sun, Kingpan Chan*

P2-025 **Association between ambient particulate matter and disorders of vestibular function: Time series and case-crossover study in Seoul, Korea**
Changwoo Han, Yun-Chul Hong, Youn-Hee Lim*

P2-026 **Cognitive Impacts of Ambient Air Pollution in the National Social Health and Aging Project (NSHAP) Cohort**
Lindsay Tallon, Justin Manjourides, Vivian Pun, Helen Suh*

P2-027 **Long term exposure to ambient air pollutants and onset of systemic autoimmune rheumatic diseases**
Audrey Smargiassi, Sasha Bernatsky, Sonia Jean, Allan Brand, Philippe Gamache*

P2-028 **Self-rated Health and Exposure to Ambient Particulate Matter in Korean Adults in Seven Major Cities**
Honghyok Kim, Yongsu Choi, Hyomi Kim, Garam Byun, Jong-Tae Lee*

P2-029 **Short-term exposure to PM_{10} and emergency admissions for Parkinson's disease in Seoul, Korea**
Hyewon Lee, Ho Kim*

P2-030 **Effect of prenatal exposure to fine airbone particles on child mental and psychomotor development: an analysis based on propensity score matching**
Viola Tozzi, Michela Baccini, Aitana Lertxundi, Jesus Ibarluzea*

P2-031 **Air pollution exposure during pregnancy and child attention deficit and hyperactivity disorder symptoms in eight European cohort studies.**
*Joan Forns, Jordi Sunyer, Raquel García-Esteban, Ainara Andiarena, Chiara Badaloní, Fernandez MF, Ulrike Gehring, Lise Giorgis-Allemand, Tong Gong, Joachim Heinrich, Barbara Heude, Michal Korek, Maria-Jose Lopez-Espinosa, Claire Philippat, Daniela Porta, Ole Raaschou-Nielsen , Remy Slama, Mette Sørensen, Marie Standl, Henning Tiemeier , Tanja G.M. Vrijkotte, Vincent W.V Jaddoe, Mark Nieuwenhuijsen, Göran Pershagen, Bert Brunekreef, Mònica Guxens**

P2-032 **Association between land-use variables and neurodevelopment at 12 and 24 months in the Piccolipiù Italian birth cohort**
Silvia Narduzzi, Sara Fioravanti, Daniela Porta, Chiara Antonucci, Chiara Badaloni, Luigi Gagliardi, Veronica Montelatici, Costanza Pizzi, Maria Antonietta Stazi, Liza Vecchi Brumatti, Francesco Forastiere, and the Piccolipiù group*

P2-033 **Associations between exposure to ambient nitrogen dioxide and autism spectrum disorder in Israel: a population-based nested case-control study**
Raanan Raz, Marc Weisskopf, David Broday, Yuval ., Ofir Pinto, Hagai Levine*

P2-034 **Comparison of metals and essential trace elements levels between Autistic Spectrum Disorders cases and their sibs in Sicily (southern Italy)**
Maria Fiore, Rita Barone, Alfina Grasso, Placido D'Agati, Daniela Varrica, Giorgia Calabrese, Renata Rizzo, Margherita Ferrante*

P2-035 **Culture-free assessment of Working Memory in children**
Mònica López-Vicente, Jordi Sunyer, Joan Forns, Miguel Burgaleta, Llúcia González-Safont, Nerea Lertxundi, Rosauro Varo, Antonio Sitoe, Quique Bassat, Mònica Guxens*

P2-036 **Effects of Maternal Exposure to $PM_{2.5}$ on Early Neuroevelopment in Children in Nanjing, China: A Longitudinal Study**
Di Wu, Yinwen Ji, Xiaosha Hu, Meiling Tong, Yankai Xia*

P2-037 **Exposure to Ambient Fine Particulate Matter and Cortical Thinning in Adolescents**
Yaling Yang, Laura Baker, Eric Kan, Meredith Franklin, Diana Younan, Fred Lurmann, Jiu-Chiuan Chen*

P2-038 **Exposure to $PM_{2.5}$ during pregnancy and Children's Cognitive and verbal development at 5 years in Spain: effect modification by breastfeeding**
Aitana Lertxundi, Jesus Ibarluzea, Ainara Andiarena, Loli Martinez, Mikel Ayerdi, Mario Murcia, Marisa Estarlich, Monica Guxens, Jordi Sunyer*

P2-039 **Prenatal air pollution exposures, maternal cytokine/chemokines, and risk of autism spectrum disorder: the early markers for autism (EMA) study.**
Bo Park, Karen Jones, Heather Volk, Judith Van de Water, Lisa Croen*

P2-040 **Prenatal blood mercury and Autism Spectrum Disorders (ASD) through 60 months of age**
Jia Ryu, Eunjung Kim, Mina Ha, Hye-sook Park, Yun-Chul Hong, Yang-ho Kim, Eunhee Ha*

P2-041 **Prenatal Diesel Exposure and Cognitive Ability in the Early Autism Risk Longitudinal Investigation**
Heather Volk, Bo Park, Jicheng Gong, Lisa Croen, M. Daniele Fallin, Irva Hertz-Picciotto, Rob McConnell, Craig Newschaffer, Junfeng (Jim) Zhang*

P2-042 **Prenatal exposure to particulate air pollution and hyperactivity, impulsivity and conduct problems at 6 years of age**
Eunjeong Kim, HyeSook Park, Yun-Chul Hong, Mina Ha, Eun-Hee Ha*

P2-043 **Prenatal Exposure to Traffic-Related Air Pollution and Child Behavioral Problems at School Age in Japan**
Takashi Yorifuji, Saori Kashima, Yoko Kado, Satoshi Sanada , Hiroyuki Doi*

P2-044 **Second-hand smoke measured with urinary cotinine during pregnancy and offspring's neurodevelopment at age of 24 months**
Myeongjee Lee, Surabhi Shah-Kulkarni, Mina Ha, Yun-Chul Hong, Hyesook Park, Yangho Kim, Eui-Jung Kim, Eun-Hee Ha*

P2-045 **Traffic-related air pollution has acute detrimental effects on attention in primary school children**
Jordi Sunyer, Elisabet Suades-González, Raquel García-Esteban, Ioar Rivas, Jesús Pujol, Mar Álvarez-Pedrerol, Joan Forns, Xavier Querol, Xavier Basagaña*

P2-046 **Urinary t,t-muconic acid as a proxy-biomarker of car exhaust and neurobehavioral performance in 15-year olds**
Michal Kicinski, Harry A. Roels, Nelly D. Saenen, Greet Schoeters, Michelle Plusquin, Elly Den Hond, Liesbeth Bruckers, Isabelle Sioen, Willy Baeyens, Mineke K. Viaene, Tim S. Nawrot*

P2-047 **A single nucleotide polymorphism in the EPHX1 gene, TYR113HIS T/C rs1051740, is associated with low birth weights in neonates exposed to pollution in utero**
Pragalathan Naidoo, Rajen N. Naidoo, Prithiksha Ramkaran, Alisa Phulukdaree, Sheena Muttoo, Anil A. Chuturgoon*

P2-048 **Air pollution at home and pregnancy outcomes**
David Olsson, Bertil Forsberg*

P2-050 **Ambient air pollution and risk of low birth weight in Sydney, Australia**
Pernilla Almerud, Geoffrey G Morgan, Eva M Andersson, Petr Oathal, Bin Jalaludin, Farhad Salimi, Margaret Rolfe, Fay Johnston*

P2-051 **Association between ambient air pollution and placenta praevia and accreta in Japan**
Takehiro Michikawa, Seiichi Morokuma, Shin Yamazaki, Kotaro Fukushima, Kiyoko Kato, Hiroshi Nitta*

P2-052 **Association between exposure to fine particulate matter and adverse pregnancy outcomes in Kaunas**
Audrius Dedele, Regina Grazuleviciene, Jone Vencloviene, Aukse Miskinyte*

P2-053 **Association between $PM_{2.5}$ and $PM_{2.5}$ Constituents and Preterm Birth in California, 2000-2006**
Rupa Basu, Dharshani Pearson, Brian Malig, Kimberly Berger*

P2-054 **Decreased birth weight following prenatal exposure during the 2000 eastern coast of Korea wildfire**
Jong-Hun Kim, Hae-Kwan Cheong*

P2-055 **Effects of ambient nitrogen dioxide concentrations on adverse birth outcomes in urban and rural areas of Alberta, Canada**
Jesus Serrano-Lomelin, Charlene Nielsen, Khalid Aziz, Manoj Kumar, Sue Chandra, Nancy Aelicks, Alvaro Osornio-Vargas*

P2-056 **Evaluation of needed study size to investigate the association between exposure to source specific $PM_{2.5}$ and adverse outcomes in pregnancy**
Hanna de Ruyter, Isabell Rumrich, Otto Hänninen, Matti Viluksela, Mika Gissler, Heljä-Marja Surcel*

P2-057 **Fertility and Environment: An Observational Study in Healthy Young Men from Different areas of Campania Region**
Mariano Galdiero, Ciro Salzano, Giacomo Galdiero, Mariangela Piscopo, Davide Menafra, Francesco Garifalos, Alfonso Vece, Cristina De Angelis, Annamaria Colao, Rosario Pivonello*

P2-058 **Fine particulate air pollution and adverse birth outcomes: Effect modification by oxidative potential**
Eric Lavigne, Scott Weichenthal, Greg Evans, Krystal Godri-Pollitt, Hong Chen, Richard Burnett*

P2-059 **Is ambient air pollution and stillbirth risk modified by maternal asthma status?**
Pauline Mendola, Sandie Ha, Danping Liu*

P2-060 **Maternal exposure to ozone and $PM_{2.5}$ and the prevalence of orofacial clefts in four U.S. states**
Ying Zhou, Suzanne Gilboa, Michele L. Herdt, Philip J. Lupo, W. Dana Flanders, Yang Liu, Mikyong Shin, Mark A. Canfield, Russell S. Kirby*

P2-061 **Prenatal exposure to air pollution and weight at the age of 4**
Sanghyuk Bae, Youn-hee Lim, Young Ah Lee, Choong Ho Shin, Yun-Chul Hong*

P2-062 **Residential exposure to industrial pollution: is there an association with adverse pregnancy outcomes?**
Enrica Lapucci, Sara Farchi, Claudia Marino, Simone Bucci, Marina Davoli, Paola Michelozzi*

P2-063 **Short-term air pollution exposure and the risk of stillbirth in California**
Rupa Basu, Varada Sarovar, Brian Malig*

P2-064 **Source-specific air pollution and adverse reproductive outcomes in Ravenna (North-East of Italy)**
Giuliano Silvi, Valeria Frassineti, Serena Broccoli, Cristina Raineri, Andrea Ranzi, Federica Parmagnani, Patrizia Lucialli, Elisa Pollini, Silvia Candela, Paola Angelini*

P2-065 **The effect of NOx pollution on oxidative stress in pregnant women living in Durban, South Africa.**
Samantha M Anderson, Prithiksha Ramkaran, Alisa Phulukdaree, Sheena Muttoo, Kareshma Ramcharan, Anil A Chuturgoon, Rajen N Naidoo*

P2-066 **The relationship between air quality and quality of life among elderly population**
Juhwa Choi, Hae-Kwan Cheong, Sooeun Chung, Youn-Seo Koo, Hui-young Yun*

P2-067 **A health risk-based source apportionment of ambient PM_{10} and its implications of pollution control strategies**
Zibing Yuan, Zhiyuan Li, Alexis Lau, Junyu Zheng*

P2-068 **Association of blood lead levels with brain cortical thickness among population living near hazardous waste incinerators**
Jungwoo Sohn, Juhwan Noh, Seong-Kyung Cho, Jee Eun Choi, Changsoo Kim, Dong-Chun Shin*

P2-069 **Blood aluminum levels in south-east costal area residents in Korea**
Young-Seoub Hong, Jin-Yong Chung, Hyun-Ju Lim, Byoung-Gwon Kim, Jung-Wook Seo*

P2-070 **Blood and Urinary Lead and Alzheimer 's disease Mortality in U.S. Adults**
Qing Peng, Kelly Bakulski, Bin Nan, Sung Kyun Park*

P2-071 **Blood Cadmium Is Associated with Osteoporosis in Obese Males but Not in Non-Obese Males: The Korea National Health and Nutrition Examination Survey 2008–2011**
Won-Jun Choi, Sang-Hwan Han, Soyoung Hong*

P2-072 **Blood Concentrations of Essential and Non-Essential Metals and Related Factors among Adult Population of Rio Branco, Acre, Brazil**
Élida Campos, Carmen Freire, Rosalina Koifman, Sergio Koifman*

P2-073 **Blood Lead Levels, Paraoxonase-1 and Malondialdehyde in urban population from Southern Brazil**
Ana Carolina Bertin de Almeida Lopes, Tiago Severo Peixe, André de Souza Nogueira, Ana Paula Michelin, Gustavo H Oliveira-Paula, Monica Maria Bastos Paoliello*

P2-074 **Cadmium, atherosclerosis and cardiovascular disease**
Lars Barregard, Gerd Sallsten, Bjorn Fagerberg, Goran Bergstrom*

P2-075 **Common SNPs in the manganese transporter SLC30A10 gene are associated with blood manganese in children as well as their IQ, motor function and behavior**
Karin Wahlberg, Donald Smith, Ayman Alhamdow, Stefano Guazzetti, Silvia Zoni, Chiara Fedrighi, Chiara Benedetti, Robert Lucchini, Karin Broberg*

P2-076 **Confounding by Smoking in Studies of Cadmium with Depression and Obstructive Lung Disease**
Danielle Kruse, Caterina Vacchi-Suzzi, Jaymie Meliker*

P2-077 **Cumulative Lead Exposure and Incidence of Age-related Cataract in Older Men**
Weiye Wang, Debra Schaumberg, Sung Kyun Park*

P2-078 **Determinants of Blood Cadmium levels in Male Residents of Mexico City**
Luisa Torres-Sánchez, Ruth A Vázquez-Salas, Adylenne Vite, Marcia Galván-Portillo, Mariano E Cebrián-García, Camilo Ríos, Sergio Montes*

P2-079 **Effect of Blood Lead Concentration on Attention Deficit Hyperactivity Disorder in Korean Children: A Mendelian Randomization Study**
Hyungryul Lim, Jong Hyuk Choi, Ho-jang Kwon, Mina Ha, Ji-ae Lim, Myung Ho Lim*

P2-080 **Effects of exposure to polycyclic aromatic hydrocarbons and heavy metals on the oxidative stress, inflammation and DNA methylation among traffic conductors**
Han-Bin Huang, Ching-Huang Lai, Saou-Hsing Liou, Shu-Li Wang*

P2-081 **Environmental cadmium exposure, chronic suppurative otitis media, and hearing impairment**
Dong-Wook Lee, Seung-Ha Oh, Moo-Kyun Park, Youn-Hee Lim, Yun-Chul Hong*

P2-082 **Environmental Exposures to Lead, Mercury, and Cadmium and Hearing Loss in Adults and Adolescents**
Yoon-Hyeong Choi, Sung Kyun Park*

P2-083 **Estimated loss of IQ points in children exposed to MeHg in Bogotá 2013**
Cesar Geney, Zaidee Barbosa, Alejandra Diaz, Yady Gonzalez, Diana Perez, Samuel David Osorio Garcia, Luis Jorge Hernandez Florez*

P2-084 **Exploring Mechanisms of Phthalate Allergenicity in Adults: Interactions with Endotoxin in National Health and Nutrition Examination Survey (NHANES) 2005-2006**
Jane Hoppin, Paula Strassle*

P2-085 **Exposure to Multiple Heavy Metals and Health Hazards in Shipbuilding Workers**
Chih-Hong Pan, Ching-Huang Lai, Wen-Yi Lin, Chiung-Yu Peng*

P2-086 **Exposure to thallium contamination in drinking water: first results of human biomonitoring in Pietrasanta (Lucca, Italy).**
Daniela Nuvolone, Cristina Aprea, Stefano Pieroni, Silvano Bertelloni, Davide Petri, Francesco Cipriani, Gianfranco Sciarra, Ida Aragona*

P2-087 **Hair mercury level is associated with anemia and increased vitamin B12 in children living near ASGM in the Peruvian Amazon**
Caren Weinhouse, Ernesto Ortiz, Axel Berky, Paige Meier, Heileen Hsu-Kim, William K Pan*

P2-088 **Heavy Metals in Blood and Ventricular Repolarization: Modification by Sex and Smoking Status in Urban Traffic Enforcers**
Emmanuel S. Baja, Godofreda V. Dalmacion*

P2-089 **Lead concentration in 'surma/kajal samples' from Japan, Pakistan and Saudi Arabia**
Shahla Naeem, Ambreen Sahito , Ambreen Kazi , Johara Alquaiz, Adeel Ahmed Khan , Fujio Kayama, Zafar Fatmi, Akihiko Ikegami*

P2-090 **Lead exposure and glutathione markers of redox status in human blood**
*Caterina Vacchi-Suzzi, Laura Viens, Roxanne Karimi, Jaymie Meliker **

P2-091 **Metal levels in urine samples and in air particulate matter in Turin metropolitan area (Italy): a comparison study**
Ennio Cadum, Maria Rowinski, Antonella Bena, Beatrice Bocca, Monica Chiusolo, Elena Farina, Martina Gandini, Manuela Orengia, Anna Pino, Enrico Procopio, Giuseppe Salamina, Francesco Lollobrigida*

P2-092 **Metals prenatal levels and Modified Checklist for Autism in Toddlers: a birth cohort study from Italy**
Fabio Barbone, Valentina Rosolen, Liza Vecchi Brumatti, Maura Bin, Josko Osredkar, Darja Mazej, Milena Horvat*

P2-093 **Neurotoxicity of Lead (PB) for Developing Brain. The Mechanisms of Action**
Irena Baranowska-Bosiacka, Izabela Gutowska, Marta Goschorska, Agnieszka Lukomska, Karolina Dec, Anna Falkowska, Dariusz Chlubek*

P2-094 **Nonlinear exposure-response associations between daily mortality and air pollution in Wuhan, China**
Yuewei Liu, Tingming Shi*

P2-095 **Predictors of Iodine Uptake Inhibitors in a Cohort of Dominican and African American Pregnant Women**
*Ramael Ohiomoba, Beverly Insel, Julie Herbstman, Xinhua Liu, Robin Whyatt, Pam Factor-Litvak **

P2-096 **Prenatal exposure to organophosphate pesticides and child neurodevelopment**
Sabrina Llop, Mario Murcia, Maria-Jose Lopez-Espinosa, Marta Roca, Vicent Yusà, Llúcia González, Carmen Iñiguez, Ferran Ballester, Marisa Rebagliato*

P2-097 **Processed Meat and Other Dietary Determinants of Cadmium Exposure: Evidence from the Strong Heart Family Study**
Pablo Olmedo-Palma, Amanda Fretts, Maria Grau, Maria Tellez-Plaza, Nora Franceschini, Jason G. Umans, Kevin A. Francesconi, Walter Goessler , Fernando Gil, Elisa T. Lee, Lyle G. Best, Shelley A. Cole, Barbara V. Howard, Ana Navas-Acien*

P2-098 **Relationship between Manganese in the environment and in Adolescents' biomarkers**
Marco Peli, Filippo Donna, Chiara Benedetti, Stefano Guazzetti, Donald Smith, Roberto Lucchini*

P2-099 **Short-term effects of fine particle components on daily mortality and hospitalization in the Emilia-Romagna region: Results from Supersite Project**
Simone Giannini, Andrea Ranzi, Serena Broccoli, Stefano Zauli-Sajani, Marta Ottone, Francesco Forastiere, Dimitri Bacco, Isabella Ricciardelli, Silvia Candela, Paola Angelini, Paolo Lauriola*

P2-100 **Spatial distribution of renal disease in the contaminated site of Taranto (Italy)**
Marta Benedetti, Marco De Santis, Valerio Manno, Sante Minerba, Antonella Mincuzzi, Angela Morabito, Nicola Panocchia, Maria Eleonora Soggiu, Maurizio Bossola, Roberto Giua, Simona Leogrande, Alessandra Nocioni, Susanna Conti, Pietro Comba*

P2-101 **Study on renal functions among adult residents in the vicinity of a petrochemical complex**
Tzu-Hsuen Yuan, Ke-Deng Yuan, Chang-Chuan Chan*

P2-102 **Temporal trend of heavy metal exposure level in Korean population**
JI AE Lim, Jung-Duck Park, Heon Kim, Sang-Young Eom, Yu-Mi Kim, Seok-Joon Sohn, Hyung-ryul Lim, Jonghyuk Choi, Su-Jung Kim, Se Young Oh, Myung Sil Hwang, Ho-Jang Kwon*

P2-103 **Thallium contamination in drinking water in Pietrasanta (Lucca, Italy): preliminary results of a retrospective cohort study**
Daniela Nuvolone, Pasquale Pepe, Silvano Bertelloni, Davide Petri, Stefano Pieroni, Ida Aragona, Cristina Aprea, Gianfranco Sciarra, Francesco Cipriani*

P2-104 **The prevalence and practices of copper sulphate use in South African traditional medicine**
Renee Street, Gaëtan Kabera, Catherine Connolly*

P2-105 **Urinary and Blood Cadmium and Alzheimer's Disease Mortality in U.S. Adults**
Qing Peng, Kelly Bakulski, Bin Nan, Sung Kyun Park*

P2-106 **Variations in Blood and Toenail Metal Concentrations by Hemochromatosis (HFE) Genotype**
Vy Nguyen, Marc Weisskopf*

P2-107 **What is the situation of blood lead levels of children living in Latin America and Caribbean Region?**
Fernanda Junqueira Salles, Cláudia Gaudência Gonçalves, Agnes Soares da Silva, Marília Afonso Rabelo Buzalaf, Maria Regina Alves Cardoso, Etelvino José Henrique Bechara, Kelly Polido Kaneshiro Olympio*

P2-108 **Mortality from Silicosis in Italy: Temporal Trends and Spatial Distribution**
Roberto Pasetto, Giada Minelli, Fulvio Cavariani, Amerigo Zona, Pietro Comba*

P2-109 **Applying the GRADE (Grading of Recommendations Assessment, Development and Evaluation) methodology to evaluate the evidence in environmental health: the SENTIERI Project case study**
Roberta Pirastu, Simona Vecchi, Lucia Fazzo*

P2-110 **Assessing the Usability of the Risk of Bias in Non-randomized Studies – of Interventions (ROBINS-I) Tool for Studies of Exposure and Intervention in Environmental Health Research**
Rebecca Morgan, Kristina Thayer, Alison Holloway, Nancy Santesso, Robyn Blain, Sorina Eftim, Ali Goldstone, Pam Ross, Gordon Guyatt, Holger Schunemann*

P2-111 **Challenges with methods for quantifying the effects on weather and climate on water-associated diseases**
Gianni Lo Iacono, Gordon Nichols, Sotiris Vardoulakis, Sari Kovats, Lora Fleming*

P2-112 **Effects of Ambient Air Pollution on Respiratory and Cardiovascular Mortality: Meta-Analysis and Meta-Regression**
Rebecca Klemm, Eddie Thomas, Ron Wyzga*

P2-113 **Plausible cumulative effect of air pollution exposure and neighborhood deprivation on the risk of congenital malformations**
Severine Deguen, Wahida Talantikite, Esther Chen, Maxime Jeanjean, Cindy M Padilla, Denis Zmirou-Navier*

P2-114 **Short-term health effects of particulate air pollution in Latin America: a systematic review of the research status in Latin America**
*Laís Fajersztajn **

P2-115 **Systematic review protocol for short-term effects of air pollution: how to address risk of bias from exposure assessment?**
*Laís Fajersztajn **

P2-116 **Health impacts of the oil shale sector in Eastern-Estonia**
Hans Orru, Jelena Tomasova, Jane Idavain, Kaja Julge, Tiina Rebane, Jüri Ruut, Leena Albreht, Kaisa Kesanurm, Knut Tamm, Kristina Aidla-Bauvald*

AREA 2—Indoor and Outdoor Air Pollution & Organic Chemicals

P2-117 **A multilevel analysis of the ecological association between air pollution and self-reported diabetes mellitus**
Riccardo Orioli, Giuseppe Cremona, Angelo Giuseppe Solimini*

P2-118 **Acute exposure to sulfur dioxide and mortality: a case-crossover analysis of power plant emissions**
*Mohamed Elsaid, Eileen Musarra, Qingyu Meng, Jaime Madrigano **

P2-119 **Air pollution and cardiovascular emergency visits in Isfahan, Iran, 2011: a case-crossover analysis**
Erfan Sadeghi, Tohid Jafari Koshki, Seyed Mohsen Hosseini, Nizal Sarrafzadegan, Katayoon Rabiei*

P2-120 **Air Pollution and Myocardial Infarction Mortality in São Paulo, Brazil**
Karina Abe, Simone Miraglia*

P2-121 **Are there Toxic Places? Examining the Correlations between the Associations of Fine and Coarse Particulate Matter with Mortality**
Sara Adar, Jennifer Peel*

P2-122 **Association among Outdoor and Indoor Exposure to $PM_{2.5}$ and Cardiovascular Autonomic Function in Adult Population in Bucaramanga, Colombia**
Oscar Rojas-Sanchez, Laura Rodriguez-Villamizar, Victor M. Herrera-Galindo, Kento Magara*

P2-123 **Associations between Inflammation and Sources and Constituents of Fine and Ultrafine Particles**
Bart Ostro, Brian Malif, Jianlin Hu, Mike Kleeman*

P2-124 **Cardiorespiratory Risks and Benefits of Outdoor Physical Activity in Older Adults**
Dave Stieb, Nina Dobbin, Robin Shutt, Lisa Marie Kauri, Sarah Mason, Li Chen, Mieczyslaw Szyszkowicz, Marc Rigden, Branka Jovic, Marie Mulholland, Martin Green, Ling Liu, Guillaume Pelletier, Scott Weichenthal, Robert Dales, Isaac Luginaah*

P2-125 **Early Life Exposure to Outdoor Air Pollution and Cardiometabolic Risk at Preschool Age**
Serena Fossati, David Martinez, Marta Cirach, Marisa Estarlich, Ana Fernández-Somoano, Monica Guxens, Damaskini Valvi, Oliver Robinson, Aitana Lertxundi-Manterola, Sabrina Llop, Loreto Santa-Marina, Adonina Tardón, Jordi Sunyer, Martine Vrijheid*

P2-126 **Elevated cord blood homocysteine levels in newborns prenatally exposed to particulate air pollution; results from the ENVIRONAGE birth cohort**
Janneke Hogervorst, Karen Vrijens, Tim Nawrot*

P2-127 **Exposure to particles of different size fractions and related health effects on cardiopulmonary inflammation**
Yanwen Wang, Yiqun Han, Xi Chen, Tong Zhu, Weiju Li, Junxia Wang, Yanhua Fang, Hongyin Zhang, Min Hu*

P2-128 **Individual and neighborhood stressors, air pollution and cardiovascular disease**
Anjum Hajat, Marnie Hazlehurst, Paula Nurius*

P2-129 **Long term effects of air pollution in Turin, Northern Italy. A population-based cohort study.**
*Moreno Demaria, Barbara Lorusso, Rocco Pispico, Claudia Galassi, Nicolas Zengarini, Martina Gandini, Ennio Cadum **

P2-130 **The association between exposures to particulate matter and risk of sudden cardiac death in women**
Jaime Hart, Jeff Yanosky, Francine Laden, Christine Albert*

P2-131 **Traffic-related air pollution and transplant failure in the UK**
Daniela Fecht, Livia Pierotti, David Collet, Susie Schofield, Kees De Hoogh, Anna L Hansell, Paul Cullinan*

P2-132 **Urban air pollution and cardiovascular hospitalizations in Salvador, BA, Brazil: a time series study**
Nelzair Vianna, Paulo Saldiva, Lourdes Martins*

P2-133 **Effects of exposure to burning scented candle on social stress-induced cardiopulmonary injury in mice**
Ming Yie Liu, Se Ping Chien, Srinivasan Periasamy*

P2-134 **Seasonal differences in household air pollutants and determinants of personal air pollution exposure in rural women cooking and heating with biomass fuels in the Tibetan Plateau**
Ellison Carter, Kun Ni, James Schauer, Majid Ezzati, Yuanxun Zhang, Hongjiang Niu, Alexandra Lai, Ming Shan, Yuqin Wang, Xudong Yang, Jill Baumgartner*

P2-135 **A critical analysis of the literature on the characterization of air in the subway**
Silvia Brini, Silvia Canepari, Giorgio Cattani, Francesca de Maio, Alessandro di Menno di Bucchianico, Arianna Lepore*

P2-136 **A Pilot Study on the Use of Kitchen Exhaust Fans to Reduce Exposure to Air Pollutants from Residential Cooking**
Nina Dobbin, Liu Sun, Melissa St-Jean, Tim Shin, Hongyu You, Ryan Kulka, Brett Singer, Daniel Aubin, Lance Wallace, Jennifer Logue*

P2-137 **Are pets important in spreading dermatophytes in indoor environment?**
Juan Justino A. Neves, Adriano Pereira, Adriana de Oliveira Paulino, Renata Gaspar Vieira, Maria Christina Christóvão Ramos, Eduardo Koji Nishida, Selene Dall' Acqua Coutinho*

P2-138 **Arterial blood pressure responses to short-term exposure to fine and ultrafine particles from indoor sources – a randomized sham-controlled exposure study**
Vanessa Jana Soppa, Roel Schins, Frauke Hennig, Bryan Hellack, Ulrich Quass, Heinz Kaminski, Thomas Kuhlbusch, Barbara Hoffmann*

P2-139 **Association between Indoor Fine Particulate Matter and Plasma Lipid Fractions in Adult Urban Population in Bucaramanga, Colombia: Preliminary Results**
Laura A. Rodriguez-Villamizar, Victor M. Herrera-Galindo, Kento Magara*

P2-140 **Association between particulate matter concentrations and symptoms of atopic dermatitis in children**
Inbo Oh, Ji-Ho Lee, Chang Sun Sim, Kangmo Ahn, Jihyun Kim, Youngshin Han, Yangho Kim*

P2-141 **Association of Acute Coronary Syndrome (ACS) with indoor air pollution due to biomass fuel use for cooking among women in rural Sindh, Pakistan: a matched case control study**
*Ambreen Sahito **

P2-142 **Changes in composition of indoor VOC and consequences for human health risk assessment**
Olf Herbarth, Philipp Opitz*

P2-143 **Correlation between indoor complaints and exposure to environmental factors in indoor air**
Hiroko Nakaoka, Emiko Todaka, Masamichi Hanazato, Norimichi Suzuki, Akifumi Eguchi, Michiko Shimoda, Chisato Mori*

P2-144 **Dampness and microbial secondary metabolites in schools and respiratory symptoms in children: the HITEA study**
José Jacobs, Alicia Borràs-Santos, Esmeralda Krop, Martin Täubel, Jan-Paul Zock, Juha Pekkanen, Anne Hyvärinen, Michael Sulyok, Rudolf Krska, Lennart Larsson, Dick Heederik*

P2-145 **Different Types of Housing and Respiratory Health Outcomes**
Wenqi Gan, Wayne Sanderson, Steven Browning, David Mannino*

P2-146 **Domestic Cleaning Products and the Risk of Dermatitis: A Prospective Cohort Study in Chinese Primary School Children**
Xudong Liu, Zilong Zhang , Lixing Tan, Claudie Wong , Ignatius YU, Kin-fai Ho , Lap-ah Tse , Xiang-Qian Lao*

P2-147 **Estimating the health impact of housing adaptations on heat-related risks in the West Midlands region (UK)**
Roberto Picetti, Jonathon Taylor, Phil Symonds, Helen Macintyre, Clare Heaviside, Emma Hutchinson, Michael Davies, Paul Wilkinson*

P2-148 **Exposure to indoor air pollution by NO_2 and BTEX compounds in European children's homes**
Ibon Tamayo-Uria, Oliver Robinson, Zaneta Stawiarska, Lise Giorgis-Allemand, Maribel Casas, Leda Chatzi, Audrius Dedele, Regina Grazuleviciene, Vicky Lebentakou, Kristine Bjerve Gutzkow, Rosie McEachan, Remy Slama, John Wright, Xavier Basagaña, Martine Vrijheid*

P2-149 **Health effects and exposure to volatile organic compounds from woods – an experimental study**
Knut Ragnvald Skulberg, Anders Quale Nyrud, Oddbjørn Sjøvold*

P2-150 **Health risk assessment of inhalation exposure to cyclic dimethylsiloxanes, glycols, and acetic esters in indoor environments**
Kenichi Azuma, Toshiko Tanaka-Kagawa, Hideto Jinnno*

P2-151 **Heavy Metal Exposure, Source Identification and Health Impact Associated with Indoor Particulate Matter (PM_{10} & $PM_{2.5}$) in Lucknow City**
*Alfred Lawrence **

P2-152 **High psychological stress could exaggerate subjective symptoms among Japanese medical students with expo sure to formaldehyde during gross anatomy dissection course**
Mihoko Mori, Yoshitaka Morimatsu, Yuuki Matsumoto, Nanae Kushino, Miyako Inoue, Tsuyoshi Saga, Koh-ichi Yamaki, Tatsuya Ishitake*

P2-153 **Household air pollution and metabolomics among Honduran women**
Maggie L Clark, Megan L Graham, Corey D Broeckling, Jay S Kirkwood, Sarah Rajkumar, Bonnie N Young, Annette M Bachand, John Volckens, Christian L'Orange, Sebastian Africano, Anibal B Osorto Pinel, Devin Clark, Stephen J Reynolds, Jennifer L Peel, Jessica E Prenni*

P2-154 **Indoor allergens, allergic sensitization, and airway inflammation in children living in Mediterranean areas**
Gaspare Drago, Silvia Ruggieri,* Luca L'Abbate, Valeria Longo, Paolo Colombo, David Bilocca, Cristopher Zammit, Martin Balzan, Charles Borg, Giovanni Viegi, Fabio Cibella*

P2-155 **Indoor Microclimate Variables and Endothelial Function in Italian Clerks**
Serena Fossati, Elisa Pasqual, Andrea Spinazzè, Andrea Cattaneo, Domenico Cavallo, Paolo Carrer*

P2-156 **Indoor/Outdoor Seasonal Variability of Different Particle Metrics**
Stefano Zauli Sajani, Arianna Trentini, Sabrina Rovelli, Dimitri Bacco, Claudio Maccone, Stefano Marchesi, Silvia Ferrari, Fabiana Scotto, Andrea Cattaneo, Paolo Lauriola, Vanes Poluzzi*

P2-157 **Investigation of $PM_{2.5}$ and Blood Lead Level in Two Populations**
Undarmaa Enkhbat, Ana Rule, Carol Resnick, Chimedsuren Ochir, Purevdorj Olkhanud, D'Ann Williams*

P2-158 **Quantifying the adoption, usage patterns, and air pollution concentrations from a novel household energy pack age in the Tibetan Plateau**
Sierra Clark , Kun Ni, Hongjiang Niu , Ellison Carter, Ming Shan , James Schauer , Majid Ezzati , Christine Wiedinmyer, Xudong Yang, Jill Baumgartner*

P2-159 **Risk Evaluation for Transmission of Nosocomial Respiratory Infections Mediated by Bioaerosols Present in the Hospital of Suba**
Jose Alejandro Pachon Bernal, Lina Maria Guzman Fierro **

P2-160 **The effects of screen illumination on: sleep efficiency and architecture, physiology, emotion and behavior- possible effect on human health**
Amit-Shay Green, Yaron Dagan, Abraham Haim*

P2-161 **Thermal and indoor air conditions in Portuguese residential buildings: risk factors for childhood health**
Joana Madureira, Inês Paciência, João Cavaleiro Rufo, André Moreira, Eduardo de Oliveira Fernandes*

P2-162 **Why are people dying from unintentional carbon monoxide poisoning? An overview of coroners' findings**
Rebecca Close, Amy Rimell, Claudia Wells, Vanessa Fearne, Louisa Smith, Danielle Fisher, Robert Flanagan, Giovanni Leonardi*

P2-163 **Identification of pesticide and tobacco factors effects on intestinal biocenosis of the military personnel in Southern Kyrgyzstan.**
*Abdymomun Nasirov **

HIGHLIGHTED POSTERS (P2-164 - P2-172)

P2-164* **Occupational pesticide exposure and subclinical hypothyroidism in the Agricultural Health Study**
Mary H. Ward, Catherine C. Lerro, Laura E. Beane Freeman, Curt DellaValle, Muhammad G. Kibriya, Farzana Jasmine, Briseis Aschebrook-Kilfoy, Christine G. Parks, Dale P. Sandler, Michael Alavanja, Jonathan N. Hofmann*

P2-165* **PBDE exposures during pregnancy and risk of Autism Spectrum Disorder at 3 years: Results from the prospective MARBLES study.**
Claire Philippat, Daniel Tancredi, Yanping Lin, Isaac N. Pessah, Birgit Puschner, Deborah H. Bennet, Irva Hertz-Picciotto*

P2-166* **Pre-diagnostic Serum Concentrations of Organochlorines and Risk of Myeloid Leukemia: a Nested Case-Control Study in the Norwegian Janus Serum Bank Cohort**
Bryan Bassig, Lawrence Engel, Hilde Langseth, Tom Grimsrud, Kenneth Cantor, Mark Purdue, Dana Boyd Barr, Aaron Blair, Nathaniel Rothman, Qing Lan*

P2-167* **Serum concentrations of persistent organic pollutants (POPs) and related factors among blood donors of Rio Branco, Acre state, Brazil**
Carmen Freire, Rosalina Koifman, Sergio Koifman*

P2-168* **Temporal trends of polychlorinated biphenyls serum levels in subjects living in a highly polluted area in Italy from 2003 to 2015: a population-based cohort study.**
Elena Raffetti, Fabrizio Speziani, Francesco Donato, Lucia Leonardi, Grazia Orizio, Carmelo Scarcella, Pietro Apostoli, Michele Magoni*

P2-169* **Ambient $PM_{2.5}$ exposure in pregnancy, maternal prenatal antioxidant intakes, and infant autonomic response**
Kelly Brunst, Chris Gennings, Brent Coull, Michelle Bosquet Enlow, Sri Kannan, Harish Ganguri, Itai Kloog, Joel Schwartz, Robert Wright, Rosalind Wright*

P2-170* **Association between Monitor and Satellite-Based Estimates of Long-term Air Pollution Exposure and Degree of Coronary Occlusion**
Laura McGuinn, Cavin Ward-Caviness, William Kraus, Elizabeth Hauser, Alexandra Schneider, Alexandra Chudnovsky, Mihye Lee, Brent Coull, Joel Schwartz, Petros Koutrakis, Qian Di, Lucas Neas, David Diaz-Sanchez, Robert Devlin*

P2-171* **Association between short-term exposure to ultrafine and fine particles and mortality in four European urban areas: have the effects changed over time?**
Susanne Breitner, Evangelia Samoli, Alexandra Schneider, Josef Cyrys, Zorana Jovanovic Andersen, Annunziata Faustini, Timo Lanki, Andreas Massling, Matteo Renzi, Massimo Stafoggia, Tarja Yli-Tuomi, Annette Peters*

P2-172* **Optimization of health and sustainability goals for low income housing (the Optihouse study)**
Eveline Otte im Kampe, Emily Nix, James Milner, Michael Davies, Paul Wilkinson*

P2-173 **A National Survey of Polychlorinated Dibenzo-p-dioxins and Dibenzofurans and Dioxin-like Polychlorinated Biphenyls in Human Milk from China in 2011**
Lei Zhang, Jingguang Li,* Yunfeng Zhao, Yongning Wu*

P2-174 **Americans' exposure to the insect repellent N,N-diethyl-m-toluamide (DEET)**
Maria Ospina, Lee-Yang Wong, Samuel Baker, Amanda Bishop, Pilar Morales-Agudelo, Liza Valentin-Blasini, Antonia Calafat*

P2-175 **Anticonvulsant Drugs in the Agroenvironment: Fate and a Potential Bioremediation Tool**
Naama Golan, Amnon Grossberger, Orit Salton, Yitzhak Hadar, Benny Chefetz*

P2-176 **Association between Dioxin and Metabolic Syndrome with Gender Difference in an Endemic Area of Exposure in Taiwan**
Chien-Yuan Huang, How-Ran Guo*

P2-177 **Association between exposure to organochlorine pesticides, thyroid hormone levels and hematological parameters in agricultural workers in Farroupilha, South of Brazil.**
Camila Piccoli, Carmen Freire, Cleber Cremonese, Rosalina Jorge Koifman, Sérgio Koifman*

P2-178 **Association between Fetal Death from Central Nervous System Abnormalities and Pesticide Consumption in the Middle West Region of Brazil**
*Joyce Daniel Suaréz, Erika Meza, Armando Meyer, Aline Espíndola, Amanda Martins, Luz Claudio, Carmen Froes, Jaime Lima **

P2-179 **Association between Pesticide Biomarkers and Reproductive and Thyroid Hormones in Pregnant Women**
Amira Aker, Offie Soldin, Lisa Anzalota Del Toro, José Cordero, Akram Alshawabkeh, John Meeker*

P2-180 **Associations between Pesticide Use and Respiratory Symptoms: A Cross-sectional Study in Southern Ghana**
*Reginald Quansah **

P2-181 **Can Indicator Congeners be used to Estimate the Total Burden of Polychlorinated Biphenyls (PCB) in Human Blood after Exposure through Indoor Air?**
Knut Rauchfuss, Silvia Sievering, Lohmann Nina, Kraft Martin*

P2-182 **Cardiovascular disease incidence and exposure to persistent organic pollutant in Great Lakes fish consumers**
Michael Blackowicz, Victoria Persky, Sally Freels, Henry Anderson, Mary Turyk*

P2-183 **Childhood exposure to per- and polyfluoroalkyl substances and childhood cognitive performance**
Maria Harris, Emily Oken, Antonia Calafat, Xiaoyun Ye, Sheryl Rifas-Shiman, Thomas Webster, Roberta White, Sharon Sagiv*

P2-184 **Despite the ban of legacy chemicals in the 1970s, African Americans continue to have higher levels of exposure: A comparison of mothers' and daughters' serum levels in the Child Health and Development Studies**
Nickilou Krigbaum, Piera Cirillo, Barbara Cohn*

P2-185 **Dietary exposure to polychlorinated biphenyls and risk of cancers of the breast, endometrium and ovary: A Prospective Cohort Study**
Carolina Donat-Vargas, Agneta Åkesson, Marika Berglund, Anders Glynn, Alicja Wolk, Maria Kippler*

P2-186 **Early-life exposure to persistent organic pollutants, gut microbial function, and asthma in Norwegian children**
Virissa Lenters, Lützen Portengen, Merete Eggesbø, Roel Vermeulen*

P2-187 **Environmental determinants of polycyclic aromatic hydrocarbons urinary metabolites in the general population of Civitavecchia, Central Italy.**
Giulia Paolocci, Lisa Bauleo, Elisa Casavecchia, Carla Ancona, Maura Ambrogi, Angela Gambelunghe, Marco dell'Omo, Giacomo Muzi, Francesco Forastiere, Nicola Murgia*

P2-188 **Estimating time-varying PCB exposures using person-specific predictions to supplement measured values: Evaluation of agreement and application in health effect study**
Therese Haugdahl Nøst, Charlotta Rylander, Eiliv Lund, Torkjel Sandanger, Knut Breivik*

P2-189 **Exposure and public health impact of pesticides among African populations**
*Adetoun Mustapha **

P2-190 **Exposure to chemical mixtures among preschool aged children**
Antonia Calafat, Xiaoyun Ye, Liza Valentin, Zheng Li, Mary Mortensen, Lee-Yang Wong*

P2-191 **Exposure to organophosphates and pyrethroids and myopia in the general U.S. population**
Vincent Migneron-Foisy, Maryse F. Bouchard, Ellen E. Freeman, Dave Saint-Amour*

P2-192 **Exposure to perfluoroalkyl substances from drinking water exposure and thyroid function in adults**
Tony Fletcher, Maria-Jose Lopez-Espinosa, Giovanni Leonardi*

P2-193 **Exposure to PFOA and birth outcome in North Rhine-Westphalia, Germany**
Arthur Philipp Kolbe, Jonathan Rathjens, Eva-Maria Becker, Hans-Joachim Bücker-Nott, Katharina Olthoff, Michael Wilhelm, Katja Ickstadt, Jürgen Hölzer*

P2-194 **Exposure to phthalates and non-phthalate plasticizers in Swedish preschool environments**
Kristin Larsson, Bo Jönsson, Christian Lindh, Georgios Giovanoulis, Momina Bibi, Marika Berglund*

P2-195 **High levels of perfluorinated alkyl acids (PFAAs) in serum of children drinking PFAAs contaminated water**
Kristin Andersson, Bo AG Jönsson, Kristina Jakobsson, Christian Lindh*

P2-196 **Insights into the uptake and fate of pharmaceuticals in vegetable plants**
Myah Goldstein, Moshe Shenker, Benny Chefetz*

P2-197 **Longitudinal changes of serum levels of poly- and perfluoroalkyl substances over 10 years in a Swedish city with contaminated drinking water**
Monica Lind, Jordan Stubleski, Samira Salihovic, Linda Dunder, Philipe McCleaf, Karin Euren, Lutz Ahrens, Magnus Svartengren, Bert vanBavel, Lars Lind*

P2-198 **Maternal Perfluoroalkyl Substances Levels in Pregnancy and Child IQ: a Danish National Birth Cohort Study.**
Zeyan Liew, Beate Ritz, Bodil Hammer Bech, Ellen Nohr, Rossana Bossi, Tine Henriksen, Eva Bonefeld-Jørgensen, Jørn Olsen*

P2-199 **Organochlorine Exposure and Body Mass Index Trajectory in Adults**
Mary Turyk, Victoria Persky, Henry Anderson, Sally Freels*

P2-200 **Pesticide exposure and health risks in Morocco**
Fatine Hadrya, Latifa Amiar, Ahmed Aarab, Abdelrhani Mokhtari, Lahcen Ouammi, Rachida Soulaymani-Bencheikh, Abdelmajid Soulaymani*

P2-201 **Pesticide exposure and risk of rheumatoid arthritis among licensed male pesticide applicators in the Agricultural Health Study**
Armando Meyer, Christine Parks, Dale Sandler*

P2-202 **Pesticide use and Parkinson's Disease in Brazil**
Armando Meyer, Aline Santos,* Noa Krawczyk, Jaime Lima **

P2-203 **Placental mtDNA content and environmental exposure: a multipollutant approach**
Annette Vriens, Tim Nawrot , Willy Baeyens, Liesbeth Bruckers, Adrian Covaci, Sam De Craemer, Elly Den Hond, Eva Govarts, Vera Nelen, Greet Schoeters, Michelle Plusquin*

P2-204 **Prenatal exposure to organochlorine pesticides and reproductive hormones in fetal blood: The Hokkaido Study**
Atsuko Araki, Chihiro Miyashita, Sachiko Itoh, Takahiko Mitsui, Futoshi Mizutani, Yoichi Chisaki, Seiko Sasaki, Kazutoshi Cho, Katsuya Nonomura, Reiko Kishi*

P2-205 **Prevalence of chronic kidney disease related to resident years in an endemic area of dioxin exposure in southern Taiwan**
*Chien-Yuan Huang **

P2-206 **Racial and ethnic differences in chemical mixture correlation networks**
*Cara Frankenfeld **

P2-207 **Residential Proximity to Agricultural Fumigant Use and IQ in 7-year Old Children**
Robert Gunier, Asa Bradman, Rosemary Castorina, Dylan Avery, Brenda Eskenazi*

P2-208 **Shorter duration of breastfeeding at elevated maternal serum concentrations of perfluoroalkyl substances**
Clara Amalie Gade Timmermann, Esben Budtz-Jørgensen, Maria Skaalum Petersen, Pál Weihe, Ulrike Steuerwald, Flemming Nielsen, Tina Kold Jensen, Philippe Grandjean*

P2-209 **The effect of organochlorine pesticide pollution on pregnancy and labour in the environment of Osh Province.**
Rakhmanbek Toichuev, Damira Begmatova, Venera Niyazova*

P2-210 **The effect of radionuclide and pesticide pollution on the development of autoimmune thyroiditis in high school children**
*Gulnara Toichueva **

P2-213 **Urban tree coverage associated with reduced mortality among tuberculosis (TB) patients undergoing treatment in California**
Robert J Blount, Lisa Pascopella, Pennan Barry, Dan Meltzer, Jenny Flood, Paul B English, Mark R Segal, Payam Nahid, John Balmes, Donald G Catanzaro*

AREA 3—Exposure Assessment and Children

P2-214 **Green Spaces and Brain Development: a Longitudinal Neuroimaging study**
Payam Dadvand, Dídac Macià, Gerard Martínez-Vilavella, Raquel Fenoll, Mikel Esnaola, Albert Dalmau-Bueno, Mar Alvarez-Pedrerol, Jesus Pujol, Jordi Sunyer*

P2-215 **Maternal violence, maternal lead exposure, and child neurodevelopment in a cohort of mothers and children in Mexico City**
Laura Zheng,* Lourdes Schnaas, Marcela Tamayo Y Ortiz, Erika Osorio-Valencia, Brent Coull, David Bellinger, Rosalind Wright, Martha M Tellez Rojo, Robert Wright

P2-216 **A real-time, mobile air quality monitoring platform for developing spatial models**
Steve Hankey, Peter Sforza*

P2-217 **Air pollution exposure and histone 3 methylation and acetylation in highly exposed individuals in Beijing, China: A repeated-measures study**
Lifang Hou, Yinan Zheng, Zhou Zhang, Marco Sanchez-Guerra, Brian Joyce, Lei Liu, Wei Zhang, Tao Gao, Citlalli Osorio-Yanez, Jia Zhong, Juan Carmona, Sheng Wang, Dou Chang, John McCracken, Xiao Zhang, Yana Chervona, Anaite Díaz, Pier Alberto Bertazzi, Petros Koutrakis, Choong-Min Kang, Joel Schwartz, Andrea Baccarelli*

P2-218 **Air pollution monitoring design for epidemiological application in a metropolitan area**
Sun-Young Kim, Kyung-Duk Min, Ho-Jang Kwon*

P2-219 **Air Polycyclic Aromatic Hydrocarbons (PAHs) in the Basque Country (Spain)**
Miren Begoña Zubero, Aitana Lertxundi, Mª Dolores Martínez, Jon Alvarez, Mikel Ayerdi, Loreto Santamarina, Jesús Mª Ibarluzea*

P2-220 **Ambient PM Concentrations Show Scale-Dependent Spatiotemporal Patterns – Should We Care about It?**
David Broday, Yael Etzion*

P2-221 **Assessing Individual Exposure in Industrial Areas Dispersion Models Versus Human Biomonitoring**
Lisa Bauleo, Carla Ancona, Simone Bucci, Chiara Antonucci, Beatrice Bocca, Stefano Caimi, Anna Pino, Flavia Ruggeri, Augusto Pizzabiocca, Roberto Sozzi, Alessandro Alimonti, Marina Davoli, Francesco Forastiere, on behalf of the ABC study group*

P2-222 **Assessment of environmental and occupational exposure to heavy metals in Taranto Italy by means of Human Scalp Hair Analysis (HSHA).**
*Elena Viola Buononato, Daniela De Luca, innocente Cataldo Galeandro, Maria Luisa Congedo, Domenica Cavone, Graziana Intranuovo, Chiara Guastadisegno, Vincenzo Corrado, Giovanni Maria Ferri**

P2-223 **Assessment of health-related exposure limits for bioaerosols – a systematic review of human studies and ex perimental animal studies**
*Sandra Walser, Doris Gerstner, Mihai Zamfir, Jürgen Bünger, Thomas Eikmann, Stefanie Kolb, Annette Kolk, Dennis Nowak, Monika Raulf, Helmut Sagunski, Nadja Sedlmaier, Roland Suchenwirth, Gerhard Wiesmüller, Klaus-Michael Wollin, Irene Tesseraux, Caroline Herr **

P2-224 **Comparison of diverse estimation methods for personal exposure to air pollutants and their associations with allergic symptoms; the Allergy & Gene-Environment Link (ANGEL) study**
Young-Min Kim, Jihyun Kim, Youngshin Han, Byung-Jae Lee, Dong-Chull Choi, Hae-Kwan Cheong, Byoung-Hak Jeon, Gwi-Nam Bae, Jae Young Lee, Chang-Heok Kim, Su Ryeon Noh , Inbo Oh, Sung Chul Seo, Kangmo Ahn*

P2-225 **Epidemiologic characterization of sudden infant death syndrome in relation to climate factors and air pollution in Korea: a case-crossover study**
Myung-Jae Hwang, Hae-Kwan Cheong*

P2-226 **Evaluation of exposure measurement error of single and multi-pollutant indicators of primary traffic pollution in the Dorm Room Inhalation to Vehicle Emissions (DRIVE) Study**
Donghai Liang, Jennifer Moutinho, Rachel Golan, Howard Chang, Roby Greenwald, Rodney Weber, Stefanie Sarnat, Armistead Russell, Vishal Verma, Jeremy Sarnat*

P2-227 **Factors of differential exposure to air pollution and temperature effects**
Poliany Rodrigues, Eliane Ignotti*

P2-228 **Health effects of cross-border atmospheric pollutants can be predicted by using an aerosol forecast model**
Kazunari Onishi, Tsuyoshi Thomas Sekiyama, Masanori Nojima, Yasunori Kurosaki, Shinji Otani, Masato Shinoda, Youichi Kurozawa*

P2-229 ***Health effects of the landslide of Doña Juana Landfill, Bogotá 2015***
Maria Barbosa, Jorge Rojas, Jhon Abella, Monica Montaña, Katalina Medina, Samuel Osorio,* Kristian Gonzalez*

P2-230 **Implications of daily mobility around residence for air pollution assessment in peri-urban South India**
Margaux Sanchez, Albert Ambros, Maëlle Salmon, Santhi Bhogadi, Julian D Marshall, Cathryn Tonne*

P2-231 **Improved air pollution dispersion model and it's applicability for exposure assessment at varying temporal resolutions**
Shimon Chen, Yuval , David Broday*

P2-232 **Measurements of Air Pollution in Urban Mysore and Chennai, India**
Amruta Nori-Sarma, G.V. Venkataramana, Rajesh Kumar Thimmulappa, Michelle L. Bell*

P2-233 **On the AOD contribution to ground PM prediction models**
Meytar Sorek-Hamer, David Broday, Ayala Cohen, Yuval -*

P2-234 **OpenAQ: An open, real-time air quality data hub for the world**
*Christa Hasenkopf **

P2-235 **Personal Air Pollution Monitoring in the MADRES Cohort of Pregnant Women: Challenges and Lessons Learned**
Rima Habre, Theresa Bastain, Genevieve Dunton, Sandrah Eckel, Frank Gilliland, Carrie Breton*

P2-236 **Personal carbon monoxide exposures ability to predict fine particulate matter exposure in the Ghana Randomized Air Pollution and Helath Study (GRAPHS)**
Zheng Zhou, Seth Owusu-Agyei , Steven Chillrud, Ellen Abrafi Boamah, Ashlynn Quinn, Patrick L Kinney, Kenneth A Ae-Ngibise, Darby Jack, Kwaku Poku Asayah*

P2-237 **Personal exposure to $PM_{2.5}$ and benzo[a]pyrene in Ostrava, Czech Republic**
Vlasta Svecova, Ivo Solansky, Tom Cole-Hunter, CITI-SENSE Consortium, Radim Sram, Alena Bartonova*

P2-238 **Personal exposure to ultrafine particles among Spanish schoolchildren according to type of environment. Preliminary results**
Amparo Ferrero, Marisa Estarlich, Amparo Cases, Daniel Lozano, Silvia Gimeno, Ana Esplugues, Carmen Iñiguez, Ferran Ballester*

P2-239 **$PM_{2.5}$ source apportionment and transport cluster analysis**
Janine Wichmann, Peter Molnár, Lin Tang, Karin Sjöberg*

P2-240 **Remote Sensing of Pesticide Drift: a Tool for Estimating and Reducing Pesticide Exposure in Agriculture**
Oz Kira, Yael Dubowski, Raphel Linker*

P2-241 **Self-reported traffic exposure is not strongly correlated modelled NOx in a Northern European cohort study**
Hanne Krage Carlsen, David Olsson, Thorarinn Gislason, Johan Hellgren, Christer Janson, Ane Johannessen, Rain Jögi, Torben Sigsgaard, Bertil Forsberg*

P2-242 **The Impact of Dust-haze on Non-accidental and Cause-specific Deaths in Beijing, China**
Mengmeng Li, Jun Yang, Qiyong Liu*

P2-243 **Towards the Quantitative Source Apportionment of Personal Exposure to Household Air Pollution**
*Ryan Chartier **

P2-244 **Urinary Polycyclic Aromatic Hydrocarbons: simultaneous determination of metabolites in human biomonitoring studies**
Giovanna Tranfo, Lisa Bauleo, Carla Ancona, Francesco Forastiere, Enrico Paci, Rossana Claudia Bonanni, Daniela Pigini, Flavio Raponi*

P2-245 **Use of wood stove and other determinants of personal and indoor $PM_{2.5}$ and absorbance levels**
Taina Siponen, Tarja Yli-Tuomi, Pekka Tiittanen, Pekka Taimisto, Juha Pekkanen, Raimo O. Salonen, Timo Lanki*

P2-246 ***What are the Current Concerns about Silica Dust Exposure and Health Risks***
*David F Goldsmith **

HIGHLIGHTED POSTERS (P2-247—P2-254)

P2-247* **Carbon load in airway macrophages, a biomarker for traffic related air pollution. Repeated measurements over one year**
Yang Bai, Lidia Casas, Esmée Bijnens, Tim Nawrot, Benoit Nemery*

P2-248* **Development of a new chemical probe for measuring the capability of ambient particulate matter to generate reactive oxygen species**
*Vishal Verma **

P2-249* **Spatial variation of ambient volatile organic compounds in Tehran, Iran**
Heresh Amini, Vahid Hosseini, Hossein Hassankhani, Mohammadali Najafi, Ming Y. Tsai, Christian Schindler, Sarah B. Henderson, Masud Yunesian, Nino Künzli*

P2-250* **The effect of population-scale human activity patterns on exposure to air pollution**
David Broday, Rakefet Shafran-Nathan, Yuval -*

P2-251* **Prenatal exposure to aeroallergens and risk of childhood atopic diseases**
Eric Lavigne, Antonio Gasparrini, David Stieb, Hong Chen, Abdool Yasseen, Eric Crighton, Teresa To, Scott Weichenthal, Paul Villeneuve, Sabit Cakmak, Frances Coates, Mark Walker*

P2-252* **Prenatal exposure to ambient PM components and newborn blood pressure**
Antonella Zanobetti, Lenie van Rossem , Sheryl Rifas-Shiman, Steven Melly , Itai Kloog , Heike Luttmann-Gibson, Brent Coull , Joel Schwartz, Murray Mittleman, Emily Oken , Matthew Gillman , Petros Koutrakis , Diane Gold*

P2-253* **Recent exposure to ultrafine particles in school children alters miR-222 expression in the extracellular fraction of saliva**
Annette Vriens, Tim Nawrot , Nelly Saenen, Eline Provost , Michal Kicinski , Karen Vrijens, Patrick De Boever, Michelle Plusquin*

P2-254* **School neighbourhood characteristics and child pedestrian road traffic casualties**
Daniela Fecht, Chiam Qui, Susan Hodgson*

P2-255 **A systematic review of frameworks for proposing children's environmental health indicators**
Eun Mi Jung, Eun Mee Kim, Minah Kang , Eun Hee Ha*

P2-256 **Allergic sensitisation in early childhood: patterns and related factors in a French birth cohort**
Stephan Gabet, Jocelyne Just, Rémy Couderc, Nathalie Seta, Isabelle Momas*

P2-257 **Association between Meteorological Factors and Aseptic Meningitis in Six Metropolitan Provinces of the Re public of Korea**
Yadav Prasad Joshi, Eun-Hye Kim, Ho Kim, Jong-Hun Kim, Hae-Kwan Cheong*

P2-258 **Blood lead, parental marital status and the risk of attention-deficit/hyperactivity disroder in elementary school children**
Won-Jun Choi, Ho-Jang Kwon, Myung Ho Lim, Ji-Ae Lim, Mina Ha

P2-259 **Children's Behavioral and social impairment in relation to prenatal exposure to phthalates**
Youssef Oulhote, Bruce Lanphear, Tye Arbuckle, William Fraser, Jean Seguin, Emmanuel Ouellet, Glenys Webster, Joseph Braun, Maryse Bouchard, Gina Muckle*

P2-260 **Distortion product otoacoustic emissions in infants developmentally exposed to PCBs show two differently time -spaced exposure sensitive windows**
Koštiaková Vladimíra, Arturo Moleti, Sona Wimmerová, Lubica Palkovicová Murínová, Renata Sisto, Eva Sovcikova, Juraj Tihányi, Henrieta Patayová, Tomas Trnovec*

P2-261 **Early life as a window to future respiratory health: rationale and design of the NELA birth cohort study**
Eva Morales, Marien Candel Torralba, Manuel Cánovas, Teresa Escamez, Angel Esteban, Trinidad Hernandez-Caselles, Pedro Jimenez-Guerrero, Elvira Larqué, Carmen Martinez-Gracia, Maria Teresa Prieto, Antonio Sanchez-Guillamon, Manuel Sanchez-Solis, Alberto Torres, Genoveva Yagüe, Manoli Zaragoza, Luis Garcia-Marcos*

P2-262 **Early life Phthalate Exposure and Obesity and Cardiometabolic Traits in Childhood.**
Marina Vafeiadi, Antonis Myridakis, Theano Roumeliotaki, Georgia Chalkiadaki, Katerina Sarri, Maria Vassilaki, Vasiliki Leventakou, Manolis Kogevinas, Euripides G. Stephanou, Leda Chatzi*

P2-263 **Genotoxic Damage in a Child Population, Cordoba, Argentina**
Ricardo Fernandez, Mariana Butinof, Daniel Lerda, Marcelo Blanco, Guillermina Huergo, Juan Manuel Laino, Io hanna Filippi, Franco Montedoro, María del Pilar Díaz*

P2-264 **Health-Monitoring-Units (GME) in Bavaria: standardized and repeated data collection of children's health status and influential factors**
Caroline Herr, Kathrin Gürlich, Alisa Weber, Linda Liang, Lana Hendrowarsito, Uta Nennstiel-Ratzel, Manfred Wildner, Bernhard Liebl, Gabriele Bolte, Rudolf Jörres, Nicole Meyer, Stefanie Kolb*

P2-265 **In Utero DDT Exposure and Obesity in Children of Farmworkers**
Marcella Warner, Kim Harley, Asa Bradman, Katherine Kogut, Brenda Eskenazi*

P2-266 **In utero pyrethroid pesticide exposure and child cognitive development from 6 to 36 months in the MARBLES longitudinal cohort**
Jacqueline Barkoski, Deborah Bennett, Daniel Tancredi, Dana Barr, Irva Hertz-Picciotto*

P2-267 **Lead poisoning in children; evaluation of a pilot surveillance system in England, 2014-15.**
Helen Crabbe, Gavin Dabrera, Rebecca Close, Jill Morris, Catherine Keshishian, Giovanni Leonardi, Ruth Ruggles*

P2-268 **Maternal Exposure to Mixtures of Food Chemicals in Relation with Offspring Birthweight and Postnatal Growth**
Manik Kadawathagedara, Thiéma Traore, Sophie Carles, Marie-Aline Charles, Barbara Heude, Marion Hulin, Véronique Sirot, Blandine de Lauzon-Guillain, Amélie Crépet, Jérémie Botton*

P2-269 **Maternal fish consumption, mercury exposure, and anthropometric measures of infants in a Mothers and Children's Environmental Health (MOCEH) study**
Byungmi Kim, Yun-Chul Hong, Hye-Sook Park , Mina Ha, Yangho Kim , Namsoo Chang , Eun-Hee Ha*

P2-270 **Non-persistent Insecticide Exposure and Auditory Brainstem Response in Infants**
Monica K Silver, Jie Shao, Mingyan Li, Minjian Chen, Yankai Xia, Paul Kileny, Twila Tardif, Betsy Lozoff, John D Meeker*

P2-271 **Oxidative Stress Index (OSI) in Children Chronically Exposed to Volatile Organic Compounds (VOC) and their Relation with Genetic Polimorphysms**
María del Rocío López Vargas, Regina Montero Montoya, Alejandra Mendez Serrano, Francisco Mercado Calderon*

P2-272 **Patterns in respiratory symptoms up to 7 years old in children from a Spanish birth cohort**
Amparo Ferrero, Fanny Rancière, Ferran Ballester, Carmen Iñiguez, Marisa Estarlich, Ana Esplugues, Mario Murcia, Isabelle Momas*

P2-273 **Peripubertal Blood Lead Levels and Male Adolescent Growth**
Jane Burns, Paige Williams, Oleg Sergeyev, Mary Lee, Susan Korrick, Boris Revich, Russ Hauser*

P2-274 **Prenatal and Childhood Perfluoroalkyl Substance Exposure and Childhood Metabolic Profile**
Abby Fleisch, Ana Maria Mora, Sheryl Rifas-Shiman, Antonia Calafat, Xiaoyun Ye, Heike Luttmann-Gibson, Lisa Rokoff, Thomas Webster, Matthew Gillman, Emily Oken, Sharon Sagiv*

P2-275 **Prenatal exposure to chemical products, early indoor environment and wheezing and eczema in infancy**
Maja Popovic, Daniela Zugna, Claudia Galassi, Franca Rusconi, Luigi Gagliardi, Enrica Migliore, Franco Merletti, Lorenzo Richiardi*

P2-276 **Prenatal exposure to DEHP and childhood wheeze and atopic dermatitis: The Hokkaido Study on the Environment and Children's Health**
Yu Ait Bamai, Atsuko Araki, Seiko Sasaki, Tamie Nakajima, Chihiro Miyashita, Reiko Kishi*

P2-277 **Prenatal exposure to Organophosphate Pesticides and infant respiratory and allergic outcomes in the PELAGIE cohort**
Fabienne Pelé, Quentin Vieille, Florence Rouget, Christine Monfort, Sylvaine Cordier, Cécile Chevrier*

P2-278 **Prenatal exposure to perfluorinated compounds affects thyroid hormone levels in newborn girls**
Eun-Hee Ha, Surabhi Shah-Kulkarni, Byung-Mi Kim, Yun-Chul Hong, Hae Soon Kim, Eun Jin Kim, Hyesook Park, Young Ju Kim*

P2-279 **Prenatal Exposure to Persistent Organic Pollutants and Childhood Asthma and Allergic Rhinitis**
Maria Alexaki, Marina Vafeiadi, Theano Roumeliotaki, Vaggelis Vittorakis, Georgia Chalkiadaki, Panu Rantakokko, Hannu Kiviranta, Vasiliki Leventakou, Maria Vassilaki, Soterios A. Kyrtopoulos, Manolis Kogevinas, Leda Chatzi*

P2-280 **Prenatal phthalate exposures and child temperament at 12 and 24 months**
Alison B Singer, Mary S Wolff, Manori Silva, Antonia Calafat, Stephanie M Engel*

P2-281 **The exposure of pregnant women and their offspring to Phtalates – Preliminary results from the Environment, Mother, and Child study in Jerusalem**
Eliana Ein-Mor, Zivanit Ergaz-Shaltiel, Smadar Even-Tov, Juma Natsheh, Ronit Haimov-Kochman, Ronit Calderon-Margalit*

P2-282 **Use of epidemiological data in USEPA risk assessment guidelines and assessments with a focus on children's health studies**
Muna Nahar, Rebecca Dzubow, Brenda Foos*

AREA 4—Biomarkers, Policy & Cancer

P2-283 **Metabolic changes to immune cells induced by arsenic in vitro**
Takenori Yamauchi, Akihisa Hata, Yuko Yamano, Kenzo Yamanaka, Yoko Endo, Ginji Endo, Toshio Nakadate*

P2-284 **A biobank for studies of normal variability of biomarkers**
*Gerd Sallsten **

P2-285 **Acute changes in serum immune markers due to swimming in a chlorinated pool**
Jelle Vlaanderen, Karin van Veldhoven, Laia Font-Ribera, Cristina Villanueva, Paolo Vineis, Manolis Kogevinas, Roel Vermeulen*

P2-286 **Bisphenol A Exposure and Symptoms of Anxiety and Depression among Inner City Children at 10-12 Years of Age**
Frederica Perera, Emily L. Roen Nolte, Ya Wang, Amy Margolis, Antonia M. Calafat, Shuang Wang, Lori A. Hoep ner, Bradley S. Peterson, Virginia Rauh, Julie Herbstman*

P2-287 **Bone manganese (BnMn) as a biomarker of cumulative Mn exposure and correlation with manual dexterity: a pilot study**
Danelle Rolle , Yingzi Liu , Farshad Mostafaei, Yuanzhong Zhou , Wei Zheng , Linda Nie , Ellen Wells*

P2-288 **Characterization of Immunologic Markers in Smoky Coal Users in a Rural Region of China with High Lung Can cer Incidence**
Nathaniel Rothman, Jason Wong, Roel Vermeulen, Wei Hu, George Downward, Meredith Shiels, Bryan Bassig, Wei Jie Seow, Jihua Li, Jun He, Allan Hildesheim, Qing Lan*

P2-289 **Comparison between smoking topography and urinary biomarkers of Japanese smokers**
Yohei Inaba, Shigehisa Uchiyama, Gen Suzuki, Naoki Kunugita*

P2-290 **Exposure to toxic metals during pregnancy in the Moscow region of Russia**
Irina Ilchenko, Tatiana Karamyisheva, Sergei Lyapunov, Olga Okina, Konstantin Osipov*

P2-291 **Extracellular vesicles are associated with particulate matter exposure**
Laura Angelici, Laura Cantone, Laura Pergoli, Chiara Favero, Michele Carugno, Silvia Fustinoni, Andrea Cattaneo, Angela Cecilia Pesatori, Valentina Bollati*

P2-292 **Fetal Growth Research Based on Metabolomic Profiles in Umbilical Cord Blood**
Yu-Li Chen, Wu-Shiun Hsieh, Hsing-Wei Sindy Lee, Pau-Chung Chen, Mei-Huei Chen*

P2-293 **Life-stage specific windows of susceptibility to lead and manganese exposure and children's behavior**
*Megan Horton, Paul Curtin, Sandra Martinez, Chris Gennings, Lourdes Schnaas, Martha María Téllez-Rojo , Manish Arora, Robert Wright**

P2-294 **Molecular markers for malignant pleural mesothelioma in Mexico**
Guadalupe Aguilar-Madrid, Cuauhthemoc Arturo Juarez-Perez, Carmina Jmenez Ramirez, Emma S Calderon Aranda, María Dolores Ochoa Vazquez, Luis Torre-Bouscoulet*

P2-295 **Monitoring air pollution based on plant fertility around a steel company in Santa Cruz, Rio de Janeiro, Brazil**
Ilce Ferreira da Silva, Marcus Vinícius Nunes Ferreira, Valéria Saraceni, Cristina Ferreira Lemos, Carmen Freire Warden, Elida de Albuquerque Campos, Rosalina Jorge Koifman*

P2-296 **Monitoring metals in toenail samples of a population living in the vicinity of the solid waste incinerator of Modena, Northern Italy**
Maria Giulia Gatti, Petra Bechtold, Giovanna Barbieri, Laura Iacuzio, Lucia Borsari, Alice Casari, Angela Ferrari, Elena Righi, Giulia Quattrini, Emanuele Bottosso, Eugenia Carluccio, Bianca Gherardi, Francesco Soncini, Alessandra Schiavi, Andrea Ranzi, Paolo Lauriola, Gabriella Aggazzotti, Carlo Alberto Goldoni*

P2-297 **Three-year temporal variability in urinary concentrations of environmental chemicals among a multi-ethnic cohort of girls in the United States**
Susan L. Teitelbaum, Ashley Pajak, Gayle C. Windham, Susan M. Pinney, Antonia M. Calafat, Xiaoyun Ye, Manori Silva, Michael Rybak, Lawrence H. Kushi, Frank M. Biro, Mary S. Wolff*

P2-298 **Urinary biomarkers of exposure to phenols and paraben among pregnant women**
Mahsa Yazdy, Susan Schantz, Andrea Aguiar, Susan Korrick*

P2-299 **Vitamin D and biomarkers of sex steroid hormones related to all-cause mortality**
*Hueiwang Anna Jeng **

P2-300 **Evaluation of environmental risk for thyroid cancer in Italian contaminated sites**
Valeria Ascoli, Giada Minelli, Susanna Conti*

P2-301 **Insecticide use is associated with increased risk of Hodgkin lymphoma: results from the North American Pooled Project (NAPP)**
Shelley Harris, Lidija Latifovic, John Spinelli, Manisha Pahwa, Aaron Blair, Punam Pahwa, John McLaughlin, James Dosman, Sheila Hoar Zahm, Kenneth Cantor, Dennis Weisenburger, Paul Demers, Laura Bean Freeman*

P2-302 **Long-term Exposure to Ambient Air Pollution and Incidence of Brain Cancer: The Danish Nurse Cohort**
Jeanette Therming Jørgensen, Martin Søes Johansen, Line Ravnskjær, Klaus Kaae Andersen, Elvira Vaclavik Bräuner, Steffen Loft, Matthias Ketzel, Thomas Becker, Jørgen Brandt, Ole Hertel, Zorana Jovanovic Andersen*

P2-303 **Malignant mesothelioma and exposure-response relationships among non-occupationally exposed persons at Wittenoom, Western Australia**
Alison Reid, Robin Mina, Nola Olsen, Peter Franklin, Fraser Brims, Susan Peters, Nita Sodhi-Berry, Nicholas de Klerk, Arthur (Bill) Musk*

P2-304 **Risk Factors for Prostate cancer patients**
*Fatima Hamad **

P2-305 **Twenty years of social conflicts around an industrial asbestos grinding site in the north of Paris: the CMMP (France).**
Benjamin Lysaniuk, Emilie Counil, Thébaud-Mony Annie*

P2-306 **Assessing the neighbourhood: an emerging dialogue for health and development programming in Small Island Developing States**
Jasneth Mullings, Novie Younger-Coleman, Affette McCaw-Binns, Carol Archer, Rainford Wilks*

P2-307 **Development of environmental public health indicators for assessing policies and interventions**
Christina Mitsakou, Sani Dimitroulopoulou, Sotiris Vardoulakis, Clare Heaviside, Klea Katsouyanni, Evangelia Samoli, Sophia Rodopoulou, Paula Santana*

P2-308 **How did the Flint, MI debacle happen?**
*Ronnie Levin **

P2-309 **Impacts of rapid Dengue clinic services at an emergency department during the endemic outbreak**
Tzu-Ching Sung, Hsiang-Chin Hsu, Hsin-I Shih*

P2-310 **Life Med Hiss – Life 12 ENV/IT/000834: an health surveillance pilot project on long term effects exposure to air pollution to implement a European system**
Ennio Cadum, Maria Rowinski, Giovanna Berti, Xavier Basagaña, Luisella Ciancarella, Teresa Spadea, Isabella Annesi-Maesano, Peter Otorepec, Gabriele Zanini, Giuseppe Costa*

P2-311 **Old and new risks: Depression and anxiety in refugees– a systematic review**
*Jutta Lindert **

P2-312 **PN versus PM: which Metric for Emission and Air Quality Limits**
*Andreas Mayer **

P2-314 **Knowledge Transfer Center in Child Health in Bogota. Support Health Tools**
Luis Hernández, Sofia Rios,* Jovana Ocampo*

P2-315 **Strategies used by activists in Israeli local environmental campaigns: Policy and practice implications**
*Ariella Cwikel **

HIGHLIGHTED POSTERS (P2-316—P2-327)

P2-316* **Long term effects of air pollution on mortality. Results from the Italian cohort in the LIFE MED HISS project (LIFE12ENV/IT/000834).**
Cecilia Scarinzi, Martina Gandini, Moreno Demaria, Giovanna Berti, Paolo Carnà, Teresa Spadea, Stefano Bande, Antonio Piersanti, Luisella Ciancarella, Giuseppe Costa, Ennio Cadum*

P2-317* **Death burden of particulate matter according to the sixth energy supply plan in South Korea**
*Jongsik Ha **

P2-318* **Did a vehicle emission inspection program lead to lower cardiovascular mortality in the Greater Vancouver region?**
Jiayun Angela Yao, Sarah Henderson, Michael Brauer*

P2-319* **Secondhand smoke exposure in indoor and outdoor locations in airports across Europe and the US: A cross-sectional study**
Yuanjie Pang, Frances Stillman, Andrea Soong, Laura Zheng, Esther Garcia, Maria Jose Lopez, Ana Navas-Acien*

P2-320* **Swedish environmental health questionnaire surveys, a valuable tool for health in all policies**
Anne-Sophie Merritt, Elin Westin, Agneta Falk Filipsson, Antonios Georgelis, Tom Bellander*

P2-321* **DNA Methylation and the in utero environment in a mother-child cohort from Durban, South Africa**
Poovendhree Reddy, Jaclyn M Goodrich, Rajen N. Naidoo, Kareshma Asharam, Stuart Batterman, Dana C. Dolinoy*

P2-322* **Guidelines for biomarkers of exposure for Health and Environment-wide Associations based on Large popula tion Surveys (HEALS)**
Nadine Steckling, Stephan Bose-O'Reilly, Alberto Gotti, Tomislav Bituh, Dimitris Chapizanis, Danae Costopoulou, Frank De Vocht, Mercè Garí, Joan O. Grimalt, Ester Heath, Marta Jagodic, Spyros P. Karakitsios, Kleopatra Kedi koglou, Tina Kosjek, Leondios Leondiadis, Thomas Maggos, Darja Mazej, Kinga Polanska, Andrew Povey, Joaquim Rovira, Marta Schuhmacher, Zdravko Spiric, Anja Stajnko, Rob Stierum, Danijela Štimac, Janja Snoj Tratnik, Irene Vassiliadou, Isabella Annesi-Maesano, Dimosthenis Sarigiannis, Milena Horvat*

P2-323* **Arsenic metabolism and cancer risk. A meta-analysis**
Brenda Gamboa-Loira, Lizbeth López-Carrillo, Mariano Cebrián*

P2-324* **Long-term Exposure to Ambient Air Pollution and Incidence of Postmenopausal Breast Cancer in 15 European Cohorts: the European Study of Cohorts for Air Pollution Effects (ESCAPE)**
Zorana Jovanovic Andersen, Massimo Stafoggia, Gudrun Weinmayr, Marie Pedersen, Claudia Galassi, Anna Oudin, Bente Oftedal, Andrei Pyko, Michelle Plusquin, Fulvio Ricceri, Agnes Fournier, Sara Grioni, Ibon Tamayo, Andrea Jaensch, Gerard Hoek, Ole Raschou-Nielsen*

P2-325* **Organochlorine insecticide use and risk of non-Hodgkin lymphoma: findings from the North American Pooled Project**
Linda Kachuri, Laura Beane Freeman, John Spinelli, Aaron Blair, Manisha Pahwa, Shelia Hoar Zahm, Kenneth Cantor, Dennis Weisenburger, Punam Pahwa, James Dosman, John McLaughlin, Paul Demers, Shelley Harris*

P2-326* **Pleural mesothelioma risk associated with environmental asbestos exposure in Casale Monferrato (Italy) area: a case control study**
Sara Tunesi, Daniela Ferrante, Dario Mirabelli, Silvano Andorno, Fulvio Lazzarato, Milena Maule, Corrado Magnani*

P2-327* **Development of Land Use Regression Models for Predicting Exposure to Particulate Matters and Nitrogen Oxides in an Area with Low Air Pollutant Concentrations**
Mila Dirgawati, Jane Heyworth, Amanda J Wheeler, Kieran Mc.Caul, David Blake, Jonathon Boeyen, Martin Cope, Bu Yeap, Mark Nieuwenhuijsen, Bert Brunekreef, Andrea Hinwood*

P2-328 **Ambient Air Pollution and Primary Liver Cancer Incidence in Four European Cohorts Within the ESCAPE Project**
Marie Pedersen, Zorana J Andersen, Mette Sørensen, Andrea Jaensch, Fulvio Ricceri, Sara Grinoni, Gerard Hoek, Ole Raaschou-Nielsen for the ESCAPE study group*

P2-329 **Assessment of a Possible Association between Living in Proximity to Gas Stations and the Incidence of Acute Myeloid Leukemia and Acute Lymphoblastic Leukemia in Israel**
*Siegal Sadetzki, Iris Maayan, Angela Chetrit **

P2-330 **Candidate Genetic Polymorphisms and Haplotypes Associated with Endometrial Cancer Risk**
Jane McElroy, Robin L Kruse, Jeremy F Taylor*

P2-331 **Cohort Study of Residents in the Neighborhood of a Military Polygon**
Roberto Pasetto, Amerigo Zona, Marco De Santis, Annibale Biggeri, Pietro Comba*

P2-332 **Environmental Exposure to Naturally-Occurring Asbestos in New Caledonia: Epidemiological and Political Issues**
*Francine Baumann **

P2-333 **Exposure assessment and exposure-response modeling to support risk estimation and cleanup activities in Libby, Montana USA.**
Thomas Bateson, Leonid Kopylev, NB Disclaimer*

P2-334 **Fluoro-edenite induced disease in the Sicilian site of Biancavilla (Italy).**
Caterina Bruno, Rosario di Stefano, Achille Cernigliaro, Pietro Comba, Susanna Conti, Claudio d'Antona, Giuseppe di Maria, Lucia Fazzo, Valerio Manno, Giada Minelli, Rosario Tumino, Amerigo Zona, Salvatore Scondotto*

P2-335 **Gender ratio and malignant mesothelioma in women. An international comparative analysis of mortality data**
Alessandro Marinaccio, Alessandra Binazzi, Davide Di Marzio, Pierpaolo Ferrante,* Sergio Iavicoli*

P2-336 **Global pattern of brain and central nervous system cancer incidence**
Adalberto Miranda-Filho, Gina Torres Rego Monteiro,* Marion Pineros, Isabelle Soerjomataram, Isabelle Deltour, Freddie Bray*

P2-337 **Leukaemia deaths from 2000 to 2012 among adult men in São Paulo State, Brazil.**
Mariana Tavares Guimarães, Maria Regina Alves Cardoso*

P2-338 **Long-term exposure to air pollution and risk for hematological cancers in adults in 13 European cohorts**
Claudia Galassi, Ole Raaschou-Nielsen, Andrei Pyko, Bente Oftedal, Enrica Migliore, Fulvio Ricceri, Gerard Hoek, Andrea Jaensch, Johan Sommar, Mette Sørensen, Michelle Plusquin, Roel Vermeulen, Sara Grioni, Massimo Stafoggia, Francesco Forastiere*

P2-339 **Long-term Exposure to Fine Particulate Matter and Breast Cancer Incidence: the Danish Nurse Cohort**
Zorana Jovanovic Andersen, Klaus Kaae Andersen, Line Ravnskjær, Jørgen Brandt, Thomas Becker, Matthias Ketzel, Ole Hertel, Elsebeth Lynge, Steffen Loft, Elvira Vaclavik Bräuner*

P2-340 **Long-term mortality patterns in a residential cohort exposed to inorganic selenium in drinking water**
Marco Vinceti, Paola Ballotari, Craig Steinmaus, Carlotta Malagoli, Ferdinando Luberto, Serena Broccoli, Marcella Malavolti, Paolo Giorgi Rossi*

P2-341 **Non-occupational exposure to asbestos and malignant mesothelioma in Italy: an overview**
Corrado Magnani, Alessandro Marinaccio, Carolina Mensi, Dario Mirabelli, Marina Musti*

P2-342 **Phthalate exposure, flavonoid consumption and breast cancer risk among Mexican women**
Angel Merida-Ortega , Cesar Hernández-Alcaraz , Angelica Garcia-Martinez , Belem Trejo-Valdivia , Aaron Salinas-Rodriguez , Katherine Svensson , Mariano E. Cebrian, Lizbeth Lopez-Carrillo*

P2-343 **Potential health impact in a cohort of residents from a historically polluted area**
Fredrik Nyqvist, Ingela Helmfrid, Gun Wingren*

P2-344 **Residential exposure to ultraviolet light and risk of Precursor B-cell acute lymphoblastic leukemia: assessing the role of individual risk factors ESCALE and ESTELLE studies**
Astrid Coste, Stéphanie Goujon, Laurent Orsi, Mathieu Boniol, Denis Hémon , Jacqueline Clavel*

P2-345 **SENTIERI-ReNaM PROJECT: Burden of Disease from Mesothelioma in Contaminated Sites in Italy**
Roberto Pasetto, Lucia Fazzo, Amerigo Zona, Caterina Bruno, Roberta Pirastu, Alessandra Binazzi, Marisa Corfiati, Pietro Comba, Alessandro Marinaccio*

P2-346 **SENTIERI-ReNaM Project: Malignant mesothelioma incidence in Italian Contaminated Sites**
Alessandra Binazzi, Simona Menegozzo, Carmela Nicita, Caterina Bruno, Lucia Fazzo, Roberto Pasetto, Roberta Pirastu, Amerigo Zona, Alessandro Marinaccio, Pietro Comba*

P2-347 **Sleep and cancer incidence: Meta-analyses of 62,177 cases among some 1,300,000 study participants in 12 countries**
Thomas C. Erren, Peter Morfeld, Russell G. Foster, Russel J. Reiter, J. Valérie Groß, Inga K. Westermann*

P2-348 **The association between metals and breast density, a measure of breast cancer risk**
Amy Trentham-Dietz, Ronald Gangnon, Scott Adams, John Hampton, Elizabeth Burnside, Martin Shafer*

P2-349 **The intake of garlic and/or tomato as a useful strategy to treatment and prevention of cancer in an experi mental model of Ehrlich tumor**
Adriano Pereira, Jenifer Bom, Elizabeth Cristina Pérez Hurtado, Silvia Regina Kleeb, José Guilherme Xavier, Maria Anete Lallo*

P2-350 **Thyroid Cancer Risk in the Palermo Province: A Spatial Analysis**
Walter Mazzucco, Barbara Ravazzolo, Rosalba Amodio, Maria Angela Brucculeri, Rita Mannino, Giuseppa Rudisi, Maria Antonietta Cascio, Rosanna Cusimano, Francesco Vitale*

P2-351 **Total cancer incidence in Sweden after the Chernobyl accident – can better precision be achieved using indi vidual exposure assessments over time?**
Hassan Alinaghizadeh, Martin Tondel, Eva Vingård, Robert Wålinder*

AREA 5—Epigenetics & Health Impact Assessment

P2-352 **Altered microRNA levels in circulating extracellular vesicles are associated with maternal metal exposure and blood pressure during pregnancy**
Alison Sanders, Rodosthenis Rodosthenous, Katherine Svensson, Maritsa Solano Gonzalez, Priyanka Basnet, Chitra Amarasiriwardena, Martha Tellez-Rojo, Robert Wright, Andrea Baccarelli*

P2-353 **An Assessment of the Oral Health Status of Monozygotic and Dizygotic Twins – a Comparative Epigenetic Study**
*Delfin Lovelina Francis **

P2-354 **Assessment of genetic susceptibilities for air pollution-induced inflammation**
Anke Hüls, Ursula Krämer, Christian Herder, Karin Fehsel, Christian Luckhaus, Sabine Stolz, Andrea Vierkötter, Tamara Schikowski*

P2-355 **Associations between blood mercury and head circumference at birth: modification by sex and maternal GSTM1/GSTT1 polymorphism**
Dirga Kumar Lamichhane, Jong-Han Leem, Hwan-Cheol Kim, Dal-Young Jung, Jung-Keun Ko, Seongjin Kim, Yangho Kim, Yun-Chul Hong, Eun-Hee Ha, Mina Ha*

P2-356 **Associations between personal traffic exposure indicators and DNA hypomethylation in healthy nurses**
Tijs Louwies, Luc Int Panis, Griet Jacobs, Tim Nawrot, Patrick De Boever*

P2-357 **Associations between prenatal cortisol exposure and cord blood mitochondrial DNA differ by maternal lifetime experience of violence.**
Marcela Tamayo y Ortiz, Martha M. Téllez-Rojo, Belem Trejo-Valdivia, Ivan Pantic, Lourdes Schnaas, Andrea Bac carelli, Marco Sanchez-Guerra, Deepjyoti Deb, Robert O. Wright, Rosalind J. Wright*

P2-358 **Correlation of gene expression with blood lead levels in Korean adults**
Yong-Dae Kim, Sang-Yong Eom, Ho-Jang Kwon, Ji-Ae Lim, Byung-Sun Choi, Jung-Duck Park, Heon Kim*

P2-359 **Demographic, Diagnostic, and Environmental Predictors of Placental DNA Methylation in the MARBLES Pro spective Autism Study**
Rebecca J. Schmidt, Diane I Schroeder, Daniel J. Tancredi, Cheryl K. Walker, Sally Ozonoff, Irva Hertz-Picciotto, Janine M. LaSalle*

P2-360 **DNA Repair Gene XPC Modifies the Association Between Air Pollution and Childhood Bronchitis**
Rakesh Ghosh, Pavel Rossner, Katerina Honkova, Miroslav Dostal, Radim Sram, Irva Hertz-Picciotto*

P2-361 **Effects of DNA methylation in tyrosine receptor kinase genes at birth on childhood respiratory health**
*Lu Gao, Joshua Millstein, Kimberly Siegmund, Carrie Breton **

P2-362 **Effects of lifestyle-related genetic profiles on depressive symptoms in a population-based cohort in Korea**
Youn-Hee Lim, Mee-Ri Lee, Kyoung-Nam Kim, Hye Yin Park, Yun-Chul Hong*

P2-363 **Epigenetic study on the human population experienced to Hebei Spirit oil spill accident**
Nivedita Chatterjee, Jisu Yang, MYUNG SOOK PARK, Seung-Hwa Lee, Yeonhee Chu, Jung-Ah Kim, Young-Hyun Choi, Mina Ha, Hae-Kwan Cheong, Jinhee Choi*

P2-364 **Estimated Causal Effects of Ozone Exposure on Epigenome-wide DNA Methylation: Evidence from a Random-ized Crossover Study**
Marie-Abele Bind, Brent Coull, Zhonghua Liu, Joel Schwartz, Robert Devlin*

P2-365 **Frataxin gene study in Friedreich ataxia disease: serum levels and environmental pollutants in purified water from a family in Sahuayo city at Michoacan State, Mexico in 2015**
Maria-Elena Soto, Alejandro Molina-Garcia,* Ingrid Flandes , Ricardo Marquez, Antonio Arias-Godinez, Gabriela Melendez, Claudia Huesca, Ricardo Gamboa, Ramiro Yañez-Gonzalez*

P2-366 **Gene-environmental interactions between CYP2C19 polymorphisms, diet pattern, and physical activity on the risk of endometriosis.**
Aline Cristina Silva de Jesus, Jamila Alessandra Perini, Plinio Tostes Berardo , Ilce Ferreira da Silva*

P2-367 **Gene-specific 5'-UTR methylation vs. promoter methylation in leukocytes from workers exposed to different levels of VOCs.**
Octavio Jiménez-Garza, Luxana Reynaga-Ornelas, Adriana Dávalos-Pérez*

P2-368 **Genetic Polymorphisms are Associated with Body Burden of Metals, Persistent Organic Pollutants (POPs) and Omega-3 Fatty Acids Levels among Inuit in the Canadian Arctic**
Rajendra Prasad Parajuli, Jaclyn M. Goodrich, Laurie Chan, Pierre Ayotte, Kami Kandola, Robert Hegele, Niladri Basu*

P2-369 **Heavy Metal Exposures and Pathway-Based DNA Methylation Patterns**
Irina Mordukhovich, Robert Wright, Xihong Lin, Chitra Amarasiriwardena, Jincheng Shen, Allan Just, Kasey Brennan, Lifang Hou, Elena Colicino, David Sparrow, Pantel Vokonas, Marc Weisskopf, Andrea Baccarelli, Joel Schwartz*

P2-370 **Hypodontia – Genetic or Environmental? –A Case Report of Monozygotic Twins**
Clement Joy Kingsly Francis, Delfin Lovelina Francis*

P2-371 **Lead-Related Genetic Loci, Cumulative Lead Exposure and Incident Coronary Heart Disease: The Normative Aging Study**
Ning Ding, Xin Wang, Marc Weisskopf, David Sparrow, Joel Schwartz, Howard Hu, Sung Kyun Park*

P2-372 **Modification of the Effect of Ultrafine Particulate Matter Exposure on Cardiovascular Disease by Genetic Factors Related to Oxidative Stress**
Laura Corlin, Mark Woodin, Jose Ordovas, Chao-Qiang Lai, Caren Smith, Matthew Simon, David Gute, Katherine Tucker, John Durant, Doug Brugge*

P2-373 **Modulation of blood pressure in response to ambient temperature: The role of DNA methylation of zinc finger genes**
Youn-Hee Lim, Changwoo Han, Sanghyuk Bae, Kyoung-Nam Kim, Yun-Chul Hong*

P2-374 **Newborn Sex-specific Transcriptome Signatures and Gestational Exposure to Fine Particles: Findings from the ENVIRONAGE Birth Cohort**
Ellen Winckelmans, Karen Vrijens, Maria Tsamou, Bram G. Janssen, Nelly D. Saenen, Harry A. Roels, Jos Kleinjans, Wouter Lefebvre, Charlotte Vanpoucke, Theo M. de Kok, Tim S. Nawrot*

P2-375 **Prenatal cadmium exposure and effects on fetal growth: placental DNA methylation as a putative mechanism of action.**
Nadia Vilahur, Annachiara Malin,* Carlos Ruiz, Florencia Harari, Liu Runze, Esperanza Amaya, Mariona Bustamante, Maria Kippler, Mariana Fátima Fernandez, Nicolás Olea, Jordi Sunyer, Karin Broberg*

P2-376 **Prenatal maternal stress, methylation in inflammation-related genes, and childhood adiposity**
*Shaowei Wu, Chris Gennings, Rosalind Wright, Ander Wilson, Heather Burris, Allan Just, Joseph Braun, Katherine Svensson, Jia Zhong, Kasey Brennan, Alexandra Dereix, Martha Maria Téllez-Rojo, Robert Wright, Andrea Baccarelli**

P2-377 **Discussion rules as a method to resolve scientific disputes**
Jouni Tuomisto, John Evans, Arja Asikainen, Pauli Ordén*

P2-378 **Urban and transport planning related exposures and mortality: a health impact assessment for cities**
Natalie Mueller, David Rojas-Rueda, Xavier Basagaña, Marta Cirach, Tom Cole-Hunter, Payam Dadvand, David Donaire-Gonzalez, Maria Foraster, Mireia Gascon, David Martinez, Cathryn Tonne, Margartia Triguero-Mas, Antònia Valentín, Mark Nieuwenhuijsen*

P2-379 **Burden of disease from road traffic and railway noise in Sweden – Quantification of healthy life years lost**
Charlotta Eriksson, Theo Bodin, Jenny Selander*

HIGHLIGHTED POSTERS (P2-380—P2-384)

P2-380* **A child's spit epigenome can reveal its respiratory allergy risk**
Sabine Langie, Matthieu Moisse, Katarzyna Szarc vel Szic, Ellen Van Der Plas, Gudrun Koppen, Guy Van Camp, Diether Lambrechts, Greet Schoeters, Wim Vanden Berghe, Patrick De Boever*

P2-381* **DNA methylation profiles associated with persistent organic pollutants body burden in Greenlandic Inuit**
Jennifer Rusiecki, Lee Moore, Tiffany Oliver, Li Wang, Ligong Chen, Regina Cer, Aleksander Giwerkman, Marcelo Spano, Gunnar Toft, Jens Peter Bonde*

P2-382* **Placental epi/genomics as sensors of the in utero environment and predictors of fetal development**
Maya Kappil, Ke Hao, Benjamin Green, Luca Lambertini, Carmen Marsit, Jia Chen*

P2-383* **Estimating the public health benefits with reducing current levels of NO_2 and SO_2 in Mexico**
Miguel Ángel Hernández Montes, José Luis Texcalac Sangrador, José Gerardo Rios Castillo, Horacio Riojas Rodríguez, Leticia Hernández Cadena, Consuelo Escamilla Nuñez, Karla Cervantes Martínez*

P2-384* **Health Impact Assessment of Active Transportation in Children**
David Rojas-Rueda, Mark Nieuwenhuijsen, Martine Vrijheid*

P2-385 **A harmonised approach to face the environmental health challenges posed by industrial contamination: the COST Action IS1408**
Ivano Iavarone, Carla Ancona, Pietro Comba, Kees de Hoogh, Tony Fletcher, Otto Hanninen, Gerard Hoek, Giovanni Leonardi, Ilse Loots, Piedad Martin-Olmedo, Marco Martuzi, Roberto Pasetto, Roberta Pirastu, Dimosthen is Sarigiannis, Jean-François Viel*

P2-386 **Air quality near industrial facilities in Italy: socioeconomic differential in exposure and impact**
Martina Nicole Golini, Carla Ancona, Chiara Badaloni, Luisella Ciancarella, Annunziata Faustini, Moreno Demaria, Ennio Cadum, Marina Davoli, Francesco Forastiere*

P2-387 Assessing the health benefits of low-sulphur marine fuel regulations in Hong Kong
Tonya G. Mason, Robert Tang, Hilda Tsang, Linwei Tian*

P2-388 **Assessing the health burden of long-term exposure to nitrogen dioxide and mortality in London**
Heather Walton, David Dajnak, Sean Beevers, Martin Williams*

P2-389 **Biological larviciding against malaria vectors in rural Africa - Impact on health and implications for future policies**
Peter Dambach, Rainer Sauerborn, Ali Sié, Norbert Becker*

P2-390 **Estimation of national and subnational environmental burden of disease, Republic of Korea**
Hae-Kwan Cheong, Jae-Hyun Park, Soo-Eun Chung, Jong-Hun Kim, Byoung-Hak Jeon, Eun A Kim, Soo-Geun Kim, Inah Kim, Mina Ha, Hyun Jin Han, Eun-Whan Lee, Aqeela Zahra, Liyuan Sun, Hee-Seung Son, Myung-Jae Hwang, Ju Hwa Choi*

P2-391 **Health impact assessment of cycling networks of seven, diverse European cities: Application of the PASTA model**
Natalie Mueller, David Rojas-Rueda, Christian Brand, Tom Cole-Hunter, Audrey de Nazelle, Regine Gerike, Thomas Götschi, Luc Int Panis, Sonja Kahlmeier, David Martinez, Mark Nieuwenhuijsen*

P2-392 **Health Impact Assessment of Tram Network Expansion in Barcelona, Spain.**
David Rojas-Rueda, Mark Nieuwenhuijsen*

P2-393 **Health impact of selected environmental indicators in Athens, Greece**
Sophia Rodopoulou, Evangelia Samoli, Sani Dimitroulopoulou, Christina Mitsakou, Clare Heaviside, Sotiris Vardoulakis, Paula Santana, Klea Katsouyanni*

P2-394 **InMAP: A new model for air pollution health impact assessments**
Christopher Tessum, Jason Hill, Julian Marshall

P2-395 **Local-Scale Health Impact Assessment of Ambient Black Carbon**
Sheryl Magzamen, Anna Molter, Jennifer Peel, Travis Sondgerath, Tan Yi, Allen Robinson,* Albert Presto*

P2-396 **PM_{10} across Years and Its Impact on Mortality in Lombardy, Italy**
Michele Carugno, Dario Consonni, Pier Alberto Bertazzi, Annibale Biggeri, Michela Baccini*

P2-397 **The association of long term exposure to low concentrations of fine particulates and nitrogen oxides and risk of all-cause mortality and stroke-specific mortality and morbidity**
Mila Dirgawati, Andrea Hinwood, Kieran Mc.Caul, Amanda Wheeler, David Blake, Jonathon Boeyen, Bu Yeap, Leon Flicker, Osvaldo Almeida, Martin Cope, Mark Nieuwenhuijsen, Bert Brunekreef, Jane Heyworth*

POSTER SESSION 3

Saturday, September 3, 13:00 - 14:15

AREA 1—Climate Change, Temperature & Water

HIGHLIGHTED POSTERS (P3-001—P3-013)

P3-001* **Analysis of environmental risk factors for malaria under climate change in Korogho (North Cote d'Ivoire)**
Kouassi Richard M'Bra, Brama Koné, Ibrahima Sy, Jacques André N'DIONE, Nagnin Soro, Guéladio Cissé*

P3-002* **Effects of Climate Change on Environmental Hazards in Local Communities: A Data Visualization Prototype**
Yi Wang, Jeremy Prather, Jeremy Chesher, Jeff Ashby, Kali Frost, Martha Henn, Lacey Steven, Robert Skoglund, Jocelyn Hospital*

P3-004* **Future Health Effects due to Wildfire Smoke under Climate Change in the Western US**
Jia Coco Liu, Loretta Mickley, Melissa P. Sulprizio, Xu Yue, Francesca Dominici, Michelle Bell*

P3-005* **Progress on action to protect health from climate change in the light of the Paris Agreement**
Tanja Wolf, Vladimir Kendrowski, Bettina Menne*

P3-006* **Social vulnerability indicators as determinants of disaster, in cities of Jalisco, Mexico.**
Maria Guadalupe Garibay-Chavez, Arturo Curiel*

P3-007* **A Cochrane review on the interventions for reducing adverse health effects of high temperature and heatwaves**
Manuela De Sario, Simona Vecchi, Paola Michelozzi, Anna Maria Bargagli, Patrizia Schifano, Marina Davoli*

P3-008* **Ambient Temperature and Externalizing Behaviors of Adolescents in Southern California: A Longitudinal Analysis**
Diana Younan, Lianfa Li, Catherine Tuvblad, Jun Wu, Fred Lurmann, Meredith Franklin, Kiros Berhane, Rob McConnell, Anna Wu, Laura Baker, Jiu-Chiuan Chen*

P3-010* **Associations of outdoor temperature and cardiovascular disease risk factors in the elderly: evidence from two Northern European prospective studies**
Claudio Sartini, Sarah JE Barry, Peter H Whincup, S Goya Wannamethee, Gordon DO Lowe, Barbara J Jefferis, Lucy Lennon, Paul Welsh, Ian Ford, Richard W Morris*

P3-011* **Evaluation of individual and neighborhood factors as modifiers of the association between warm-season temperature and pediatric asthma morbidity in Atlanta, GA**
Cassandra O'Lenick, Andrea Winquist, Howard H. Chang, Michael R. Kramer, James Mulholland, Andrew J. Grundstein, Stefanie Ebelt Sarnat*

P3-012* **The association between temperature and ambulance call data – implications for climate change**
Paul Fisher, Lee Champan, Neil Thomas*

P3-013* **Urban vegetation and heat-related mortality in Seoul, Korea**
Ji-Young Son, Kevin Lane, Jong-Tae Lee, Michelle Bell*

P3-014 **Association between Temperature and Sudden Infant Death Syndrome in the US**
Iny Jhun, Antonella Zanobetti, Mihye Lee, Francesco Nordio, Joel Schwartz*

P3-015 **`futureheatwaves`: Characterizing, and Exploring Waves in Climate Projections with R**
Brooke Anderson, Colin Eason, Elizabeth Barnes*

P3-016 **A Syndromic surveillance system to monitor dairy cattle mortality**
Maria Ines Crescio, Valeria Massarotto, Eleonora Aiassa, Francesco Ingravalle, Cristiana Maurella, Rosaria Possidente, Laura Chiavacci, Giuseppe Ru*

P3-017 **Aging Will Amplify the Heat-related Mortality Risk Under a Changing Climate: Projection for the Elderly in Beijing, China**
*Tiantian Li *, Radley Horton, Daniel Bader, Patrick Kinney*

P3-018 **Are plant-based diets good for us and good for the planet? A critical review of the evidence.**
Sam Soret, Helen Harwatt, Joan Sabate*

P3-019 **Assessing the social and environmental determinants of pertussis epidemic: A Bayesian spatiotemporal analysis**
*Xiadodong Huang, Stephen Lambert, Colleen Lau, Ricardo Magalhaes, John Marquess, Mohana Rajmokan, Gabriel Milinovich, Wenbiao Hu**

P3-020 **Barriers and enablers to build community resilience to climate change for older Chinese ethnic minority groups – findings from both quantitative and qualitative studies**
Ying Zhang, Hui Ye, Meng Wang, Kaisong Wu, Betriaz Carrillo Garcia*

P3-021 **Climate Change Epidemiological Health Reports in Michoacan State, Mexico since 2009 to 2015.**
Alejandro Molina-Garcia, Cynthia Armendariz-Arnez, Lilian Pacheco-Magaña, Gloria Figueroa-Aguilar, Luz-Arlette Saavedra-Romero, Carlos-Esteban Aranza-Doniz, Josefina Martinez-Ponce*

P3-022 **Climate Change, Combined Sewer Overflows (CSOs), and Diarrheal Disease in Children**
*Samar Khoury, Marie Russell**

P3-023 **Climate Change-Related Temperature Increases and Associated Health Risks for Cities in the Shue Database**
James Milner, Jonathon Taylor, Ian Hamilton, Mauricio Barreto, Mike Davies, Andy Haines, Meena Sehgal, Paul Wilkinson*

P3-024 **Comparative evaluation of human stress indices on selected hospital admissions across Australian cities**
James Goldie, Lisa Alexander, Sophie Lewis, Steven Sherwood*

P3-025 **Deciphering Big Data: Making Sense of Global Climate Models in the Context of Public Health Protection and Policy**
*John Nuckols**

P3-026 **Developing health related indicators of climate change incorporating vulnerability in Australia**
Maryam Navi, Dino Pisaniello, Alana Hansen, Monika Nitschke*

P3-027 **Difference Between Expected and Observed Mortality due to the 2004 and 2012 Heat Waves in South Korea**
Bo Yeon Kwon, Kyunghee Jo, Eunil Lee, Seulkee Heo, Jinsun Kim*

P3-028 **Does Mercury Exposure Increase with El Nino?**
*Beth Feingold, Axel Berky, Justin Lana, Ernesto Ortiz, Sarah Diringer, Ana Maria Morales, Helen Hsu-Kim, William Pan**

P3-029 **Environmental Health Surveillance: Heat Related Morbidity and Mortality in California**
Jhaqueline Valle Palominos, Galatea King*

P3-030 **Frequency of Extreme Events and Injury Risk From Motor Vehicle Accidents in Maryland, USA**
Sutyajeet Soneja, Ann Liu, Chengsheng Jiang, Chanjuan Huang, Clifford Mitchell, Amir Sapkota*

P3-031 **Global associations between UV dose exposure and current eczema prevalence in children and adolescents**
Elaine Fuertes, Carsten Flohr, Jonathan Silverberg, David Strachan*

P3-032 **Global burden of mortality attributed to ambient temperature**
Shilu Tong, Xiaoyu Wang, yuming guo, lina madaniyazi*

P3-033 **Health impacts of heatwave under different heatwave definitions: a systematic review and meta-analysis**
Zhiwei Xu, Gerard FitzGerald, Yuming Guo, Bin Jalaludin, Shilu Tong*

P3-034 **Heat Illness Severity and Hydration Practices among Outdoor Workers in Negeri Sembilan, Malaysia**
Zawiah Mansor, Jamal Hisham Hashim, Rosnah Ismail, Noor Hassim Ismail*

P3-035 **Heat Waves and Hospital Admissions for Mental Disorders in Northern Vietnam**
*Trang Phan Minh**

P3-036 **Heat-related illness in agricultural workers**
Linda McCauley, Abby Mutic, Lisa Elon, Bryan Williams, J. Antonio Tovar, Eugenia Economos, Katherine Peterman, Valerie Mac, Vicki Hertzberg*

P3-037 **Heterogeneous changes in heat-related mortality risk among heat clusters over a 17-year period**
Seulkee Heo, Eunil Lee, Bo Yeon Kwon, Jinsun Kim*

P3-038 **Household preferences to reduce their carbon footprint - a comparative study from 4 European cities**
Rainer Sauerborn, Carlo Aall, Maria Nilsson, Carine Barbier, Ghislain Dubois, Paul Wilkinson, Valérie Louis*

P3-039 **Impact of low-salt drinking water alternatives on burden of stroke and myocardial infarction in salinity-prone areas: a mathematical modelling approach**
Pauline Scheelbeek, Mohammad Hoque, Paolo Vineis, Adrian Butler*

P3-040 **Increase in dust storm related PM_{10} concentrations: A time series analysis of 2001-2015**
Michael Friger, Helena Krasnov, Itzhak Katra*

P3-041 **Increasing heat mortality among European Union citizens under global warming in 21 Century**
Vladimir Kendrovski, Michela Baccini, Bettina Menne, Tanja Wolf, Gerardo Sanchez Martinez*

P3-042 **Interaction effects between high temperatures and ozone on death in summer, Seoul**
Okjin Jung, Jeong-Ho Lee, Jongsik Ha*

P3-043 **Is Sweden ready for climate change? -summer indoor temperatures in Swedish care homes**
Mare Lõhmus, Robert Wålinder*

P3-044 **Life and death on a tiny island: Health impacts and adaptation in small communities**
Hilary Bambrick, Stefano Moncada*

P3-045 **Linking Human Health and Wellbeing with Weather, Climate and the Environment**
Lora E Fleming, Gordon Nichols, Christophe Sarran, Brian Golding, Andy Haines, Majid Djennad, Shakoor Hajat, Ceri Whitmore, Anthony Kessel, Harriet Gordon Brown, Neil Kaye, Trevor Bailey, Michael Depledge*

P3-046 **Negative risk of cold on lag 0 day in distributed lag pattern can be due to preceding mortality peak before the temperature trough**
Yasushi Honda, Xerxes Seposo, Dang Tran Ngoc, Masahiro Hashizume, Ho Kim*

P3-047 **Pragmatic methods for projecting climate-associated health effects in Michigan**
Carina Gronlund, Claire Shea, Lorraine Cameron, Lily Tyndall Snow, Marie O'Neill*

P3-048 **Projected Future Temperatures Are Associated with Increased Morbidity but Decreased Mortality in Rhode Island**
Kate Weinberger, Melissa Eliot, Julia Gold, Gregory Wellenius*

P3-049 **Risk characterization of hospitalizations for mental illness and/or behavioral disorders and a heat-related illness**
Michael Schmeltz, Janet Gamble*

P3-050 **Statistical and spatial analysis of ambulance callouts during heat waves: A health indicator of climate change?**
Maryam Navi, Dino Pisaniello, Alana Hansen, Monika Nitschke*

P3-051 **Susceptibility to hospital admissions related to temperature in the population of 16 cities, South Korea**
*E Jin Kim**

P3-052 **Temporal changes in mortality from extended cold weather in the Island of Ireland 1984-2007**
Ariana Zeka, Patrick Goodman*

P3-053 **The acute effects of rapid changes in air pollutant levels on cardiovascular disease in Taipei City, Taiwan**
*How-Ran Guo, Shao-Wei Yang**

P3-054 **The Impacts of Climate Change on Food Poisoning Cases in Malaysia**
Noor Artika Hassan, Jamal Hisham Hashim, Anthony Capon, Wan Rozita Wan Mahiyuddin, Mohd Syazwan Faisal, Mohd Fadzli Mohd Fuzi*

P3-055 **The Influence of Air Pollution and Weather Conditions on Traffic Crashes and Traffic-Related Mortality in Ahvaz, Iran**
Narges Khanjani, Maryam Dastoorpoor, Esmaeil Idani, Gholamreza Goudarzi, Abbas Bahrampour*

P3-056 **The Role of Season and Climate in the Incidence of Congenital Hypothyroidism in Kerman Province, Southeastern Iran**
Narges Khanjani, Ahmad Ahmadzadeh, Bahram Bakhtiari, Farzan Madadizadeh*

P3-057 **Using Climate Projections to Estimate Heat-related Illness Disease Burden**
Kathryn Conlon, Kristina Kintziger, Meredith Jagger, Lydia Stefanova, Christopher Uejio, Charles Konrad*

P3-058 **Vulnerability Assessment of Human Health due to Ozone and climate change Using Fuzzy TOPSIS in Korea**
*Hyun-Joo Bae**

P3-059 **Connecting Children to their Environment and Health: Characterizing Exposures to Temperature and UV Radiation during Active Play**
Jennifer Vanos, Marc Lochbaum*

P3-060 **Exposure variable selection in heat - health risk assessment and implications for interventions**
David M Hondula, Shuo Yang, Benjamin L Ruddell, Sharon L Harlan, Diana B Petitti*

P3-061 **2015 Excess mortality in Italy: the role of an ageing population, heat waves and factors influencing seasonal mortality**
Manuela De Sario, Paola Michelozzi, Francesca de'Donato, Matteo Scortichini, Federica Asta, Daniela D'Ippoliti, Marina Davoli*

P3-062 **Ambient Temperature and Circulating Biomarkers of Cardiovascular Health in Healthy Adults: A Repeated-Measure Study in Beijing, China**
*Shaowei Wu, Furong Deng, Di Yang, Jing Huang, Hongying Wei, Xinbiao Guo**

P3-063 **Assessing the cold effect of temperature on hospitalization and outpatient by allergic rhinitis in Seoul, Korea**
Hyomi Kim, Jong-Tae Lee, Yoon-Hyung Park*

P3-064 **Attributable deaths due to urban heat island effect in a mega city of Vietnam: an application of dynamic downscaling weather model**
Tran Ngoc Dang, Doan Quang Van, Xerxes T. Seposo, Hiroyuki Kusaka, Yasushi Honda*

P3-065 **Cardiovascular disease emergency admissions associated with maximum temperature in Bogotá from 2009 to 2013**
Carolay Corredor, Jose Andrés Corredor, Samuel Osorio, Diana Durán, Rodrigo Sarmiento-Suárez*

P3-066 **Effect of pre-existing disease on the association between summer temperature and heat illness in South Korea**
Jae-Yeon Jang, Si-Heon Kim, Kyung Eun Lee , Kyoung Jun Song , Soo-Nam Jo*

P3-067 **Effect of summer temperatures on hospital admissions in a temperate climate of Switzerland.**
Ana M Vicedo-Cabrera, Martina S. Ragettli, Christian Schindler, Martin Röösli*

P3-068 **Effectiveness of public health interventions in reducing heat effects in Switzerland: a natural quasi-experimental design**
Martina S. Ragettli, Ana M. Vicedo-Cabrera, Christian Schindler, Martin Röösli*

P3-069 **Effects of ambient temperature on accident and emergency fracture admissions in England, 2007-2012**
Eveline Otte im Kampe, Sari Kovats, Shakoor Hajat*

P3-070 **Effects of the indoor thermal environment on human food intake: a pilot randomized cross-over trial**
Molly Bernhard, Peng Li, David Allison, Julia Gohlke*

P3-071 **Environmental Risk Factors Impact in Mortality (Los Angeles County: 1975-2005) - How may the associations change over decades?**
Samya Pinheiro, Fábio Gonçalves, Leila Carvalho, David Lopez-Carr, Daniel Erwin, Scott Sheridan*

P3-072 **Environmental temperature and blood pressure among adults: A systematic review and Meta analysis**
Qiong Wang, Changchang Li, Cunrui Huang*

P3-073 **Estimating the Associations between Apparent Temperature and Inflammatory, Hemostatic, and Lipid Serum Markers in a Cohort of Midlife Women**
Rupa Basu, Xiangmei Wu, Rachel Broadwin, Brian Malig, Ellen Gold, Lihong Qi, Carol Derby, Rochelle Green*

P3-074 **Estimating the Effects of Mean, Inter-, and Intra-day temperature variations on mortality among 7 Tropical and Subtropical Cities of Southeast Asian Countries**
Xerxes Seposo, Tran Ngoc Dang, Chris Fook Sheng Ng, Wan Rozita Wan Mahiyuddin, Mazrura Sahani, Masahiro Hashizume, Yasushi Honda*

P3-075 **External mortality increases with high and low temperatures: evidence from North-Eastern Europe**
Daniel Oudin Åström, Hans Orru*

P3-076 **Fine Scale Resolution Air Temperature Exposure in Italy using Satellite Data, Observed Monitoring Data and Land Use Data**
Francesca de'Donato, Itai Kloog, Paola Michelozzi, Paolo Vineis*

P3-077 **Geographical variation in relative risks associated with cold waves in Spain: The need for a cold wave prevention plan**
Rocio Carmona, Julio Diaz, Isidro J Miron, Cristina Ortiz, Yolanda Luna, Cristina Linares*

P3-078 **Geographical variation in relative risks associated with heat in Spain**
Julio Diaz, Rocio Carmona, Isidro J Miron, Cristina Ortiz, Yolanda Luna, Cristina Linares*

P3-079 **Heat and ischemic and hemorrhagic stroke mortality in 12 cities of Jiangsu Province, China**
Lian Zhou, Kai Chen, Lei Huang, Xiaodong Chen, Yuanshu Jing, Patrick Kinney*

P3-080 **Heat index and vulnerability in population with diabetes mellitus spectrum diagnoses in Bogota 2009 2013**
Rodrigo Sarmiento-Suárez, Carolay Corredor, Samuel Osorio, Jose Andres Corredor*

P3-081 **Heat waves and mortality in tropical climate: a multi-city analysis in Southeast Asia**
Chris Fook Sheng Ng, Xerxes T. Seposo, Tran Ngoc Dang, Yoonhee Kim, Wan Rozita Wan Mahiyuddin, Mazrura Sahani, Yasushi Honda, Masahiro Hashizume*

P3-082 **Heat, Heat Waves and Hospital Admissions in Indianapolis, Indiana**
Yi Wang, Dan Johnson, Nathan Byers*

P3-083 **Heat-Related Morbidity and Mortality in New England: Evidence for Local Policy**
Gregory Wellenius, Melissa Eliot, Kathleen Bush, Dennis Holt, Rebecca Lincoln, Julia Gold*

P3-084 **High temperatures are associated with occupational injuries in Spain**
Erica Martinez-Solanas, María López-Ruiz, Gregory A. Wellenius, Fernando G. Benavides, Xavier Basagaña*

P3-085 **How outdoor temperature and air pollutants affect the risk of work injuries in three Italian cities. A case-crossover study**
Federica Asta, Patrizia Schifano, Alessandro Marinaccio , Michela Bonafede, Giuseppe Campo, Paola Michelozzi*

P3-086 **Longitudinal approach of seasonality of cardiovascular risk factors and its association with meteorological factors**
Magda Cepeda, Josje Schoufour, Oscar Franco*

P3-087 **Mean temperature and cardio-respiratory mortality in elderly from Bogota and Sao Paulo**
Samuel David Osorio Garcia, Priscila Ikefuti, Helena Ribeiro*

P3-088 **Mortality due to temperature anomalies in the metropolitan area of Guadalajara, Mexico**
*Arturo Curiel**

P3-090 **Relationship of ambient temperature to hemorrhagic and ischemic stroke in patients with cardiovascular disease and diabetes**
Seong-Kyung Cho, Jaelim Cho, Jungwoo Sohn, Changsoo Kim*

P3-091 **The association between temperature and sudden cardiac death in women**
Jaime Hart, Jeff Yanosky, Francine Laden, Christine Albert*

P3-092 **The differences in the natures of associations with ambient temperature between the most common causes of respiratory hospitalizations**
Holly Lam, William Goggins III, Emily Chan*

P3-093 **Translating findings from heat-health risk assessments to inform public health practice in the United States**
Ambarish Vaidyanathan, Shubhayu Saha, Antonio Gasparrini

P3-094 **When is heat 'extreme'? The effect of definition choice on the association between extreme heat and cause-specific morbidity in Sydney, Australia**
Marissa Parry, Andrew Hayen, Donna Green, Ying Zhang*

P3-095 **Baseline study of the water quality at industrial hotspots in the Nakivubo channel, Kampala**
Dominik Dietler, Samuel Fuhrimann, Abdullah Ali Halage , Mohammed Babu, Guéladio Cissé*

P3-096 **Determination of lead and cadmium in the water of the Damavand River, Iran**
Shahrzad Khoramne Jadian, Forouzan Fatemi*

P3-097 **Diurnal variation in urinary trihalomethanes and circadian oscillation of lipid peroxidation products**
Stephanie Gaengler, Pantelis Charisiadis, Ratanesh Seth, Saurabh Chatterjee, Konstantinos Makris*

P3-098 **Efficacy of Water Treatment Processes and Endemic Gastrointestinal Illness - A Multi-City Study in Sweden**
Andreas Tornevi, Magnus Simonsson, Bertil Forsberg, Melle Säve-Söderbergh, Jonas Toljander*

P3-099 **Implementation of a novel bioassay as a global indicator of endocrine disruption in public drinking water supplies**
Rena Jones, Maki Inoue-Choi, Diana Stavreva, Lyuba Varticovksi, Peter Weyer, Michael Wichman, Barry Graubard, Laura Beane Freeman, Gordon Hager, Mary Ward*

P3-100 **In utero exposure to fluoride and cognitive development delay in children**
*Diana Rocha Amador *, Liliana Valdez Jimenez, Rogelio Costilla Salazar, Jaqueline Calderón Hernandez , Dania López Guzmán*

P3-101 **Long-term exposure to trihalomethanes in drinking water and breast cancer risk in the MCC-Spain study**
Cristina M Villanueva, Laia Font-Ribera, Esther Gracia-Lavedan, Gemma Castaño-Vinyals, Nuria Aragones, Marina Pollan, Beatriz Perez, Jone M Altzibar, Eva Ardanaz, Antonio J Molina, Ines Gomez-Acebo, Guillermo Fernandez-Tardon, Rosana Peiro, Manolis Kogevinas*

P3-102 **Pharmaceuticals and illicit drugs in surface, drinking and swimming pool waters in the Province of Modena: preliminary investigation**
*Gabriella Aggazzotti *, Guglielmina Fantuzzi, Elena Righi, Guerrino Predieri, Sara Castiglioni, Ettore Zuccato*

P3-103 **Quantification and molecular characterization of Cryptosporidium spp. from raw surface water and raw sewage for the monitoring of public water supplies in the metropolitan region of São Paulo, Brazil**
Ronalda Silva Araújo, Milena Dropa, Bruna Aguiar, Adriano Pereira*, Maria Tereza Pepe Razzolini, Maria Inês Zanoli Sato, Glavur Rogério Matté, Maria Helena Matté*

P3-104 **The impact of short-term exposure to disinfection by-products on the metabolome – a metabolome-wide association study**
Karin van Veldhoven, Dinesh Kumar Barupal, Pekka Keski-Rahkonen, Lutzen Portengen, Laia Font-Ribera, Cristina M Villanueva, Florence Guida, Paolo Vineis, Augustin Scalbert, Roel Vermeulen, Manolis Kogevinas, Marc Chadeau-Hyam*

P3-105 **Transcriptional responses in the blood to short-term exposure to disinfection by-products**
Almudena Espín-Pérez, Karin van Veldhoven, Theo de Kok, Manolis Kogevinas, Lutzen Portengen, Laia Font-Ribera, Marc Chadeau-Hyam, Roel Vermeulen, Cristina M Villanueva, Jos C Kleinjans*

P3-106 **Trichloroethylene (TCE) in underground water and its relationship with urinary malondialdehyde (MDA) and N-Acetyl-?-D-Glucosaminidase (NAG)**
Li-Ya Wang, Hsien-Wen Kuo, Chun-Ping Tu*

P3-107 **Uranium and Arsenic Contamination of Groundwater on Navajo and Hopi Nations**
Laura Corlin, Tommy Rock, Jamie Cordova, Doug Brugge, Mark Woodin, John Durant, Jani Ingram*

P3-108 **Variation in parasite communities in Oreochromis niloticus linked with precipitation**
Adriano Pereira, Ricardo José Teixeira, Diva Denelle Spadacci-Morena, José Guilherme Xavier, Elizabeth Cristina Pérez Hurtado, Maria Anete Lallo*

AREA 2—Children & Aging

P3-109 **Associations of blood cadmium levels with depression and lower handgrip strength in a community-dwelling elderly population: A repeated-measures panel study**
*Kyoung-Nam Kim**

P3-110 **Land-use variables and respiratory infections in infancy in the Piccolipiù birth cohort**
Franca Rusconi, Luigi Gagliardi, Eleonora Fanti, Silvia Narduzzi, Sara Fioravanti, Luca Ronfani, Sara Farchi, Virginia Toccaceli, Franco Merletti, Francesco Forastiere*

P3-111 **A study of levels of arsenic in samples of urine, capillary blood and nails in Brazilian children**
Thatiana Verônica Rodrigues de Barcellos Fernandes, Carmen Ildes Rodrigues Froes Asmus, Volney de Magalhães Camara*

P3-112 **Adolescent's perception of textual and pictorial warnings on cigarette packs in Sicily (south Italy): a cross-sectional survey**
*Maria Fiore, Alice Mannocci, Gabriele Castorina, Armando Platania, Margherita Ferrante, Giuseppe La Torre**

P3-113 **Association Between Air Pollution and Biomarkers of Oxidative Stress in Children Before and During the Beijing Olympics**
Tong Zhu, Weiwei Lin, Tao Xue, Wei Peng, Bert Brunekreef, Ulrike Gehring, Wei Huang, Xiaoyan Tang*

P3-114 **Association between the Computed Tomography scan frequency for medical use and the Autism spectrum disorder in Republic of Korea**
Jong Hyuk Choi, Hyungryul Lim, Mina Ha, Hojang Kwon*

P3-115 **Blood lead level and behavioral problems in a nationally representative sample of Korean youths: symptom domain and age specific associations**
Hyunjoo Joo, Mina HA, Yeni Kim, Wookhee Choi, Suejin Kim*

P3-116 **Cord plasma PBDEs and working memory among 7-year old children**
Whitney Cowell, Andreas Sjodin, Richard Jones, Shuang Wang, Amy Margolis, Virginia Rauh, Julie Herbstman*

P3-117 **Early-life exposure and healthy outcomes in pregnancy and childhood by cohort study**
Bo Xu, Minjian Chen, Wei Wu, Di Wu*, Kun Zhou, Xiumei Han, Yankai Xia**

P3-118 **Effect of Moving to a Newly Built or Renovated House on Atopic Dermatitis in Korean children: The ISAAC Phase III Study in Korea**
Xue Han, Hyungryul Lim, Jong Hyuk Choi, Ji-ae Lim, Ho-jang Kwon, Mina Ha*

P3-119 **Effects of manganese exposure on visuoperception and visual memory in schoolchildren.**
Horacio Riojas-Rodríguez, David Hernández-Bonilla, Consuelo Escamilla-Núñez, Donna Mergler, Sandra Rodríguez-Dozal, Marlene Cortez-Lugo, Sergio Montes, Luis Antonio Tristán-López, Minerva Catalán-Vázquez, Astrid Schilmann*

P3-120 **Environmental and Clinical Determinants of Hematopoietic Stem and Progenitor Cells (HSPC) in Umbilical Cord Blood in the Maternal and Child Health Birth Cohort Study**
Theresa Bastain, Carrie Breton, Fred Lurmann, Brendan Grubbs, Gregor Adams, Frank Gilliland*

P3-121 **Estimating and Valuing Health Impacts of Formaldehyde Exposure to Improve Decision-Making**
Juleen Lam, Patrice Sutton, Amy Padula, Michael Cabana, Erica Koustas, Hanna Vesterinen, Evans Whitaker, Natalyn Daniels, Tracey Woodruff*

P3-122 **Exploring the Association between Developmental PBDE Exposure and IQ/ADHD Effects: Application of the Navigation Guide Systematic Review Methodology**
*Juleen Lam, David Bellinger, Bruce Lanphear, Daniel Axelrad, Jennifer McPartland, Patrice Sutton, Lisette Davidson, Natalyn Daniels, Saunak Sen, Tracey Woodruff**

P3-123 **Exposure to Dichlorodiphenyl Dichloroethene (DDE) and Childhood Pulmonary Function**
Pallavi Balte, Wilfried Karmaus, Joachim Kuehr, Herrman Kruse*

P3-124 **Exposure to manganese from drinking water and IQ in school-age children**
Maryse F. Bouchard, Pierre Cormier, Delphine Foucher, Céline Surette*

P3-125 **Extent of Energy Poverty among Tribal and its linkages to the child health and development In India**
Kabir Pal, Nidhi Jain*

P3-126 **Green spaces and allergic outcomes in children**
Ji-young Lee, Mina Ha, Jong-Han Leem, Dirga Kumar Lamichhane, Myung-gi Lee, Eunjeong Kim, Yun-Chul Hong, Yangho Kim, Eun-Hee Ha*

P3-127 **High prevalence of elevated Manganese levels in blood of one-two years old Beninese children**
*Laura Milne, Philippe Glorennec, Pierre Ayotte, Achille Massougbodji, Michel Cot, Florence Bodeau-Livinec**

P3-128 **Influence of land-use variables on size, tempo and velocity of weight growth during infancy in the Piccolipiù Italian birth cohort study**
Costanza Pizzi, Silvia Narduzzi, Tullia Todros, Sara Fioravanti, Lorenza Nisticò, Daniela Porta, Antonella Ranieli, Luca Ronfani, Franca Rusconi, Lorenzo Richiardi, and the Piccolipiù group*

P3-129 **Interaction between postnatal exposure to organophosphate pesticides and PON1 genetic polymorphisms on neuropsychological performance in school children**
Marina Lacasaña, Beatriz González-Alzaga, Clemente Aguilar-Garduño, Inmaculada López-Flores, Antonio Gómez-Martin A, Luis Javier Martínez-González , Antonio F. Hernández*

P3-130 **Is there an environmental connection between the dramatic increasing trends in obesity and in autism spectrum disorder?**
Irva Hertz-Picciotto, Paula Krakowiak, Cheryl K Walker*

P3-131 **Lessons Learned from the Children's Health Exposure Analysis Resource (CHEAR) Data Center**
Patricia Kovatch, Deborah L. McGuinness, Chris Gennings, Susan L. Teitelbaum*

P3-132 **Maternal concentration of urinary metabolites of organophosphate pesticides and neurodevelopment at 3 years of age**
Maryse F. Bouchard, Gina Muckle, William Fraser, Tye E. Arbuckle, Jean Séguin, Emmanuel Ouellet, Nadine Forget -Dubois, Glenys M. Webster, Joseph Braun, Youssef Oulhote, Bruce Lanphear*

P3-133 **Micronucleus cytome assay in exfoliated buccal cells of children for the evaluation of early biological effects of air pollution exposure. The MAPEC_LIFE project.**
Elisabetta Ceretti, Donatella Feretti, Claudia Zani, Sara Levorato, Annalaura Carducci, Francesco Bagordo, Silvia Bonetta, Gaia Claudia Viviana Viola, Tania Salvatori, Beatrice Casini, Tiziana Grassi, Sara Bonetta, Samuele Vannini, Silvia Bonizzoni, Alberto Bonetti, Umberto Gelatti*

P3-134 **Multiple Estimates of Residential Greenspace, Time Spent Outdoors, and Body Mass Index in a Cincinnati Children's Health Cohort**
Rebecca Gernes, Cole Brokamp, Glenn Rice, J. Michael Wright, Patrick Ryan*

P3-135 **Mutagenic and Genotoxic Effect of PM0.5 in Different Italian Towns: The MAPEC (Monitoring Air Pollution Effects on Children for supporting public health policy) Study**
Sara Bonetta, Silvia Bonetta, Elisabetta Ceretti, Gaia Claudia Viviana Viola, Donatella Feretti, Cristina Pignata, Sara Levorato, Tania Salvatori, Samuele Vannini, Tiziana Schilirò, Marco Verani, Valeria Romanazzi, Francesca Serio, Giorgio Gilli, Silvia Bonizzoni, Alberto Bonetti, Elisabetta Carraro, Umberto Gelatti, - MAPEC_LIFE Study Group*

P3-136 **Pesticides trade and congenital abnormality outcomes in Brazil.**
Carmen Asmus, Volney Camara, Ronir Raggio, Philip J Landrigan, Luz Claudio*

P3-137 **Potential for Confounding Bias When Estimating the Association between Prenatal Exposure to Air Pollution and Children's Health Outcomes**
Ander Wilson, Yueh-Hsiu Mathilda Chiu, Hsiao-Hsien Leon Hsu, Robert Wright, Rosalind Wright, Brent Coull*

P3-138 **Predictors of polybrominated diphenyl ether (PBDE) serum levels in a cohort of U.S. children aged 1-5 years**
Lyndsey Darrow, Michele Marcus, Melanie Jacobson, Emma Preston, Dana Barr*

P3-139 **Prenatal exposure to environmental mixtures and asthma risk among children**
Roxana Khalili, Susan Korrick, Veronica Vieira*

P3-140 **Prenatal Exposure to Iodine Uptake Inhibitors and Child Cognition at Age 3**
*Ramael Ohiomoba, Beverly Insel, Xinhua Liu, Julie Herbstman, Robin Whyatt, Pam Factor-Litvak**

P3-141 **Prenatal exposure to mercury and child fine motor development in an Eastern Mediterranean cohort**
Fabio Barbone, Valentina Rosolen, Marika Mariuz, Darja Mazej, Janja Tratnik, I Antoniadou, Zdravko Spiric, Francesca Valent, Milena Horvat, Luca Ronfani*

P3-142 **Prenatal Exposure to Particulate Air Pollution and Anthropometry in Urban Children: Sensitive Windows and Sex Difference**
Yueh-Hsiu Mathilda Chiu, Hsiao-Hsien Leon Hsu, Ander Wilson, Brent A. Coull, Itai Kloog, Joel Schwartz, Robert O. Wright, Rosalind J. Wright*

P3-143 **Prenatal exposure to perfluoroalkyl substances and cardio-metabolic components during childhood**
Cyntia Beatriz Manzano-Salgado, Maribel Casas, Maria-Jose Lopez-Espinosa, Ferran Ballester, Carmen Iniguez, Loreto Santa-Marina, David Martinez, Dania Valvi, Jesus Vioque, Jordi Sunyer, Martin Vrijheid*

P3-144 **Prenatal exposure to phthalates, working memory, and discrepancies in performance across intelligence domains among children in a multiethnic birth cohort in New York City**
Elizabeth Kamai, Richard L. Canfield, Mary S. Wolff, Emily Werder, Stephanie M. Engel*

P3-145 **Prenatal Methylmercury Exposure and child development at five years**
kristine vejrup, Synnve Schjølberg, Helle Katrine Knudsen, Anne Lise Brantsæter, Helle Margrete Meltzer, Margaretha Haugen*

P3-146 **Second hand smoking and shorter sleep duration in Italian 12 months old infants.**
Sonia Brescianini, Luigi Gagliardi, Lorenzo Richiardi, Franca Rusconi, Liza Vecchi Brumatti, Antonio Arnofi, Sabrina Alviti, Cristina D'Ippolito, Miriam Salemi, Silvia Narduzzi, Sara Fioravanti, Sara Farchi, and the PiccoliPiù group*

P3-147 **Selenium status during pregnancy and child neurodevelopment**
Wojciech Hanke, Kinga Polanska, Anna Krol, Jolanta Gromadzinska, Renata Brodzka, Gemma Calamandrei, Flavia Chiarotti, Wojciech Wasowicz*

P3-148 **The effect of forest fires on the prevalence of respiratory illnesses in children in Chile**
Rebecca Ciciretti, Sandra Cortes*, Lorna Jara*, Fabio Paredes*

P3-149 **Tooth Matrix Biomarkers in Children's Environmental Health Research**
Manish Arora, Christine Austin, Syam Andra, Birgit Claus Henn, Brent Coull, Chris Gennings, Rosalind Wright, Robert Wright*

P3-150 **Tooth Matrix Biomarkers of Pre- and Postnatal Manganese Exposure and Motor Function in Adolescents**
Yueh-Hsiu Mathilda Chiu, Birgit Claus Henn, Hsiao-Hsien Leon Hsu, David C. Bellinger, Christine E. Austin, Silvia Zoni, Donald R. Smith, Robert O. Wright, Roberto G. Lucchini, Manish Arora*

P3-151 **Urinary Phthalate Metabolites and Child Growth**
Ching-Chun Lin, Meng-Shan Tsai, Liang-yu Lin, Pau-Chung Chen*

P3-152 **Using the Power of Theater to Engage Children in an Environmental Justice Community**
Rhonda Spencer-Hwang, Sam Soret, Xochitl Alicia Tores, Johanny Valladares, Marco Pasco-Rubio, Molly Dougherty*

P3-153 **Willingness to pay and air pollution: the results of Gioconda Life project**
Carla Guerriero, Meri Scaringi*, Liliana Cori*, Stefano Zauli Sajani, Stefano Marchesi, Fabrizio Bianchi, Paolo Lauriola*

P3-154 **Association between urinary metabolites of pesticides and biomarkers of oxidative stress/inflammation in children consuming an organic diet: a pilot study**
Konstantinos Makris, Corina Konstantinou, Federica Gaiani, Gian Luigi de Angelis*

O-116 **The association of prenatal metals exposure with children's growth in Bangladesh**
Nancy Diao, David Christiani*

P3-155 **Relationship between Blood Concentrations of Persistent Organic Pollutants and Regional Difference in Type-2 Diabetes in Germany**
Alexandra Schneider, Annette Peters, Brenda Bongaerts, Kathrin Wolf, Jürgen Wittsiepe, Karl-Werner Schramm, Karin Halina Greiser, Saskia Hartwig, Alexander Kluttig, Wolfgang Rathmann*

P3-156 **Urinary phthalate metabolite and bisphenol-A concentrations in association with serum vitamin D levels: results from pregnant and non-pregnant women in two US populations**
Lauren E. Johns, Kelly K. Ferguson, Thomas F. McElrath, David E. Cantonwine, John D. Meeker*

P3-157 **Regulation of Endocrine Disruptors in the European Union: Originality, Expectations, Hurdles**
Remy Slama, Jean-Pierre Bourguignon, Barbara Demeneix, Richard Ivell, Giancarlo Panzica, Andreas Kortenkamp, Thomas Zoeller*

HIGHLIGHTED POSTERS (P3-158—P3-164)

P3-158* **Living near major roads and the incidence of dementia, Parkinson's disease and multiple sclerosis in Ontario, Canada: population-based study**
Hong Chen, Jeffrey Kwong, Ray Copes, Karen Tu, Aaron van Donkelaar, Perry Hystad, Paul Villeneuve, Randall Martin, Brian Murray , Barry Jessiman, Alexander Kopp, Richard Burnett*

P3-159* **DES Exposure and Third Generation Attention Deficit/ Hyperactivity Disorder**
Marianthi-Anna Kioumourtzoglou, Eilis O'Reilly, Alberto Ascherio, Marc Weisskopf*

P3-160* **Periconceptional exposure to bisphenol-A and fecundability among couples trying to conceive in a prospective, preconception cohort**
Christina Porucznik, Kyley Cox, Joseph Stanford*

P3-161* **Impact of phthalate exposure during early, mid, and late in utero development in relation to ADHD symptoms at 6-11 years of age**
Deborah J. Watkins, John D. Meeker, Lourdes Schnaas, Maritsa Solano-Gonzalez, Erika Osorio-Valencia, Karen E. Peterson, Martha-Maria Tellez-Rojo*

P3-162* **In utero and peripubertal phthalate exposure in relation to 8-isoprostane, a marker or oxidative stress, at 8-14 years of age**
Deborah J. Watkins, Karen E. Peterson, Alejandra Cantoral, Maritsa Solano-Gonzalez, Martha-Maria Tellez-Rojo, John D. Meeker*

P3-163* **Occupational pesticide exposure in early pregnancy associated with impaired glycaemic control in adolescents.**
Helle Raun Andersen, Jeanette Tinggaard, Philippe Grandjean, Katharina M Main, Tina K Jensen*

P3-164* **Prenatal exposure to perfluoroalkyl substances (PFASs) and child behavior at 5 and 8 years**
Glenys Webster, Ann Vuong, Aimin Chen, Kimberly Yolton, Gina Muckle, Bruce Lanphear*

P3-166 **2014 Soccer World Cup in São Paulo: effects on air quality and health**
Helena Ribeiro, Samuel Osorio, Sung Kyun Park, João Vicente de Assunção, Adelaide Cássia Nardocci*

P3-167 **Abuse and Mental Health in seven urban cities in Europe**
Jutta Lindert, Mindaugas Stankunas, Gabriella Melchiorre, Francisco Torres-Gonzalez*

P3-168 **Associations between bone lead and bone density in the Nurses Lead Study**
Elissa Wilker, Susan Korrick*

P3-169 **Fine Particulate Matter, Residential Proximity to Major Roads, and Markers of Small Vessel Disease in a Memory Clinic Population**
Elissa Wilker, Sergi Martinez-Ramirez, Itai Kloog, Joel Schwartz, Petros Koutrakis, Elizabeth Mostofsky, Murray Mittleman, Anand Viswanathan*

P3-170 **Housing conditions and limitations in physical function among older adults.**
Esther García-Esquinas, Bibiana Pérez-Hernández, Pilar Guallar-Castillón, José R. Banegas, José Luis Ayuso-Mateos, Fernando Rodríguez-Artalejo*

P3-171 **Is the effect of air pollution on premature skin aging mediated by a local inflammation response in the lung?**
Andrea Vierkötter, Anke Hüls, Sabine Stolz, Dorothee Sugiri, Ursula Krämer, Monika Raulf, Thomas Brüning, Christian Herder, Jean Krutmann, Tamara Schikowski*

P3-172 **Low-level cadmium exposure and atherosclerotic vascular disease in elderly Australian women**
Anna Callan, Kane Deering, Richard Prince, Joshua Lewis, Andrea Hinwood, Amanda Devine*

P3-173 **Multilevel Mixed-Effects Survival Parametric Models: A Study of Cohorts from Brazil, Argentina and Italy of time to event from chronic diseases in elderly people.**
Liciana vaz de Arruda Silveira, María del Pilar Díaz, Alberto Rubén Osella*

P3-174 **Prenatal air pollution predicts newborn telomere length at birth**
Dries S Martens, Michelle Plusquin, Bram G Janssen, Tim S Nawrot*

P3-175 **The association of lead and cadmium exposure with frailty in US older adults.**
Esther García-Esquinas, Ana Navas-Acien, Beatriz Pérez-Gómez, Fernando Rodríguez Artalejo*

P3-176 **Urban heat islands and damage to respiratory health in elderly in a high desert town in northern Chile.**
Sandra Cortés, Cinthya Leiva, Cristián Henríquez*

P3-177 **Urban physical environmental factors that influence mobility and well-being in senior adults (> 70 years), Guadalajara, Jalisco, Mexico.**
*Maria Isabel Magallan-Torres, Maria Guadalupe Garibay-Chavez**

P3-178 **Urinary Co, Mn and Sr concentrations, cardiovascular disease and all-cause mortality in older Australian Women**
Anna Callan, Kane Deering, Richard Prince, Joshua Lewis, Andrea Hinwood, Amanda Devine*

P3-179 **Prenatal exposure to perfluoroalkyl substances (PFASs) and ADHD-related behaviors in 3 year old children**
Glenys Webster, Megan Romano, Gina Muckle, William Fraser, Tye Arbuckle, Jean Séguin, Emmanuel Ouellet, Youssef Oulhote, Joseph Braun, Maryse Bouchard, Nadine Forget-Dubois, Pierre Ayotte, Bruce Lanphear*

P3-180 **A crossover–crossback prospective study of dibutyl-phthalate exposure from mesalamine medications and semen quality**
Feiby Nassan, Brent Coull, Niels Skakkebaek, Michelle Williams, Ramace Dadd, Lidia Mínguez, Stephen Krawetz, Elizabeth Hait, Joshua Korzenik, Alan Moss, Jennifer Ford, Russ Hauser*

P3-181 **Assessment of the endocrine-disrupting effects of short-chain chlorinated paraffins in in vitro models**
Weiping Liu, Quan Zhang*

P3-182 **Association between Phthalates Exposure and Serum Thyroid Hormones, Insulin-Like Growth Factor I in Taiwanese: Taiwan Environmental Survey for Toxicants (TEST) 2013**
Po-Chin Huang, Wei-Yen Liang, Hung-Che Chiang, Han-Bin Huang, Yue-Liang Guo*

P3-183 **Congenital Anomalies of the Male Genitalia and Risk of Autism Spectrum Disorders**
Ran Rotem, Gabriel Chodick, Marc Weisskopf*

P3-184 **Effect of atrazine metabolite, DACT, on sperm mitochondrial function and acrosome reaction - the bovine model**
Alisa Komsky-Elbaz, Zvi Roth*

P3-185 **Environmental exposure to phthalates and DINCH in the adult Spanish population**
*Marta Esteban *, Juan J. Ramos, Holger M. Koch, Argelia Castaño*

P3-186 **Environmental exposure to toxic metals/metalloids and risk of incident loss**
Germaine Buck Louis, Rajeshwari Sundaram, Kurunthachalam Kannan, Zhaohui Lu, Melissa Smarr, Katherine Sapra, Amy Steuerwald, Patrick Parsons*

P3-187 **Exposure to Bisphenol A and DNA methylation in a birth cohort study**
*Mei-Lien Chen**

P3-188 **Exposure to bisphenol S (BPS) and the incidence of type 2 diabetes in a French prospective cohort study**
Fanny Rancière, Beverley Balkau, Rémy Slama, Laurent Debrauwer, Marlène Lacroix, Ronan Roussel, Marie Aline Charles, Jérémie Botton, Dianna Magliano*

P3-189 **Exposure to organophospate contaminants is associated with aberrant DNA methylation at imprinted genes in sperm: results of the TIEGER study**
Adelheid Soubry, Craig M Butt, Steffen Fieuws, Cathrine Hoyo, Stephanie Romanus, Thomas M Price, Susan K Murphy, Heather M Stapleton*

P3-190 **Exposure to phthalates, bisphenol-a, parabens and organophosphates among mother-child pairs**
Euripides G. Stephanou, Myridakis Antonis, Manolis Kogevinas*

P3-191 **Incidence of breast, prostate, testicular and thyroid cancer in Italian contaminated sites with presence of substances with endocrine disrupting properties**
Marta Benedetti, Amerigo Zona, Mario Carere, Pietro comba*

P3-192 **Maternal urinary Triclosan concentration in relation to maternal and neonatal thyroid hormone levels: a prospective study**
Fengxiu Ouyang, Xu Wang, Liping Feng, Zhiwei Liu, Jun Zhang*

P3-193 **Negative synergistic effect of mono-(2-ethylhexyl) phthalate and the absence of estradiol on oocyte developmental competence - the bovine model**
Dorit Kalo, Zvi Roth*

P3-194 **Persistent organic pollutants and thyroid function in mother-child pairs. A multipollutant assessment.**
Vivian Berg, Therese Nøst, Rolf Dagfinn Pettersen, Solrunn Hansen, Anna-Sofia Veyhe, Rolf Jorde, Jon Øyvind Odland, Torkjel Manning Sandanger*

P3-195 **Phthalate Exposure and 15-F2t Isoprostane Concentrations Among Couples Seeking Assisted Reproductive Technologies**
Alexandra Olmsted, David Cantonwine, Haotian Wu, Cynthia Sites, Rahil Tayyab, Shawn Shahsavari, J. Richard Pilsner*

P3-196 **Pilot study of in-utero exposure to phenols and birthweight.**
Assiamira Ferrara, Monique Hedderson, Stacey Alexeeff*

P3-197 **Polybrominated and polychlorinated biphenyls and thyroid function in a cohort of Michigan women.**
Melanie Jacobson, Lyndsey Darrow, Dana Barr, Metrecia Terrell, Michele Marcus*

P3-198 **Prenatal Exposure to Polychlorinated Biphenyls and Fetal Growth in British Girls**
Ethel Taylor, Jill Shah, Andreas Sjodin, Terry Hartman*

P3-199 **Prenatal Phthalates Exposure and its effect on Infant Croup in the Swedish Study**
*Huan Shu, Bo Jönsson, Chris Gennings, Christian Lindh, Åke Svensson, Eewa Nånberg, Tim Takaro, Sverre Wikstrom, Carl-Gustaf Bornehag**

P3-200 **Temporal Trends in Phthalate Exposures in the Swedish pregnancy cohort**
*Huan Shu, Bo Jönsson, Chris Gennings, Christian Lindh, Åke Svensson, Eewa Nånberg, Malin Knutz, Tim Takaro, Carl-Gustaf Bornehag**

P3-201 **Toward a multi-country monitoring system of reproductive health in the context of Endocrine Disrupting Chemical exposure**
*Joëlle Le Moal, Richard Sharpe, Niels Jorgensen, Hagai Levin, Joanna Jurewicz, Jaime Mendiola, Shanna Swan, Helena Virtanen, Sophie Christin-Maitre, Sylvaine Cordier, Jorma Toppari, Wojciech Hanke Hanke , Annabel Rigou**

P3-202 **Urinary Diphenyl Phosphate and Thyroid Function in Adults**
Emma V Preston, Michael D McClean, Claus Henn Birgit, Heather M Stapleton, Lewis E Braverman, Elizabeth N Pearce, Colleen M Makey, Thomas F Webster*

P3-203 **Variability and Predictors of Urinary Concentrations of Replacement Flame Retardants among Pregnant Women**
Megan Romano, Antonia Calafat, Melissa Eliot, Nicola Hawley, Nayana Jayatilaka, Karl Kelsey, Stephen McGarvey, Maureen Phipps, David Savitz, Erika Werner, Joseph Braun*

AREA 3—Occupation, Microbiome & Nutrition

P3-204 **Variability of urinary phenols and phthalate metabolites in school-age children of 5 European countries**
Maribel Casas, Jeroen de Bont, Xavier Basagaña, Cathrine Thompsen, Lise Giorgis-Allemand, Leda Chatzi, Mariza Kampouri, Sarah Lyon-Caen, Regina Grazuleviciene, Cyntia Manzano, Oliver Robinson, Amrit K. Sakhi, Berit Granum, John Wright, Rémy Slama, Martine Vrijheid*

P3-205 **Marine Protected Areas and Human Adult Mortality: Longitudinal Ecological Comparisons with United Nations Data**
Matthew O. Gribble, Lora E. Fleming*

P3-206 **Influence of seasonality on Salmonella concentration and dynamics in wastewater stabilization station**
Ayman Elshayeb, Abdulgadir Elfadil*

P3-207 **After-Shift Musculoskeletal Pain Symptoms and Work-Related Factors: A Cross Sectional Study in a Seafood Processing Company**
Thuy Thi Thu Tran, Quynh Thuy Nguyen, Chinh Thi Thuy Phan, Tuan Cong Pham*

P3-208 **An Outbreak of Artificial Stone Silicosis in Israel—A Call for Worldwide Awareness**
Noam Raanan, Varda Edwards, Luba Pushnoy*

P3-209 **Asbestos: from underrecognized hazards to neverending controversies on health effects. French experiences**
*Annie Thebaud Mony**

P3-210 **Assessing the Effects of Pesticide Exposure on the Auditory System Based on the Suppression of Transient-Evoked Otoacoustic Emissions**
Maria Isabel Kós, Tatiana Garcia, Silvana Frota, Maria de Fátima Miranda, Armando Meyer*

P3-211 **Assessment of an Interactive Toolbox Talk Training on N95 Respirator Mask Use Among Construction Workers**
Alberto Caban-Martinez, Henry Olano, Joshua Sznol, Charles Chen, Kristopher Arheart, David Lee*

P3-212 **Assessment of the oxidative damage in lymphocytes of workers exposed to pesticides and of a control group through the Comet Assay**
Graziana Intranuovo, Nunzia Schiavulli, Chiara Guastadisegno, Elena Viola Buononato, Maria Luisa Congedo, Luigi Vimercati, Pierluigi Cocco, Domenica Cavone, Annamaria Giordano, T. Perrone, Giorgina Specchia, Giuseppe Ingravallo, P. Mazza, Michela Strusi, Caterina Spinosa, Giovanni Maria Ferri*

P3-213 **Association of Multisite Chronic Pain and Worksite-level Factors : Evidence from the (MUSCLE) MUsculoskeletal Study of Construction workers' Longitudinal Exposures**
Alberto Caban-Martinez, Samuel Huntley, April Yang*

P3-214 **Cancer risk associated with occupational, environmental and medical exposure in a cohort of nuclear workers**
Lucie Fournier, Dominique Laurier, Sylvaine Caër-Lorho, Pierre Laroche, Bernard Le Guen, François Pic, Klervi Leuraud*

P3-215 **Elevated Urinary biomarkers KIM-1 and NGAL may predict occurrence of Chronic Interstitial Nephritis (CINAC) in rural Sri Lanka**
P.Mangala C.S De Silva, K.S. Mohammed Abdul, Channa Jayasumana, Sudeera S. Jayasinghe, Sisira Siribaddana, Saman Chandana, H.B. Asanthi*

P3-216 **Emphysema Prevalence and Severity in South African Miners; A Pathology Automation (PATHAUT) Study, 1975 - 2014.**
Sithembile Mabila, Zodwa Ndlovu, Jill Murray, Naseema Vorajee, Robert Cohen*

P3-217 **Environmental and Genetic Determinants of Parkinsonism from a Case-Control Study in Brescia, Italy**
Donatella Placidi, Margherita Caci, Manuela Oppini, Chiara Passeri, Stefano Guazzetti, Cristina Rizzetti, Alessandro Padovani, Loredana Covolo, Umberto Gelatti, Roberto Lucchini*

P3-218 **Epidemiological Survey on workers of Fiumicino Airport after a fire in May 2015**
Federica Asta, Daniela D'Ippoliti, Enrica Santelli, Francesco Forastiere, Manuela De Sario, Orietta Angelosanto, Marcello De Masi, Marina Davoli, Paola Michelozzi*

P3-219 **Exposure to organophosphate (OP) pesticides and health status in workers from Maule, Chile.**
María Teresa Muñoz-Quezada, Boris Lucero, Karen Levy, Verónica Iglesias, María Pía Muñoz, Claudia Cornejo, Eduardo Achú, Carlos Concha, Ana María Brito*

P3-220 **Exposure to pesticides and pulmonary function impairment in a rural population in northwest of Rio de Janeiro State, Brazil**
Rafael Buralli, Helena Ribeiro, Renata Leão, Daniele Silva, Rejane Marques, Jean Remy Guimarães*

P3-221 **Factors that Influence Support and Enforcement of the Smoke-Free Law in Turkey: A Survey of Hospitality Venue Owners and Employees**
Angela Aherrera, Asli Çarkoglu, Mutlu Hayran, Gül Ergör, Toker Egrüder, Bekir Kaplan, Jolie Susan, Laura Zheng, Joanna Cohen, Ana Navas-Acien*

P3-222 **Farm workers' social representations of pesticides risk**
Boris Lucero, Maria Teresa Muñoz-Quezada*

P3-223 **First mortality analysis in the French cohort of uranium millers, period 1968-2012.**
Ségolène BOUET, Eric Samson, Iris Jovanovic, Pierre Laroche, Ana-Paula Serond, Dominique Laurier, Olivier Laurent*

P3-224 **Hypertension prevalence and risk factors in contaminated areas in the region of the estuary of Santos and São Vicente and city of Bertioga, Brazil.**
Tatyana Ribeiro, Daniele Carvalho, Mariana Guimarães, Mônica Lobarinhas, Michele Cunha, Vera Oliveira, Lourdes Martins, Adriana Gomes, Luiz Alberto Pereira, Alfésio Braga*

P3-225 **Level and extent of occupational exposure to formaldehyde in the Italian industrial sectors**
Alberto Scarselli, Marisa Corfiati, Davide Di Marzio*

P3-226 **Lung cancer, renal cell cancer risk with occupational exposures in Korea**
Jong Han Leem, Jung-Keun Ko , Hwan-Cheol Kim*

P3-227 **Neurocognitive Performance and Military Occupation Among Enlisted United States Army Soldiers**
Kathryn Taylor, Kristin Heaton, Caitlin Dillion, Susan Proctor*

P3-228 **Occupational exposure and anemia: population-based study in the Brazilian Amazon**
*Thatiana Amaral, Cledir Amaral, Gina Torres Monteiro**

P3-229 **Occupational exposure to cristobalite and mortality from natural causes**
Sally Picciotto, Ellen A. Eisen*

P3-230 **Occupational exposure to organochlorine insecticides and prostate cancer risk in AGRICAN**
Clémentine LeMarchand, Séverine Tual, Mathilde Boulanger, Noémie Levêque-Morlais, Stéphanie Perrier, Bénédicte Clin, Anne-Valérie Guizard, Michel Velten, Elisabeth Marcotullio, Isabelle Baldi, Pierre Lebailly*

P3-231 **Oxidative stress and lipid peroxidation quantified with M1dG in nasal epithelia workers exposed to formaldehyde**
Roberto Bono, Armelle Munnia, Filippo Cellai, Valeria Romanazzi, Valeria Bellisario, Marco E. M. Peluso*

P3-232 **Pattern of Pesticide Exposure in a Rural Population from the State of Rio de Janeiro**
Maria Isabel Kós, Gesiele Veríssimo, Tatiana Garcia, Armando Meyer*

P3-233 **Quality of indoor working environment from public health and architecture view**
*Anja Jutraz, Nika Jutraz, Karmen Zrnec, Timotej Brecelj, Andreja Kukec**

P3-234 **Radiation protection and long-term health management of workers after the Fukushima Daiichi nuclear power plant accident**
Naoki Kunugita, Tsutomu SHIMURA, Ichiro Yamaguchi*

P3-235 **Staphylococcus aureus exposure and diminished lung function in industrial hog workers in North Carolina**
Vanessa Coffman, Nora Pisanic, Meghan Davis, David C. Love, Christopher D. Heaney*

P3-236 **The Establishment of a National Occupational Registry in Israel**
Rachel Raanan, Luba Pushnoy , Miriam Klebanov, Michael Maiman, Eli Rosenberg*, Ahmad Kabaha, Avital Stark, Tamy Shohat*

P3-237 **The relationship between job stress and body weight and obesity: A Six-Year Longitudinal Study**
Moonhee Chang, Kyoungho Lee, Soo-Hun Cho*

P3-238 **The state of stress, anxiety and depression in nurses and its relation to workload and work relationship, a story in one Vietnamese Hospital**
*Thuy Thi Thu Tran**

P3-239 **Usefulness of two indexes to assess the occupational exposure to pesticide and their association with perceived health and effect biomarkers. Córdoba, Argentina.**
Ricardo Fernandez, Iohanna Filippi, Daniel Lerda, Mariana Butinof, Maria del Pilar Díaz*

P3-240 **Welding fume and heart rate variability among shipyard workers**
*Hsiao-Chi Chuang, Chih-Hong Pan, Kai-Jen Chuang**

P3-241 **Worker's health in the greenhouse environment: a systematic review of exposure to organophosphate and *carbamate pesticides***
Sabrina Gravel, France Labrèche, Maryse Bouchard*

P3-242 **Epidemiology of Pesticide Ingestions in Australia 2001-2014**
Nicholas Osborne, Rose Cairns, Andrew Dawson, Nancy Briggs, Nicholas Buckley*

HIGHLIGHTED POSTERS (P3-243—P3-248)

P3-243* **Counteracting associations of dietary polychlorinated biphenyls and omega-3 fatty acids with stroke risk**
Agneta Åkesson, Maria Kippler, Susanna Larsson, Marika Berglund, Anders Glynn, Alicja Wolk*

P3-244* **Co-benefits for climate and public health within ClimBHealth: 1. Assessment of air pollutants**
Hanns Moshammer, Willi Haas, Ulli Weisz, Christian Lauk, Karl Steininger, Brigitte Wolkinger, Robert Griebler, Peter Nowak, Charlotte Klein, Jennifer Delcour, Michaela Theurl, Christian Kurz, Cem Ekmekcioglu, Peter Wallner, Michael Kundi, Hans-Peter Hutter*

P3-245* **Bacterial load from saliva and gingival samples and associations with oral health**
Randi Bertelsen, Tamar Ringel-Kulka, Jeff Roach, Antonio Pérez, Andrea Azcarate-Peril, Francisco G. Real, Cecilie Svanes*

P3-246* **The beach bum survey: investigating the association between surfing and faecal carriage of antibiotic resistant bacteria**
Anne Leonard, Ruth Garside, Obioha Ukoumunne, William Gaze*

P3-247* **Air exposure as a possible route for ESBL in pig farmers**
Wietske Dohmen, Heike Schmitt, Dik Mevius, Marc Bonten, Dick Heederik*

P3-248* **Occupational Pesticide Use and Parkinson's Disease in Central California**
Shilpa Narayan, Zeyan Liew, Jeff M Bronstein, Beate Ritz*

P3-249 **Assessing the Food Safety and Hyienic Practices of Street Food Vendors in south Western Nigeria**
*Chidinma Okoroha**

P3-250 **Behavioral Intervention Decreases Daily Melamine Exposure from Melamine Tableware**
*Ming-Tsang Wu**

P3-251 **Drought, Conflict, and Child Wasting in Ethiopia: Bayesian Meta-analysis of 231 Small Scale Surveys from 2000–2013**
Tefera Delbiso, Debarati Guha-Sapir*

P3-252 **Emerging Risks of Genetically Modified Foods**
*Firdu Zawide**

P3-253 **Health Effects of Low Water Footprint Diets in India**
James Milner, Edward Joy, Rosemary Green, Francesca Harris, Sutapa Agrawal, Andy Haines, Alan D. Dangour*

P3-254 **Household Crop Harvest and Children's Nutritional Status in Rural Burkina Faso**
Kristine Belesova, Antonio Gasparrini, Rainer Sauerborn, Ali Sie, Paul Wilkinson*

P3-255 **Involuntary exposure to pharmaceuticals via consumption of produce irrigated with reclaimed wastewater**
Ora Paltiel, Ganna Fedorova, Galit Tadmor, Geffen Kleinstern, Yehoshua Maor, Benny Chefetz*

P3-256 **Measuring the Nutritional Transition in Madre de Dios Peru**
Beth Feingold, Ahlam Abuawad, Stacy Pettigrew, Anthony Saxton, Ernesto Ortiz, Axel Berky, William Pan*

P3-257 **NUTRICLIM: The relationship between climate and childhood malnutrition, an exploratory study in Burkina Faso**
Raïssa Sorgho, Revati Phalkey, Frank Jonas, Rainer Saeurborn*

P3-258 **Prenatal nutrition and 4-year-old McCarthy Scores**
Chris Gennings, Manuela Orjuela, Alejandra Cantoral, Katherine Svensson, Megan Horton, Lourdes Schnaas, Sandra Martinez Medina, Ivan Pantic, Andrea Baccarelli, David Bellinger, Robert Wright, Martha M Tellez-Rojo*

P3-259 **Relation of Dietary Patterns to Bone and Blood Lead Levels in the Normative Aging Study**
Xin Wang, Ning Ding, Marc Weisskopf, David Sparrow, Howard Hu, Sung Kyun Park*

P3-260 **Study on the effect of climate change on feeding of Persian sturgeon (Acipenser persicus Bordin,1987) in coastal zone of Caspian Sea (Iranian water)**
*Kourosh Haddadi Moghaddam**

P3-261 **Synergistic effect of environmental factors on risk of prostate cancer in Argentina: occupational and dietary exposure interaction**
*Camila Niclis, María Dolores Román, Julia Becaria Coquet, Sonia Edith Muñoz, María del Pilar Díaz**

P3-262 **The Impact of Organic Diet on Antioxidant Capacity and Biomarkers of Inflammation and Oxidative Stress**
Corina Konstantinou, Stephanie Gaengler, Konstantinos Makris*

P3-263 **A health economic approach to promote active travel – does it work and what can we do better?**
Sonja Kahlmeier, Nick Cavill, Christian Schweizer, Francesca Racioppi, Randy Rzewnicki, Harry Rutter*

P3-264 **Ambient air pollution and years of life lost in Ningbo, China**
Tianfeng He, Zuyao Yang, Xiaohong Fu, Yuelun Zhang, Chen Mao, Guozhang Xu, Jing-Ling Tang*

P3-265 **Co-benefits for climate and public health within ClimBHealth: 2. Assessment of physical activity**
Hanns Moshammer, Willi Haas, Ulli Weisz, Christian Lauk, Karl Steininger, Brigitte Wolkinger, Robert Griebler, Peter Nowak, Charlotte Klein, Jennifer Delcour, Michaela Theurl, Christian Kurz, Cem Ekmekcioglu, Peter Wallner, Michael Kundi, Hans-Peter Hutter*

P3-266 **Co-benefits for climate and public health within ClimBHealth: 3. Assessment of meat reduction**
Hanns Moshammer, Willi Haas, Ulli Weisz, Christian Lauk, Brigitte Wolkinger, Robert Griebler, Peter Nowak, Charlotte Klein, Jennifer Delcour, Michaela Theurl, Christian Kurz, Cem Ekmekcioglu, Peter Wallner, Michael Kundi, Hans-Peter Hutter*

P3-267 **Comprehensive Health Impact Assessment for Active Travel: the**
David Rojas-Rueda, Mark Nieuwenhuijsen, Natalie Mueller, Elisabeth Raser, Regine Gerike, Audrey de Nazelle, Anna Clark, Annika Nilsson, Carsten Rothballer, Christian Brand, Christian Schweizer, Francesca Racioppi, Evi Dons, Jurgen Buekers, Luc Int Panis, Sandra Wegener, Sonja Kahlmeier, Thomas Goetschi*

P3-268 **Effect of the September 2009 Sumatra earthquake on health impact facilities in the city of Padang, Indonesia: a one-half year post-quake assessment**
*Defriman Djafri**

P3-269 **Generation of exposure response relationships for short term health effects related to urban air pollution**
Priscilla Johnson, Sheela Ravinder, Santu Ghosh, Padmavathi Ramasamy, Kalpana Balakrishnan*

P3-270 **Impact of climate and emission change on ozone induced mortality in Europe with combining effect of heat**
Hans Orru, Camilla Andersson, Christofer Åström, Tanel Tamm, Kristie Ebi, Bertil Forsberg*

P3-271 **Pioneering mobile data capture: using mobile phones in the post event coverage survey of vitamin A supplementation and measles immunisation in Sierra Leone, May 2012**
Habib Issa Kamara, Mary H. Hodges, Mohamed Turay*

P3-272 **The Scope and Magnitude of the Public Burden from PM2.5 between 1980 and 2010 in the Contiguous U.S.**
Neal Fann, Sun-Young Kim, Lianne Sheppard*

P3-273 **Developing Malaria Susceptibility Area in Sabah, Malaysia using Spatial Analysis**
Siti Aisah Mokhtar, Jamal HIsham Hashim, Farrah Melissa Muharam, Rozita Hod, Ummi Kalthom Shamsudin*

P3-274 **The Public Health Consequences of Hygenically Clean**
*David F Goldsmith**

P3-275 **Risks and Policies Focused on Hospital Infections and Contaminated Textiles**
David F Goldsmith, Dirk Hoefer*, Kwok-Yung Yuen*, M.P. Muller**

P3-276 **Survey of dermatophytes on the haircoat of free-ranging golden-headed lion tamarins (Leontopithecus chrysomelas)**
Juan Justino A. Neves, Adriano Pereeira, Marina Galvao Bueno, Jose Luiz Catao-Dias, Camila Molina, Maria Cecilia M Kierulff, Alcides Pissinatti, Selene Dall' Acqua Coutinho*

P3-277 **Environmental occurrence of microsporidia in water sources: a necessity of development a standard detection method**
Adriano Pereira, Ronalda Silva Araújo, Maria Anete Lallo*

P3-278 **The seasonality and effects of temperature and rainfall on Campylobacter infections**
Gordon Nichols , Lora Fleming, Gianni Lo Iacono, Christophe Sarran, Anthony Kessel , Richard Elson , Iain Lake, Trevor Bailey, Sari Kovats , Felipe J Colon-Gonzalez , Chris Lane , Jan Semenza, Christophe Höser*

AREA 4—Air Pollution, Cancer & Disasters

P3-279 **Use of ventilation as a control banding tool in quantifying exposure concentration of particulates in biomass using rural kitchens of South India– a pilot study**
*Krishnendu Mukhopadhyay**

P3-280 **Asthma Symptoms among Children 7 Years after the Hebei Spirit Oil Spill**
Jung-Ah Kim, Myung-Sook Park, Yeonhee Chu, Seung-Hwa Lee, Young-Hyun Choi, Mina Ha, Hae-Kwan Cheong*

P3-281 **Respiratory Sympthoms in Childhood associated to a tire fire in Bogotá D. C. 2014.**
David Mauricio Muñoz, Jhon Jairo Abella, Monica Montaña, ivan Miranda, Rodrigo Sarmiento, Samuel Osorio*

P3-282 **Environmental Epidemiology and Population Engagement: the Manfredonia Environment and Health Project**
Annibale Biggeri, Rosa Porcu, Emilio Antonio Luca Gianicolo, Bruna De Marchi, Antonella Bruni, Cristina Mangia, Marco Cervino, Maria Angela Vigotti, Manfredonia Environment and Health Project Collaborative Group*

P3-283 Air pollutant emissions patterns by cooking fuel type among Sri Lankan households
Sumal nandasena, Nalini Sathiakumar, Rod Larson, Anuradhini Kasturiratne, Meghan Tipre, Udaya Wimalasiri, Rajitha Wickreme Singhe*

P3-284 **Air Pollution and Cardiorespiratory Mortality in São Paulo, Brazil – a times series study**
Simone Miraglia, Karina Abe*

P3-285 **Air pollution exposures among pregnant women in a United States - Mexico border town**
Kirsten Koehler, Ana Rule, Natalie Johnson, Jairus Pulczinski, Josias Zietsman, Suriya Vallamsundar*

P3-286 **An Assessment of enhanced personal exposure monitoring among children using the Ghana Randomised Air Pollution and Health Study (GRAPHS) Platform**
Kwaku Poku Asante, Darby Jack, Kenneth Ae-Ngibise Ayuurebobi, Ellen Abrafi Boamah, Mohammed Mujtaba, Ashlinn Quinn, Kaali Syram1, Ryan Chartier, Patrick Kinney, Seth Owusu-Agyei, Steven Chillrud*

P3-287 **Approaching personal exposure assessment at population scale: The Holy Grail is not made of gold**
John Volckens, Casey Quinn, David Leith, John Mehaffy, Charles Henry, Daniel Miller-Lionberg*

P3-288 **Assessing Exposure to Ambient Fine Particulate Matter Based on Digital Imagery**
Tamar Yacobi, Yael Etzion, Rohan Jayaratne, Md Mahmudur Rahman, Lidia Morawska, Barak Fishbain*

P3-289 **Assessing personal exposure to traffic air pollution - traffic map and mobile phone tracking technologies**
Hai-Ying Liu, Erik Skjetne*

P3-290 **Association between PM_{10} and mortality at municipalities' level in Slovenia: ecological spatial study (LIFE MED HISS LIFE12 ENV/IT/000834)**
Andreja Kukec, Simona Percic, Ivan Erzen, Lijana Zaletel-Kragelj, Peter Otorepec, Ennio Cadum, Xavier Basagaña*

P3-291 **Associations between ambient fine and coarse particles and mortality in major cities of Korea**
Tae Young Kim, Jongbae Heo*

P3-292 **Effects of exposure to indoor air pollution due to biomass fuel combustion on birth outcomes: a prospective birth cohort study**
Rajitha Wickreme Singhe, Sumal nandasena, Anuradhini Kasturiratne, Arunasalem Pathmeswaran, Meghan Tipre, Claudiu Lungu, Nalini Sathiakumar*

P3-293 **Exposure to ultrafine particles in outdoor air pollution and effects on respiratory diseases: a time trend study in Ljubljana municipality Slovenia**
*An Galicic, Natalija Kranjec, Peter Otorepec, Ivan Erzen, Andreja Kukec**

P3-294 **Fine Particulate Matter in Beijing: Sources and Health Impacts**
Mei Zheng, Xiaoying Li, Yanjun Zhang, Caiqing Yan*

P3-295 **Improvements in an Urban Ultrafine Particle Model by Accounting for Secondary Particle Formation**
Matthew Simon, Alex Bob, Allison Patton, Doug Brugge, John Durant*

P3-296 **Improving exposure assessment of bioaerosol emissions from composting: Dispersion model tests**
Philippa Douglas, Anna Hansell, Rob Kinnerlsey, Michael Whelan, Kerry Walsh, Phil Longhurst, Simon Pollard, Sean Tyrrel, Gill Drew*

P3-297 **Is Air Pollution Associated with Emergency Hospitalizations for Peptic Ulcer Diseases? A Case-Crossover Analysis in Hong Kong**
Jinjun Ran, Hong Qiu, Shengzhi Sun, Robert Tang, Linwei Tian*

P3-298 **Lessons Learned from Land Use Regression Modelling in an Industrialised region in a developing country**
Sheena Muttoo, Rajen N. Naidoo, Kees Meliefste, Rob Beelen, Lisa Ramsay*

P3-299 **Modelling population exposure to arsenic release during the chemical accident occurred at Manfredonia (Italy) in 1976**
Cristina Mangia, Marco Cervino, Antonella Bruni, Emilio Antonio Luca Gianicolo, Giuseppe Delle Noci*

P3-300 **Multi Spectral Methods for Inferring Toxic Chemicals and Sources from PM2.5 Filter Samples**
*Judith Chow**

P3-301 **Personal and public perception of air quality in eight European cities: the CITI-SENSE Citizens' Observatory Toolbox**
Tom Cole-Hunter, Leonardo Santiago, Alexander Arpaci, David Broday, Nuria Castell, Karen Galea, Milena Jovasevic-Stojanovic, Tania Martinez, Johanna Robinson, Vlasta Svecova, Hans Keune, Fintan Hurley, Hai-Ying Liu, Arne Berre, Mark Nieuwenhuijsen, Alena Bartonova*

P3-302 **Personal measurement of exposure to black carbon and ultrafine particles in French schoolchildren**
*Alexandra-Cristina PAUNESCU, Isabelle MOMAS**

P3-303 **PM_{10} and Congestive Heart Failure in São Paulo city: effects modifiers by sex and age group**
Ysabely de Aguiar Pontes Pamplona, Daneiel Alberto Pamplona*, Luiz Belino Ferreira Sales, Janara de Camargo Matos*, Beatriz Berenchtein Bento de Oliveira*, Luiz Alberto Amador Pereira, Marcos Abdo Arbex, Alfésio Luís Ferreira Braga, Lourdes Conceição Martins**

P3-304 **Pollutant data mapping at municipality level within the European Project LIFE MED HISS - LIFE12 ENV/IT/000834**
Martina Gandini, Stefania Ghigo, Stefano Bande, Giovanna Berti, Ennio Cadum, Luisella Ciancarella, Mihaela Mircea, Antonio Piersanti, Gaia Righini, Gabriele Zanini, Xavier Basagaña, David Agis*

P3-305 **Population-weighted exposure indicator for entire population, quantification of health effects attributable to PM -exposure**
Dagmar Kallweit, Dirk Wintermeyer, Andreas Kerschbaumer Kerschbaumer*

P3-307 **Relation between Sulphur Dioxide and Congestive Heart Failure admissions in São Paulo city stratified by sex and age groups**
Ysabely de Aguiar Pontes Pamplona, Daneiel Alberto Pamplona*, Beatriz Berenchtein Bento de Oliveira Oliveira*, Janara de Camargo Matos*, Luiz Alberto Amador Pereira*, Marcos Abdo Arbex*, Alfésio Luís Ferreira Braga*, Lourdes Conceição Martins**

P3-308 **Retrospective exposure assessment to air pollution from power plants emissions in the Brindisi area**
Roberto Giua, Angela Morabito, Annalisa Tanzarella, Tiziano Pastore, Ilenia Schipa, Francesca Intini, Alessandra Nocioni, Stefano Spagnolo, Giorgio Assennato, Francesco Forastiere, Carla Ancona, Lucia Bisceglia*

P3-309 **Spatio-temporal mapping of the $PM_{2.5}$/PM_{10} ratio in France**
Fouad Amrani, Cara Henson-Maesano, Isabella Annesi-Maesano*

P3-311 **Understanding variations in the PM2.5/PM_{10} ratio using dispersion model estimates in France**
Cara Nichole Maesano, Fouad Amrani, Isabella Annesi-Maesano*

P3-312 **Using multiple imputation to treat missingness in air pollution time series**
Michela Baccini, Simone Giannini, Andrea Ranzi*

HIGHLIGHTED POSTERS (P3-313—P3-321)

P3-313* **Urinary cadmium and breast cancer: a prospective Danish cohort study**
Kirsten Thorup Eriksen, Jane A. McElroy, James Harrington, Keith E. Levine, Camilla Pedersen, Mette Sørensen, Anne Tjønneland, Jaymie R. Meliker, Ole Raaschou-Nielsen*

P3-314* **Coal mine fire smoke exposure associated with increased ambulance attendances for cardiac and respiratory conditions in the Latrobe Valley, Australia**
Lahn Straney, Martine Dennekamp, Fay Johnston, Tom O'Dwyer, Malcolm Sim, Karen Smith, Rory Wolfe, Michael Abramson*

P3-315* **Cohort study of the population exposed to dioxin after the Seveso, Italy accident: Mortality results, 1976-2013**
Dario Consonni, Angela Cecilia Pesatori, Luca Cavalieri D'Oro, Magda Rognoni, Pier Alberto Bertazzi*

P3-316* **Epigenome-wide association study of in utero and early life exposure to particulate matter**
Michelle Plusquin, Florence Guida, Rossella Alfano, Gianluca Campanella, Paul Elliott, John Gulliver, Kevin Garwood, John Henderson, Tim Nawrot, Marc Chadeau-Hyam, Paolo Vineis*

P3-317* **Long-term exposure to Ambient Air Pollution and Incidence of Lung Cancer: The Danish Nurse Cohort.**
*Jeanette Therming Jørgensen *, Line Ravnskjær, Klaus Kaae Andersen, Elvira Vaclavik Bräuner, Steffen Loft, Matthias Ketzel, Thomas Becker, Jørgen Brandt, Ole Hertel, Zorana Jovanovic Andersen*

P3-318* **Exposome of Refinery and Coal-Fired Power Plant Emissions**
Chi-Hsin Chen, Tzu-Hsuen Yuan, Ming-Kei Chung, Ruei-Hao Shie, Kuen-Yuh Wu, Chang-Chuan Chan*

P3-319* **Ambient air pollution and climate change in Latin America and the Caribbean**
Horacio Riojas-Rodríguez, Agnes Soares da Silva, José Luis Texcalac-Sangrador , Grea Litai-Banda*

P3-320* **Assessing exposure to household air pollution: A systematic review and meta-analysis of carbon monoxide as a surrogate measure of particulate matter**
Christina Norris, Ellison M. Carter, Kathie L. Dionisio, Kalpana Balakrishnan, William Checkley, Steven N. Chillrud, Santu Ghosh, Darby W. Jack, Patrick L. Kinney, Luke P. Naeher, Sankar Sambandam, James J. Schauer, Blair J. Wylie, Jill Baumgartner*

P3-321* **Water Crisis, Management and Risk of Adverse Pregnancy outcomes in Rural India**
Nidhi Jain, Kabir Pal*

P3-322 **Assessing the potential link between chemical exposures from unconventional oil and gas development and risk of childhood leukemia**
Elise Elliott, Pauline Trinh, Xiaomei Ma, Brian Leaderer, Mary Ward, Nicole Deziel*

P3-323 **Brain tumor and environmental risk factors in young people- A literature review**
Angela Zumel, Elisa Pasqual, Gemma Castaño-Vinyals, Juan Alguacil, Elisabeth Cardis*

P3-324 **Cancer incidence in the territories around an oil refinery (Gela, Sicily)**
Carmela Nicita, Giuseppe Cascone, Graziella Frasca, Caterina Martorana, Eugenia Spata, Rosario Tumino*

P3-325 **Cancer risks and toxic chemicals release in non-urban area, Gimpo, Korea**
Jung-Keun KO, Jong-Han Leem, Hwan-Cheol Kim, Dirga Kumar Lamichhane*

P3-326 **Exploring regional patterns of childhood cancer diversity in Alberta, Canada.**
Jesus Serrano-Lomelin, Charlene Nielsen, Irena Buka, Paul Villeneuve, Alvaro Osornio-Vargas*

P3-327 **Light at night exposure and breast cancer risk in England**
Susan Hodgson, Anna Freni Sterrantino , Alianore Descours, John Gulliver, Daniela Fecht*

P3-328 **Long term exposure to particulate matter and female lung cancer mortality in selected Italian province capital cities**
*Raffaella Uccelli, Marina Mastrantonio, Pierluigi Altavista, Emanuela Caiaffa, Giorgio Cattani, Pietro Comba**

P3-329 **Long-term residential exposure to air pollution and lung cancer in Korea**
Hwan-Cheol Kim, Dirga Kumar Lamichhane, Dal-Young Jung, Jong-Han Leem*

P3-330 **Mortality Risk in High Environmental Risk Areas: A Cohort Study in a Southern Italy Municipality**
Enrica Santelli, Enrica Lapucci, Daniela D'Ippoliti, Simone Bucci, Francesco Forastiere, Sebastiano Pollina Addario, Salvatore Scondotto, Marina Davoli, Paola Michelozzi*

P3-331 **Organochlorine levels in plasma and risk of multiple myeloma**
John Spinelli, Zenaida Abanto, Alain LeBlanc, Agnes Lai, Heather Sutherland, Kevin Song*

P3-332 **Outdoor air pollution and risk for kidney parenchyma cancer in 14 European cohorts**
Ole Raaschou-Nielsen, Marie Pedersen, Andrei Pyko, Bente Oftedal, Johan Sommar, Mette Sørensen, Andrea Jaensch, Fulvio Ricceri, Michelle Plusquin, Sara Grioni, Ibon Tamayo, Massimo Stafoggia, Gerard Hoek*

P3-333 **Roadway Proximity and Lung Cancer in Participants of the NIH-AARP Cohort in California**
Rena Jones, Roel Vermeulen, Gerard Hoek, Neal Freedman, Rashmi Sinha, Linda Liao, Sina Hasheminassab, Dongbin Wang, Constantinos Sioutas, Mary Ward, Debra Silverman*

P3-334 **Shared risk modeling of non-Hodgkin lymphoma subtypes and UVR exposure**
David Wheeler, Anny-Claude Joseph, Elizabeth Khaykin Cahoon*

P3-335 **Social security archives to improve cohort environmental studies with record linkage procedures.**
*Stefania Massari *, Lisa Bauleo , Carla Ancona, Alessandra Binazzi, Luca Taiano , Francesco Forastiere, Alessandro Marinaccio*

P3-336 **Tobacco Smoking and Prostate Cancer Mortality in Four US States, 1999-2010**
Miranda Jones, Corinne Joshu, Norma Kanarek, Ana Navas-Acien, Kelly Richardson, Elizabeth Platz*

P3-337 **Associations between the levels of heavy metals and renal function in Hebei Spirit oil spill area Taean, Korea**
Myung-Sook Park, Seung-Hwa Lee, Yeonhee Chu, Jung-Ah Kim, Young-Hyun Choi, Mina Ha, Hae-Kwan Cheong*

P3-339 **High impact of flooding on mental health outcomes: a cohort study in response to the 2013/14 floods in England**
Daiga Jermacane, Thomas David Waite, Katerina Chaintarli1, Charles R Beck, Angie Bone, Richard Amlôt, Sari Kovats, Ben Armstrong, Giovanni Leonardi, Isabel Oliver*

P3-340 **Improving Disaster Research Response to Better Understand Human Health Impacts**
Richard Kwok, Aubrey Miller, J. Chip Hughes, Steven Ramsey*

P3-341 **Malignant Mesothelioma in Aboriginal people in Western Australia**
Peter Franklin, Alison Reid, Susan Peters, Fraser Brims, Nicholas de Klerk, Nola Olsen, Arthur W (Bill) Musk*

P3-342 **Persistently High All Cause Morbidities in the Exposed Survivors Following 1984 Industrial Gas Disaster in Bhopal**
Sushi Singh, Nalok Banerjee, K.K. Soni, Roma Galgalekar, Moina Sharma*

P3-343 **Pleural thickening in a population environmentally exposed to amphibole asbestos as children**
Curtis Noonan, Jaime Szeinuk, Claudia Henschke, Jean Pfau, Brad Black, Albert Miller, David Yankelevitz, Rowena Yip, Laura Linker, Tracy McNew, Raja Flores*

P3-344 **Prevalence of Diabetes Mellitus in the Seveso (Lombardy) Cohort: Diabetes results, 2006-2014**
*Luca Cavalieri d'Oro *, Magda Rognoni, Dario Consonni, Angela Cecilia Pesatori, Pier Alberto Bertazzi*

P3-345 **Reliability of lung function parameters in determining small airways dysfunction 7-9 years after a high-concentration chlorine gas exposure**
Kathleen Clark, Pallavi Balte, Lawrence Mohr, Wilfried Karmaus, Bo Cai, Dennis Ownby, John Vena, James Gibson, Svendsen Erik*

P3-346 **Tuberculosis relapse in the aftermath of natural disaster**
*Anna-Meagan Fairley**

P3-347 **Corruptio Optimi Pessima: Ethical Challenges to Environmental Epidemiologists Posed by Chemical Warfare**
*Elihu D Richter**

P3-348 **How does smoking-related profile of the population influence the effectiveness of smoke-free laws? A nation wide study in Switzerland**
Ana M Vicedo-Cabrera, Christian Schindler, Dragrana Radovanovic, Fabienne Witassek, Leticia Grize, Martin Röösli, Laura Perez*

AREA 5—Exposome & Epigenetics

P3-349 **Does residential mobility in pregnancy influence estimated effects of particulate matter on adverse birth out comes?**
Gavin Pereira, Michael B. Bracken, Michelle L. Bell*

P3-350 **Cohort study of the population exposed to dioxin after the Seveso, Italy accident: Cancer incidence results, 1977-2012**
Angela Cecilia Pesatori, Dario Consonni, Raquel Cacace, Raffaella Sindaco, Luca Cavalieri D'Oro, Magda Rognoni, Pier Alberto Bertazzi*

P3-351 **Six minute walk test in millworkers exposed to high concentration chlorine gas**
Pallavi Balte, Kathleen Clark, Bo Cai, Lawrence Mohr, Wilfried Karmaus, Dennis Ownby, John Vena, James Gibson, Erik Svendsen*

P3-352 **Ambient Polycyclic Aromatic Hydrocarbons, Gene Expression, DNA Methylation, and Childhood Asthma**
Hyunok Choi, Wonmin Song, Radim Sram, Bin Zhang*

P3-353 **Genome-wide DNA methylation and Organophosphate pesticide exposure in Central California Parkinson's disease patients and healthy controls**
Kimberly Paul, Steve Horvath, Beate Ritz, Myles Cockburn, Jeff Bronstein*

P3-354 **Multi-Omics Markers of Smoking-Induced Lung Cancer Screening and Risk**
Florence Guida, Therese Nost, Gianluca Campanella, Michelle Plusquin, Mattias Johansson, Torkjel Sandanger , Roel Vermeulen, Paolo Vineis, Marc Chadeau-Hyam*

P3-355 **A differential isotope labelling approach to quantifying a large fraction of the human exposome: A focus on chemicals of high concern**
Parinya Panuwet, David Achaintre, Liang Li, Augustin Scalbert*

P3-356 **Development of metabolomic indicators of exposure to primary traffic for use in air pollution epidemiologic modeling**
Donghai Liang, Rachel Golan, Jennifer Moutinho, Tianwei Yu, Chandresh Ladva, Roby Greenwald, Rodney Weber, Stefanie Sarnat, Armistead Russell, Vishal Verma, Dean Jones, Jeremy Sarnat*

P3-357 **Exposome-Explorer: a manually-curated database on biomarkers of exposure to dietary and environmental factors**
Augustin Scalbert, Vanessa Neveu, Craig Knox, David Wishart*

P3-358 **Adult and child urinary 2,4-D in cities with and without cosmetic pesticide bylaws: a population-based cross-sectional pilot study**
Scott Venners, Neda Koshnood, Matthew Jeronimo, Aaron Sobkowicz, Philip Provencher, Guanting Tang, Winnie Chu, Ray Copes*

P3-359 **Algorithms for the estimation of occupational pesticide exposure in the Green Belt of Cordoba City, Argentina**
German Franchini, Ricardo Fernandez, Marcelo Blanco, Maria del Pilar Diaz, Mariana Butinof*

P3-360 **An objective assessment of travel-activity behavior using smartphone technology**
David Donaire-Gonzalez, Antònia Valentín, Audrey de Nazelle, Albert Ambros, Edmund Seto, Glòria Carrasco , Michael Jerrett, Mark J Nieuwenhuijsen*

P3-361 **Assessing exposure to unconventional gas development and its association with preterm birth in the Barnett Shale, Texas**
Kristina Whitworth, Amanda Marshall, Elaine Symanski*

P3-362 **Developing an Environmental Public Health Surveillance System for England**
Tayo Owodunni, Rebecca Close, Umair Muhammad, Bevan Loon, Behrooz Behbod, Helen Crabbe, Jill Meara, Isabel Oliver, Robie Kamanyire, Julia Verne, Giovanni Leonardi*

P3-363 **Distribution of perfluorinated alkylated substances (PFAS) in blood compartments during prenatal exposure**
Flemming Nielsen, Pal Weihe, Philippe Grandjean*

P3-364 **Empirical validation of a within-subject pooling approach to improve accuracy of estimation of exposure to biomarkers with strong temporal variations**
Celine Vernet, Claire Philippat, Valerie Siroux, Sarah Lyon-Caen, Isabelle Pin, Philippe Lorimier, Antonia Calafat, Xiaoyun Ye, Enrique Schisterman, Remy Slama*

P3-365 **Evaluation of an intervention program on manganese exposure in a mining zone in Mexico**
Horacio Riojas-Rodríguez, Marlene Cortez-Lugo, Hortensia Moreno-Macias, Sandra Rodríguez-Dozal, David Hernández-Bonilla, Sergio Montes*

P3-366 **Development of a microsimulation model of mortality and morbidity impacts due to air pollution in England**
Philip Symonds, Roberto Picetti, Emma Hutchinson, Zaid Chalabi, Paul Wilkinson, Micheal Davies*

P3-367 **Environmental health surveillance in the areas near large electoronic industrial complex in Korea**
Geun-Bae Kim, Bo-Eun Lee, Kang Tack shin*

P3-368 **Protecting children against air pollution threats in Romania's urban areas – The RokidAIR approach**
Hai-Ying Liu, Stefania Iordache, Mihaela Oprea, Daniel Dunea*

P3-369 **MicroRNA expression profiles in placenta and birth outcomes in a prospective birth cohort in Bangladesh**
Mohammad Rahman, Russ Hauser, Liming Liang, Andrea Baccarelli, Golam Mostofa, Quazi Quamruzzaman, David Christiani*

P3-370 **Surveillance of Multiple Congenital Anomalies in Italian Contaminated Sites**
Michele Santoro, Fabrizio Minichilli, Anna Pierini, Gianni Astolfi, Lucia Bisceglia, Gabriella Dardanoni, Ivano Iavarone, Paolo Ricci, Gioacchino Scarano, Fabrizio Bianchi*

P3-371 **An algorithm for quantitatively estimating non-occupational pesticide exposure intensity for spouses in the Agricultural Health Study**
Nicole Deziel, Laura Beane Freeman, Jane Hoppin, Kent Thomas, Catherine Lerro, Rena Jones, Aaron Blair, Barry Graubard, Jay Lubin, Dale Sandler, Honglei Chen, Gabriella Andreotti, Michael Alavanja, Melissa Friesen*

P3-372 **Adverse health effects attributed to wind turbines: Have we been missing important co-exposures?**
Victoria Blanes-Vidal, Joel Schwartz*

P3-373 **An objective assessment of the transport mode chosen using smartphone technology**
David Donaire-Gonzalez, Antònia Valentín , Audrey de Nazelle , Edmund Seto, Albert Ambros, Glòria Carrasco , Michael Jerrett , Mark J Nieuwenhuijsen*

P3-374 **Animal biomonitoring in environmental risk assessment: application of good practices**
Paola Scaramozzino, Sabrina Battisti, Giuseppe Ru, Rosanna Desiato, Marco Tamba, Giorgio Fedrizzi*

P3-375 **Associations between unconventional natural gas development, respiratory symptoms, and mental health in Pennsylvania**
Sara Rasmussen, Annemarie Hirsch, Meredith McCormack , Brian S. Schwartz*

P3-376 **Compliance with the proper use of an individual radiation dosimeter among children and the effects of improper use on the measured dose: a retrospective study 18 to 20 months following Japan's 2011 Fukushima nuclear incident**
Shuhei Nomura, Masaharu Tsubokura, Ryugo Hayano, Daisuke Yoneoka, Akihito Ozaki, Yuki Shimada, Tomoyuki Furutani, Yukio Kanazawa, Tomoyoshi Oikawa*

P3-377 **Diverging temporal trends of perfluoroalkyl acids (PFAAs) in primiparous women from Uppsala 1997-2014**
Anders Glynn, Jonathan Benskin, Irina Gyllenhammar, Oskar Sandblom, Per Ola Darnerud, Urs Berger, Sanna Lignell*

P3-378 **Environmental Exposure to Cadmium: Health Risk Assessment and its Associations with Hypertension and Impaired Kidney Function**
*Lei Huang**

P3-379 **Evaluation of secondhand smoke exposure in taxi cabs in Turkey**
Angela Aherrera, Walla Alfaraj, Hoda Magid, Asli Çarkoglu, Gül Ergör, Mutlu Hayran, Toker Egrüder, Bekir Kaplan, Jonathan Pollak, Jolie Susan, Joanna Cohen, Ana Navas-Acien*

P3-380 **Exposure triggered health questionnaires by linking real-time RF-EMF measurements to a smartphone application**
Luuk van Wel, Anke Huss, Philipp Bachmann, Marco Zahner, Hans Kromhout, Jürg Fröhlich, Roel Vermeulen*

P3-381 **Health Care Provider Screening of Women of Childbearing Age for High Mercury Exposure from Fish Consumption**
Patricia McCann, Jill Korinek, Larry Souther, Joyce Klees, Teresa Borak, Danelle Reilly, Patricia Doherty, Michael Sampson, Jennifer Backstrom, Beth Baker, Mary Turyk*

P3-382 **Indoor air quality of low and middle income urban households in South Africa**
Nkosana Jafta, Prakash Jeena, Rajen Naidoo*

P3-383 **Modeling the distribution and increase of oak pollen over the Seoul metropolitan region**
Mi-Kyoung Hwang, Inbo Oh, Jin-Hee Bang, Kyu Rang Kim, Yun-Kyu Lim, Changbum Cho*

P3-384 **Modifiable Risks Factor for Adherence to Individual Healthy Behaviours in Population Living near Petrochemicals Areas of Sicily**
*Salvatore Scondotto**

P3-385 **Pooling of heterogeneous human biomonitoring data for assessment of spatial distribution of PCB serum concentrations by kriging around a source of pollution in eastern Slovakia**
*Zuzana Sutova, Pavol Zavacky, Maximilian Stremy, Sona Wimmerova, Lubica Palkovicova Murinova, Denisa Richterová, Irva Hertz-Picciotto, Tomas Trnovec**

P3-386 **Temporal Trends in Exposure to C4-C8 Perfluoroalkyl Substances among U.S. Adults**
Xiaoyun (Sherry) Ye, Koyoko Kato, Janice Ma, Akil Kalathil, Lily Jia, Antonia Calafat*

P3-387 **UK Dietary Exposure to a range of persistent organic pollutants (PBDEs, PBBs, PCBs, PBDD/Fs and PCDD/Fs): Comparison of results from 24 hour duplicate diet with total diet study estimation and health risk assessment**
Lindsay Bramwell, David Mortimer, Alwyn Fernandes, Martin Rose, Stuart Harrad, Tanja Pless-Mulloli*

P3-388 **Understanding the relationship between environmental quality and asthma using claims data**
Christine Gray, Andrey Rzhetsky, Kristen Rappazzo, Yun Jian, Grabich Shannon, Jyotsna Jagai, Lynne Messer, Danelle Lobdell*

P3-389 **Urolithiasis, urinary cancer, and home drinking water source in the United States Territory of Guam, 2006-2010**
Josephine Malilay, Robert Haddock, David R. Olson, Lorraine Backer*

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

WEDNESDAY, AUGUST 31

16:30 - 20:00	Registration	

THURSDAY, SEPTEMBER 1

08:00 - 18:00	Registration	
10:30 - 11:15	**WELCOME ADDRESSES**	
11:15 - 12:15	**OPENING PLENARY SESSION:** TRADITIONAL RISK FACTORS IN ENVIRONMENTAL HEALTH	SALA SINOPOLI
12:15 - 13:00	Lunch	FOYER
13:00 - 14:15	**POSTER SESSION 1**	POSTER AREAS
14:15 - 15:45	**PARALLEL SESSIONS** SINOPOLI - Health Effects of Long Term Exposure to Air Pollution PETRASSI - **Symposium**: The Broadening Noise Phenome and its Biological Links TEATRO STUDIO - **Symposium**: Climate Change - Beyond the Paris Agreement: How can Environmental Epidemiology Contribute? RISONANZE - Prenatal Exposures and Pregnancy Outcomes OSPITI - Arsenic and Health: Contemporary and Emerging Research STUDIO 1 - Pesticides and Health in Latin America: Old and New Risks over the Lifespan STUDIO 2 - Radiation and Electromagnetic Fields STUDIO 3 - Food, Nutrition, and Microbiome	
15:45 - 16:10	Coffee Break	FOYER
16:10 - 17:40	**PARALLEL SESSIONS** SINOPOLI - **Symposium**: Recent Developments in Air Pollution Exposure Assessment PETRASSI - Acute Exposure to Air Pollution and Novel Cardiovascular Outcomes TEATRO STUDIO - Climate Change, Mitigation Measures and Co-benefits RISONANZE - Advances in Temporal and Spatial Models OSPITI - Earth, Wind and Fire: Environmental Factors Related to Active Travel STUDIO 1 - **Symposium**: Ethical Challenges for Epidemiologists in the Legal Process STUDIO 2 - Indoor Air: From Observations to Interventions STUDIO 3 - Endocrine Disruption from Birth through Childhood	
17:40 - 19:20	**PLENARY SESSION:** AWARDS	SALA SINOPOLI
19:30 - 21:30	Cocktail reception	FOYER
20:00	Science Slam	

FRIDAY, SEPTEMBER 2

07:30 - 18:00	Registration	
07:30 - 08:30	**EARLY MORNING SESSIONS** TEATRO STUDIO - The use of Satellite data in air pollution exposure assessment: new opportunities for environmental epidemiology and global methodological challenges RISONANZE - Old risks, new diesel engine technologies and the public health impacts SALA OSPITI - Improving impact of epidemiology on public health policy: lessons from risk assessment and systematic reviews STUDIO 1 - Supporting Creative Minds – The European Research Council (ERC) STUDIO 2 - Creating Healthy City Environments STUDIO 3 - An Interactive Ethics Workshop for Young Researchers - a joint session between the ISEE Ethics and Philosophy Committee and the SNRN	
08:30 - 10:15	**PLENARY SESSION:** NEW ISSUES IN ENVIRONMENTAL HEALTH	SALA SINOPOLI
10:15 - 10:45	Coffee Break	FOYER
10:45 - 12:15	**PARALLEL SESSIONS** SINOPOLI - **Symposium:** New Frontiers for Environmental Epidemiology in a Changing World PETRASSI - Air pollution, diabetes and metabolism TEATRO STUDIO - Air Pollution and fetal growth RISONANZE - Extreme weather events and health effects (Climate change and Health) SALA OSPITI - Chemicals and children's health STUDIO 1 - **Symposium:** Atmopheric Aerosols and Health. Results of the Supersite project in Emilia-Romagna region (Italy) STUDIO 2 - Women's Health and Environmental Inequalities STUDIO 3 - Linking risk assessment with risk communication for better evidence informed policy making	
12:15 - 13:00	Lunch	FOYER
13:00 - 14:15	**POSTER SESSION 2**	POSTER AREAS

FRIDAY, SEPTEMBER 2

14:15 - 15:45	**PARALLEL SESSIONS** SINOPOLI - **Symposium:** Environment and ageing PETRASSI - Traffic noise and novel health outcomes TEATRO STUDIO - **Symposium:** The health impact of industrially contaminated sites, a global environmental health challenge RISONANZE - Ambient Air Pollution- Respiratory Disorders (adults) SALA OSPITI - Metals and children's health STUDIO 1 - Air pollution biomarkers STUDIO 2 - Participatory epidemiology to improve policy implementation STUDIO 3 - Temperature and health. Subgroups at risk	
15:45 - 16:10	COFFEE Break	FOYER
16:10 - 17:40	**PARALLEL SESSIONS** SINOPOLI - Neurodevelopmental/degenerative Disorders and Air Pollution PETRASSI - Causal Inference in Environmental Epidemiology TEATRO STUDIO - Methodological advances in exposure assessment of air pollution RISONANZE - **Symposium:** Atlanta to Asia: Measuring the effectiveness of air quality action SALA OSPITI - Household biomass use and health STUDIO 1 - Climate change and health (Non-temperature-related impact) STUDIO 2 - **Symposium:** Environmental Health Challenges in Africa: The IRS dilemma STUDIO 3 - Waste and soil contamination	
17:40 - 19:00	**ISEE GENERAL MEMBERS MEETING**	TEATRO STUDIO
19:00 - 19:30	BUS TO CONFERENCE DINNER	
19:30 - 23:30	**CONFERENCE DINNER**	

SATURDAY, SEPTEMBER 3

07:30 - 18:00	Registration	
07:30 - 08:30	**EARLY MORNING SESSIONS** TEATRO STUDIO - The end of big birth cohorts? RISONANZE - Ultrafine particles and airports – exposure and health effects SALA OSPITI - Cheating and Environmental Health STUDIO 1 - Arsenic in Food: Exposure, Microbiome and Health Impacts STUDIO 2 - A damaged foundation: How environmental exposures disrupt the immune system STUDIO 3 - Building your network: how to connect and make it count	
08:30 - 10:15	**PLENARY SESSION** –METHOLOGICAL CHALLENGES IN ENVIRONMENTAL EPIDEMIOLOGY	SALA SINOPOLI
10:15 - 10:45	Coffee Break	FOYER
10:45 - 12:15	**PARALLEL SESSIONS** SINOPOLI - **Symposium:** Health Effects of Ozone Exposure - Recent evidence, new pathways of research and future concerns PETRASSI - Early life exposures and DNA methylation markers TEATRO STUDIO - Exposure Assessment/Exposome RISONANZE - **Symposium:** Climate Change and Health in Africa - Challenges with Water-related and Vector-borne Diseases SALA OSPITI - Occupational and environmental exposures and non-malignant diseases STUDIO 1 - Prenatal and early life dioxin exposure and children's health STUDIO 2 - Integrating environmental risk factors in cancer etiology, surveillance and prevention STUDIO 3 - Metals and health	
12:15 - 13:00	Lunch	FOYER
13:00 - 14:15	**POSTER SESSION 3**	POSTER AREAS
14:15 - 15:45	**PARALLEL SESSIONS** SINOPOLI - Air Pollution and Cancer PETRASSI - **Symposium:** Air Pollution and Brain Health: The role of neuroimaging TEATRO STUDIO - GIS and exposure assessment of air pollution RISONANZE - Green Spaces, Built Environment, and Human Health SALA OSPITI - **Symposium:** Environmental exposures and women's perinatal health: Implications for chronic disease risk STUDIO 1 - Children's pesticide exposure, endocrine disruption, and neurodevelopmental effects STUDIO 2 - Health impact assessment of air pollution and environmental exposures STUDIO 3 - Environmental disasters and evidence of health risks: cases from different continents	
15:45 - 16:10	Coffee break	FOYER
16:10 - 17:40	**PARALLEL SESSIONS** SINOPOLI - **Symposium:** Causal inference methods for estimating health impacts of environmental policies PETRASSI - New Applications of Land Use Regression Modeling TEATRO STUDIO - Temperature and mortality - environmental and socioeconomic impacts RISONANZE - Ambient Air Pollution & Respiratory Disorders SALA OSPITI - **Symposium:** Is it "Build it and they will come?" New insights on strategies, tools and policy approaches to promote active travel STUDIO 1 - Occupational exposures and cancer STUDIO 2 - Persistent organics: Longitudinal studies in adults and newborns STUDIO 3 - Early-life exposure to PFAS and metals and health effects	
17:40 - 18:45	**CLOSING PLENARY SESSION -** AFTER GLYPHOSATE: EVIDENCE EVALUATION FOR PUBLIC HEALTH POLICY	SALA SINOPOLI
18:45	MEETING ADJOURNS	

- Conference area
- SALA SINOPOLI (first floor)
- SALA PETRASSI (first floor)
- TEATRO STUDIO
- RISONANZE
- SALA OSPITI
- STUDIO 1-2-3

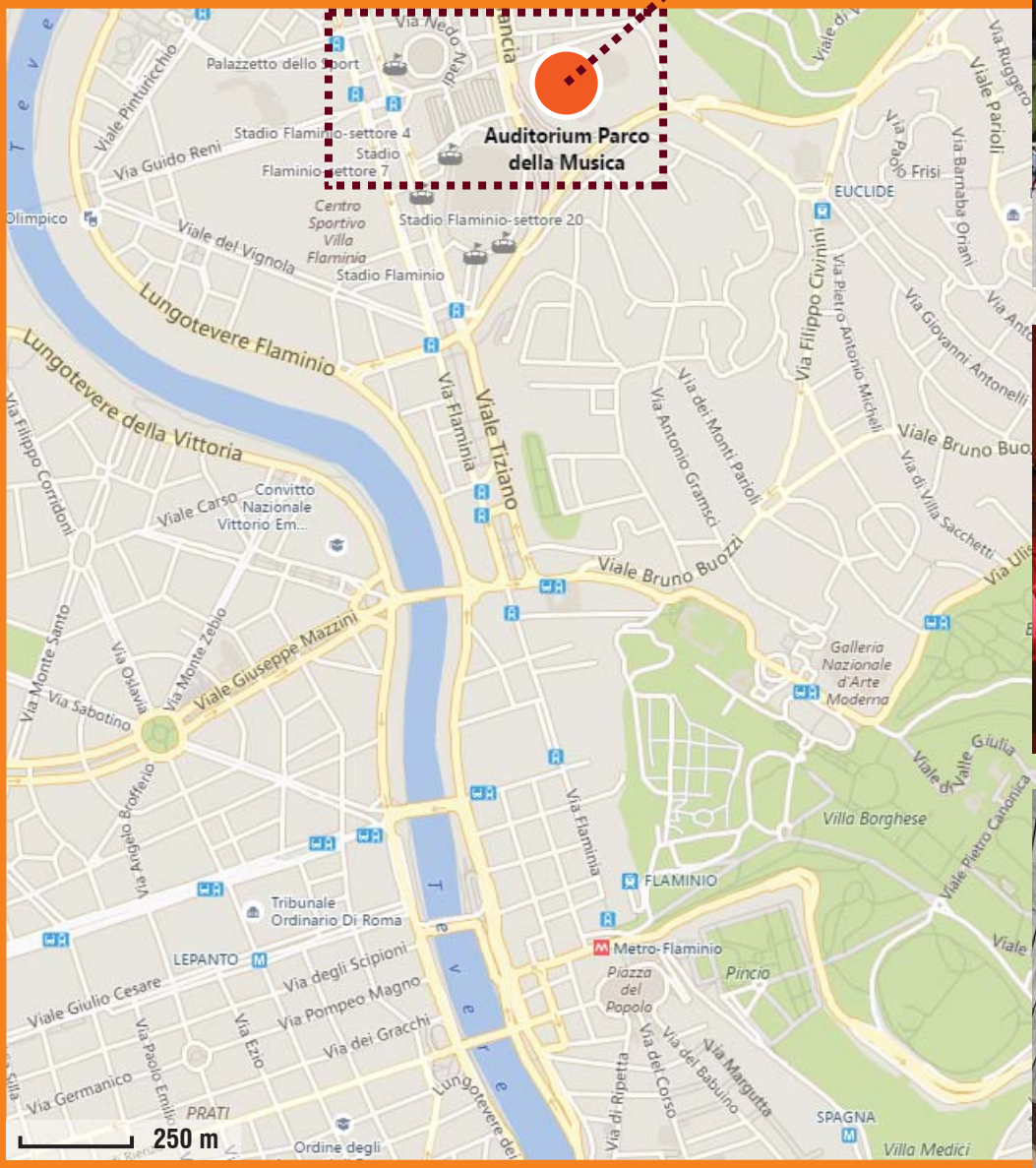
- Registration desk
- Poster info
- Poster area
- SNRN corner
- Slide center
- Internet and charging point

- Water station
- Elevator
- ATM machine
- Taxi point
- First aid

Restrooms are available outside each room

Auditorium Parco della Musica

Viale Pietro de Coubertin, 30



VATICAN CITY ↓ TREVI FOUNTAIN ↓ SPANISH STEPS