



**ALEXANDER HOLLAENDER COURSE  
ON GENETIC TOXICOLOGY:  
Genomic and Proteomic Approaches**

**AND  
A SPECIAL WORKSHOP ON ARSENIC EXPOSURE  
ASSESSMENT**

**December 10 - 12, 2008  
Indian Institute of Chemical Biology  
Kolkata – India**

**A Satellite Workshop will be Held at the  
Industrial Toxicology Research Centre  
December 15 - 17, Lucknow, India**



### GENERAL INFORMATION

The Alexander Hollaender course (AHC) is organized every year in countries where environmental mutagenesis and health issues are of major concerns. Previous ones are listed below:

- 1) Mexico City, Mexico, 1993, Chaired by Dr. Patricia Ostrosky-Wegman
- 2) Buenos Aires, Argentina, 1994, Chaired by Dr. Marta A. Carballo
- 3) Cape Town, South Africa, 1996, Chaired by Dr. Wagida Anwar
- 4) Cairo, Egypt, 1997, Chaired by Dr. Wagida Anwar
- 5) Curitiba, Brazil, 1998, Chaired by Dr. Lucía R. Ribeiro
- 6) Harare, Zimbabwe, 1999, Chaired by Dr. Julia Hasler
- 7) Popayan, Colombia, 2000, Chaired by Dr. Luz Stella Hoyos
- 8) Shanghai, China, October 30-31, 2001; Dr. Jerry Shey
- 9) Warsaw, Poland, 2002, Chaired by Dr. Antonina Cebulska-Wasilewska
- 10) Iasi, Romania, 2004, Chaired by Dr. Luminita S. Iancu
- 11) Fez, Morocco, November 27, 2005; Dr. Fatma Squali
- 12) Chillán, Chile, 2006, Chaired by Dr. Enrique Zamorano-Ponce
- 13) Cartagena, Colombia, 2007, Chaired by Dr. Elena Groot

The 14<sup>th</sup> AHC will be hosted by Indian Institute of Chemical Biology, Kolkata and the Industrial Toxicology Center, Lucknow, India. The AHC is made up of a lecture course in Kolkata and a workshop in Lucknow. The course and workshop are intended to review the advance in environmental mutagenesis and health, particularly relating to the following topics:

**(1)** Mutagens and carcinogens in the environment **(2)** Advanced technology and biomarkers for evaluation of environmental mutagenesis **(3)** Genetic susceptibility and susceptible populations **(4)** Molecular epidemiology for environmental exposure and health risk evaluation with special reference to arsenic exposure **(5)** Application of “omic” technologies in environmental health **(6)** Application of knowledge for disease prevention and intervention.

**Invitation.** You are cordially invited to attend the 14th Alexander Hollaender course to be held on December 10 – 12, 2008 in Kolkata and satellite workshop, December 15 - 17, 2008 in Lucknow. The course and satellite workshop will provide you with opportunities to present results of your current research, to participate in lectures delivered by eminent scientists, to exchange ideas with colleagues from other countries, to earn technical expertise and to gain rewarding cultural experience in India.

Applicants are requested from all scientists and especially from graduate students working in different Universities and Institute in India and abroad, in the field of Environmental Mutagenesis, Molecular Epidemiology and Environmental Health. For additional information about application, please contact: Dr. Ashok K. Giri (e-mail: [akgiri15@yahoo.com](mailto:akgiri15@yahoo.com) or [akgiri@iicb.res.in](mailto:akgiri@iicb.res.in)) for the course and Dr. Alok Dhawan (email: [dhawanalok@hotmail.com](mailto:dhawanalok@hotmail.com) or [alokdhawan@yahoo.com](mailto:alokdhawan@yahoo.com)) for the satellite workshop.

### **Language**

The official languages of the course will be English. No simultaneous translation will be available.

### **Poster Presentation**

Each participant (except from the speakers) is required to present a poster depicting his/her work. The size of the poster shall be 34” X 42”.

### **Registration**

Registration fees should be sent to Dr. A. K. Giri, Organizing Secretary, 14<sup>th</sup> Alexander Hollaender Course, Deputy Director, Molecular and Human Genetics Division, Indian Institute of Chemical Biology, Kolkata – 700 032, West Bengal., India, only by demand draft drawn in favor of “Organizing Secretary – 14<sup>th</sup> AHC” payable at Kolkata.

### **Registration Fees**

Indian Participants	Rs. 3000.00
Foreign Participants	USD 100.00

### **Organization**

Indian Institute of Chemical Biology, Kolkata- 700 032, India

**National Advisory Board** (to be determined)

### **International Advisory Board:**

Dr. William Au, Chairman (University of Texas Medical Branch, USA),

Dr. Sepideh Arbabi (Islamic Azad University, Iran)

Dr. Rakhmetkaji I. Bersimbaev (Al-Farabi Kazakh Nacional University, Kazakhstan)  
Dr. David DeMarini (Environmental Protection Agency, USA)  
Dr. Elena Groot (University Los Andes, Colombia)  
Dr. Mat Ljungman (University of Michigan, USA)  
Dr. Patricia Ostrosky (Autonomous National University, Mexico)

**14<sup>th</sup> AHC Chairmen:** Dr. Ashok K. Giri; [akgiri@iicb.res.in](mailto:akgiri@iicb.res.in), or, [akgiri15@yahoo.com](mailto:akgiri15@yahoo.com)  
Dr. William Au; [William.au@utmb.edu](mailto:William.au@utmb.edu)

**Organizing and Program Committee:** Co-chaired by:

W. Au (University of Texas), D. DeMarini (EPA-USA), A. K. Giri (I.I.C.B., Kolkata) and Alok Dhawan (ITRC, India)

#### **Tentative Invited Plenary Speakers (6)**

1. Dr. William Au (University of Texas Medical Branch, Galveston, Texas, USA)
2. Dr. Stefano Bonassi (Environmental Epidemiology and Biostatistics". Istituto Nazionale per la Ricerca sul Cancro, Italy)
3. Dr. David DeMarini (USEPA, USA)
4. Dr. Nina Holland (University of California, Berkeley, California, USA)
5. Prof. J. Christopher (Department of Pharmacology, University of Louisville, USA)
6. Prof. Keshav K. Singh (Roswell Park Cancer Institute, USA)

#### **Tentative Invited Speakers (15)**

1. Dr. Rakhmetkaji I. Bersimbaev (Al-Farabi Kazakh Nacional University, Kazakhstan)
2. Dr. Takehiko Nohmi (National Institute of Health Sciences, Japan)
3. Dr. Malyn Chulasiri (Mahidol University, Thailand)
4. Salmaan H Inayat-Hussain (Universiti Kebangsaan Malaysia, Malaysia)
5. Dr. David Polya (University of Manchester, U.K.)
6. Prof. Animesh Jha (University of Leeds, U.K.)
7. Prof. Jon Lloyd (University of Manchester, U.K.)
8. Dr. Marina Hery (University of Manchester, U.K.)
9. Dr. Debapriya Mondal (University of Manchester, U.K.)
10. Dr. A. K. Giri (I.I.C.B., Kolkata, India)
11. Dr. Alok Dhawan (Industrial Toxicological Research Centre, Lucknow, India)
12. Dr. B. C. Das (Institute of Cytology and Preventive Oncology, New Delhi, India)
13. Dr. Siegfried Knasmuller (Institute of Cancer Research, University of Vienna, Vienna, Austria)
14. Prof. Allan Smith (University of California, Berkeley, USA)
15. Dr. Hiroshi Kasai (Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, Kitakyushu, Japan)

#### **Course Venue**

The 14th AHC will take place at Indian Institute of Chemical Biology (<http://www.iicb.res.in/>) situated in the heart of the metropolis of Kolkata, 1hr from the Netaji Subhas International Airport. The local organizing committee will provide convenient transportation links for participants once they reach Kolkata. The workshop will take place in the Industrial Toxicology Research Center in Lucknow.

## **Financial support**

The host intends to provide support for registration fee, local transportation, accommodation and food expenses for all invited speakers in Kolkata and Lucknow. All invited speakers are expected to cover their own travel expenses to Kolkata and/or to Lucknow.

## **Tentative Scientific Program**

*Hollaender course, Kolkata, India, Dec. 10 – 12, 2008.*

**Course Co-Directors:** *Dr. Ashok Giri* (akgiri@iicb.res.in, or, [akgiri15@yahoo.com](mailto:akgiri15@yahoo.com), *India*) and *Dr. William Au* ([William.au@utmb.edu](mailto:William.au@utmb.edu), *USA*)

### **I. Mutagenic hazards of environmental toxic substances**

- a) Dr. David DeMarini – “Air Pollutants: Genotoxicity of tobacco, smoke and tobacco smoke condensate”.
- b) Dr. Malyn Chulasiri – “Phytoprotection of UV-induced Genotoxicity in Photoaging”.
- c) Dr. Alok Dhawan – “Challenges in Nanomaterial Toxicology / Genotoxicity of metal nanoparticles”.

### **II. Population monitoring for health hazards**

- a) Dr. Nina Holland – “Molecular Epidemiology of Children environmental health”.
- b) Dr. Stefano Bonassi – “Genetic monitoring of human populations: Risk evaluation and prevention”.

### **III. Environmental mutagens and health research in India and Asia**

- a) Dr. A. K. Giri – “Arsenic induced health effects, genetic damage and genetic variants in the population exposed through drinking water”.
- b) Dr. Rakhmetkaji I. Bersimbaev – “Human health and the environment in Kazakhstan”.

### **IV. Mechanisms of mutagenesis and carcinogenesis**

- a) Dr. William Au – “Life Style, environmental and genetic susceptibility to Cancer”.
- b) Prof. Keshav K. Singh – “Genomic changes associated with carcinogenesis”.
- c) Dr. Stefano Bonassi – “Molecular Epidemiology of malignant mesothelioma”.

### **V. Current and novel mutagenic assays**

- a) Dr. Takehiko Nohmi – “Transgenic in vivo genotoxicity assays: basic features and the possible applications”.
- b) Salmaan H Inayat-Hussain – “Cytotoxicity and apoptosis- Relevance for mutagenicity testing?”
- c) Dr. Hiroshi Kasai – “Analysis of 8-OH-dG as a marker of oxidative stress”

### **VI. Genomic and proteomic approaches in genetic toxicology**

- a) Prof. J. Christopher States – “Transplacental arsenic induced changes in liver gene expression”.
- b) Dr. B. C. Das - “Toxicogenomics and Cancer”.
- c) Dr. Siegfried Knasmüller – “Use of conventional and -omics based methods for the detection of dietary antioxidants”

**VII. Special workshop on arsenic exposure assessment**

- a) Dr. David Polya – “Spatial distribution of arsenic hazard in groundwaters”.
- b) Prof. Animesh Jha – “Problems of quantification of Arsenic in Different Valence States, New Measurement Techniques and Zero Waste Remediation Technologies for Groundwater Treatment”.
- c) Prof. Allan Smith – “Long term risks from exposure to arsenic in drinking water”.
- d) Prof. Jon Lloyd (Topic to be announced soon).
- e) Dr. Marina Hery – “Molecular Ecology of Arsenic mobilisation in SE India aquifers”.

**VIII. Dr. Debapriya Mondal (Topic to be announced soon).**

**IX.**

**X. Poster sessions**

**XI. Concluding session and recommendations for future research**

**XII. Cultural program in the afternoon on December 12, 2008.**

# **A SATELLITE ALEXANDER HOLLAENDER WORKSHOP ON GENETIC TOXICOLOGY:**

**INDUSTRIAL TOXICOLOGY RESEARCH CENTRE  
LUCKNOW- 226 001, INDIA  
December 15 - 17, 2008**

*Workshop Co-Directors: Dr. Alok Dhawan (dhawanalok@hotmail.com or alokdhawan@yahoo.com, India) and Dr. William Au (William.au@utmb.edu, USA).*

The objective of the workshop is to provide hand-on experience on some of the most relevant genetic toxicology assays for the evaluation of environmental mutagens and of health risk from exposure to these mutagens. Expert scientists will be workshop leaders for the following scientific sessions. The workshop will also include a cultural program for faculty and participants.

- A. Micronucleus Assay In Vivo and In vitro
- B. Chromosomal Aberration and FISH Assays in vivo and in vitro
- C. Comet Assay