



International Agency for Research on Cancer
Centre International de Recherche sur le Cancer

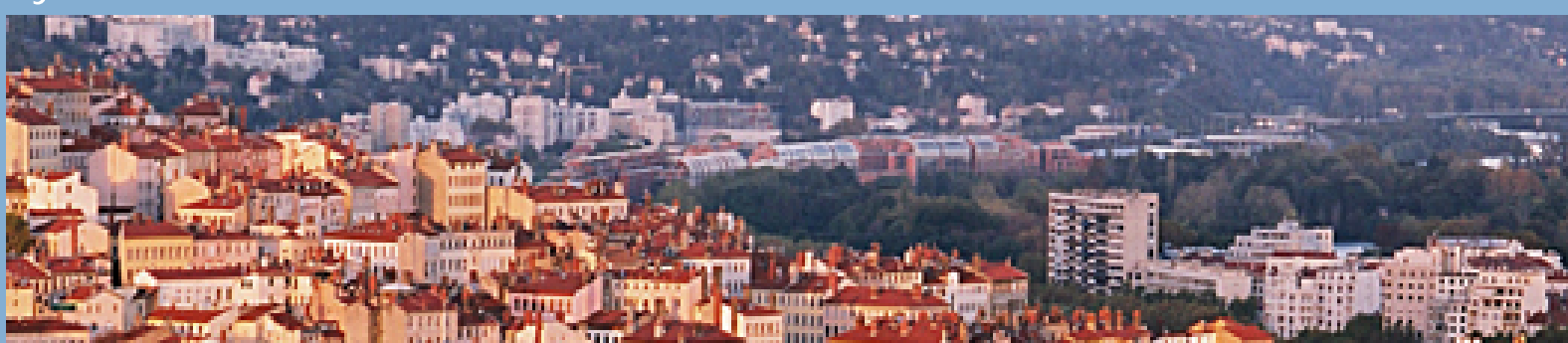


Integrative Molecular Cancer Epidemiology An IARC-EACR-AACR-ECNIS Symposium

3-5 July 2008

<http://www.iarc.fr/molepi2008>

International Congress Center of Lyon
Lyon, France



Integrative Molecular Cancer Epidemiology

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Molecular epidemiology has developed during the last two decades as an independent discipline at the crossroad of epidemiology and molecular sciences. On the one hand, molecular epidemiology aims to overcome the limitations of traditional approaches in epidemiology, by measuring events relevant to exposure, disease development, and response to therapy, reducing exposure and outcome misclassification, and identifying determinants of individual susceptibility to disease and treatment response. On the other hand, it offers a framework for applying novel molecular techniques to population and clinical studies. Furthermore, the finalization of the HAPMAP project and the advent of new technologies for genotyping 100,000s of variants for limited cost have led to a new generation of studies aimed to identify cancer genes.

Recent technological advances and discoveries in genomic and molecular research, including in particular the use of microarrays and high-throughput analyses pose novel challenges to the design and analysis of molecular epidemiological studies, whose theoretical implications have yet to be fully explored. Molecular epidemiology, however, should not be seen as a mere application of novel molecular techniques to human studies, rather as a rapidly evolving field in which both epidemiologists, clinicians, molecular scientists – and even more so the new generation of ‘molecular epidemiologists’ with a multidisciplinary background – work together to address the most relevant aetiological and clinical questions.

Cancer research has represented an area of particular importance for the theoretical development and the application of molecular epidemiology. The long duration of disease development, entailing the need to measure exposures back in the past, the heterogeneity of the relevant phenotypes, the complexity of carcinogenic pathways and the limited success in developing effective therapeutic strategies have traditionally represented major challenges to aetiological and clinical cancer research. The application of molecular techniques to epidemiological and clinical studies has therefore been seen as a potentially promising approach to overcome these limitations.

An international symposium on Integrative Molecular Cancer Epidemiology will be organized in Lyon, France, on 3rd-5th July 2008, immediately before the 20th meeting of EACR (EACR20), scheduled to take place in Lyon on 5th-8th July 2008 (<http://www.ecco-org.eu/Conferences-and-Events/EACR-20/page.aspx/213>).



The conference will be a joint initiative of IARC, AACR and EACR, in partnership with the EC-sponsored Network of Excellence on Cancer, Environment, Nutrition, and Individual Susceptibility (ECNIS, www.ecnis.org).

The conference aims to represent a forum for young and established investigators to present their work and to review the most promising areas of future development of the discipline.

The conference will focus on aetiologic and mechanistic aspects of molecular and genetic cancer epidemiology research. Sessions on clinical applications of molecular epidemiology will be included in the main EACR meeting, to promote cross-participation between the two events.

Target participants include epidemiologists, geneticists, biochemical and molecular biologists, pharmacologists, pathologists and researchers who are interested in the field. Efforts will be made to attract also clinicians. It is expected that a sizeable number of participants will also attend the EACR meeting.

Organizing Committee

Paolo Boffetta
Pierre Hainaut
Paul Brennan
Sean Tavitigian
Christine Ambrosone
Regina Santella
Marco Pierotti
Edit Olah
Soterios Kyrtopoulos
Peter Farmer

Program Committee

Jim Cerhan
John Groopman
Rayjean Hung
Tim Rebbeck
Julie Ross
Peter Shields
Neli Ulrich
Roel Vermeulen
Paolo Vineis
Chris Wild



Date and venue

The conference will start on 3rd July 2008 at 10:00am and will end on 5th July 2008 at 12:00noon.

The conference will be organized in the International Congress Center of Lyon, where the main EACR meeting will take place.

Cité Centre de Congrès
Secil Sa - Cité Internationale
50, quai Charles de Gaulle
F-69463 Lyon Cedex
France

Registration, abstract submission

Registration to the conference is handled together with the registration of EACR20. Information, prices and forms are available the website of EACR20 (<http://www.ecco-org.eu/Conferences-and-Events/EACR-20/page.aspx/213>).

Participants are invited to submit abstracts for oral and poster presentations. Forms are available from the website of symposium (<http://www.iarc.fr/molepi2008>). Deadline for abstract submission is 20 April 2008. Authors will be notified by 30 April 2008.



Programme

3rd July

9:30am – 10:00am

Opening

*Chair: **P. Boffetta***

10:00am – 11:00am

Keynote lecture

Successes and failures of molecular cancer
epidemiology – **F. Perera**

11:00am – 11:30am

Coffee break

Session 1. Molecular epidemiology – Application of novel molecular markers to cancer epidemiology

11:30am – 12:10pm

Invited lecture

Novel viral markers – **M. Pawlita**

12:10pm – 12:50pm

Invited lecture

Application of epigenetics to cancer epidemiology –
Z. Herceg

12:50pm – 1:00pm

Proffered paper

Serologic response to HPV and the risk of head
and neck cancer – **K. Ribeiro**

1:00pm – 2:00pm

Lunch break

*Chair: **P. Farmer***

2:00pm – 2:40pm

Invited lecture

Expression microarrays and cancer epidemiology,
lessons from breast cancer – **A.L. Børresen-Dale**

2:40pm – 3:20pm

Invited lecture

Integrated gene expression analysis in PBL and in
the derived lymphoblastoid cell lines to define
individual radiotoxic risk profiles – **M. Pierotti**

3:20pm – 3:30pm

Proffered paper

In vitro benzo [a] pyren diol epoxide-induced
damage to DNA and chromosomes are
independent risk markers for squamous cell



carcinoma of the head and neck. – **Q-Y. Wei**

3:30pm – 4:30pm

Coffee break and poster session

Posters P1 – P33

4:30pm – 5:10pm

Invited lecture

Application of proteomics to cancer epidemiology –

S. Hanash

5:10pm – 5:50pm

Invited lecture

Proteomics: an epidemiological view – **R.**

Vermeulen

4th July

Session 2. Genomic epidemiology in the era of whole genome scan

Chair: D. Segerbäck

8:30am – 9:10am

Invited lecture

Case-control mutation screening – insights and lessons from breast cancer susceptibility – **N.**

Rahman

9:10am – 9:50am

Invited lecture

Lessons from genome scans – the example of lung cancer – **P. Brennan**

9:50am – 10:30am

Invited lecture

Statistical approaches for genome-wide association studies – **D. Balding**

10:30am – 11:00am

Coffee break

11:00am – 11:40am

Invited lecture

Copy number variants: a common mechanism in complex diseases – **X. Estivill**

11:40am – 11:50am

Proffered paper

Searching for early breast cancer biomarkers by serum protein profiling in Prospect –EPIC. – **A. van**

Winden

11:50am – 12:00pm

Proffered paper

Genetic variants in fibroblast growth factor receptor



- 2 (FGFR2) contribute to susceptibility of breast cancer in Chinese women. – **H.B. Shen**
- 12:00pm – 1:00pm** *Keynote lecture*
Molecular cancer epidemiology and public health –
R. Saracci
- 1:00pm – 2:00pm** *Lunch break*
Chair: M. Kirsch-Volders
- 2:00pm – 2:10pm** *Proffered paper*
Effects of IL-10 and IL-6 gene polymorphisms and atomic-bomb radiation exposure on gastric cancer risk. – **T. Hayashi**
- 2:10pm – 2:20pm** *Proffered paper*
A case-control study on the effect of p53 and p73 polymorphisms on gastric risk and progression in an Italian population. – **E. De Feo**
- 2:20pm – 2:30pm** *Proffered paper*
Circulating vitamin D concentration, vitamin D receptor polymorphisms and the risk of colorectal cancer: results from the European Prospective Investigation into Cancer and Nutrition (EPIC). – **M. Jenab**
- 2:30pm – 2:40pm** *PhD student presentation*
Polymorphisms in fatty acid metabolizing genes and colorectal cancer risk in the European Prospective Investigation into Cancer and Nutrition (EPIC) – **B. Hoefft**
- 2:40pm – 2:50pm** *PhD student presentation*
Genetic variants of folate metabolizing enzymes and epigenetic regulation genes and sporadic colorectal cancer risk – **S. De Vogel**
- 2:50pm – 3:00pm** *PhD student presentation*
Pre-pregnancy weight, rate of gestational weight gain and risk of infant leukemia – **C. Blair**
- 3:00pm – 3:10pm** *PhD student presentation*



Genetic markers for the prediction of breast density and breast cancer risk – **M. Biong**

3:10pm – 3:20pm

PhD student presentation

Genetic polymorphisms of myeloperoxidase (MPO), epoxide hydrolase 1 (EPHX1) and NAD(P)H dehydrogenase 1 (NQO1) as risk factors of early onset lung cancer – **M. Timofeeva**

3:20pm – 3:40pm

Special lecture

Viral hepatitis and liver cancer – **L. Beretta**

3:40pm – 4:40pm

Coffee break and poster session

Posters P34 – P69

Session 3. Integrative molecular epidemiology -Visions for the future

4:40pm – 5:20pm

Invited lecture

Gene-environment interactions – **N. Rothman**

5:20pm – 6:00pm

Invited lecture

Epidemiology of childhood leukemia: a transdisciplinary approach – **J. Ross**

5th July

Chair: K. Rydzynski

9:00am – 9:40am

Invited lecture

Evaluating cumulative evidence in genomic epidemiology – **J. Ioannidis**

9:40am – 10:20am

Invited lecture

Transdisciplinary science approaches for molecular epidemiology – **R. Hiatt**

10:20pm – 10:40pm

Invited lecture

Impact of whole genome scans on cancer research – **G. Thomas**

10:40am – 11:10am

Coffee break

11:10am – 12:10pm

Keynote lecture

Future perspectives of molecular cancer epidemiology – **M. Smith**

12:10pm – 12:30pm

Closing