

## EHB 13

### Early Morning Tutorials

**Tuesday, 20 August**

#### **Title: CV/Career Planning**

**Name of the lecturer:** Dr. Andrea Ferro<sup>1</sup> (Clarkson University), Dr. Barbara Hoffmann<sup>2</sup> (Leibniz Research Institute for Environmental Medicine), Dr. Christopher Chao and Dr. Yuguo Li<sup>3</sup> (The Hong Kong University of Science and Technology)

**E-mail of the lecturer:** aferro@clarkson.edu, Barbara.Hoffmann@IUF-Duesseldorf.de, meyhchao@ust.hk, liyg@hku.hk

**Affiliation incl. country of the lecturer:** 1 Clarkson University, 2 Leibniz Research Institute for Environmental Medicine, 3 The Hong Kong University of Science and Technology

**Summary (max 100 words):** During this morning session, speakers will boost your HR-potential to unknown heights, sharing best practices on CV writing, bringing you up to speed on the academic recruiting process and explaining what aspects of yourself appeal to recruiters. Experts in the field will also talk about how to prepare for a research career, career trajectories, and how to make an academic CV stand out from the rest. We have included speakers from North America, Europe and Asia, so wherever you're coming from or plan on going to, there will be someone here to discuss cultural differences in research career trajectories.

#### **Title: Epigenetics and Environmental Epidemiology: a Step by Step Tutorial to Design and Conduct an Epigenetic Study**

**Name of the lecturer:** Andrea Baccarelli

**E-mail of the lecturer:** abaccare@hsph.harvard.edu

**Affiliation incl. country of the lecturer:** Harvard University, School of Public Health, Boston, USA

**Summary (max 100 words):** Epigenetics is a fast growing field – with increasing applications in environmental epidemiology – that focuses on mechanisms that can stably/heritably influence gene expression. The lecture will focus on the design of environmental epidemiology studies featuring epigenetics. Emphasis will be given to leveraging existing resources from ongoing studies and initiating new investigations. Ongoing epidemiology studies (cohort, case-control, cross-sectional and repeated-measure studies) will be presented to introduce epigenetic effects

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in prenatal/early and adult life of air pollution, metals, pesticides, benzene, PCBs, POPs, and smoking. The lecture will enable attendees to ascertain advantages and pitfalls of different designs in the conduction of epigenetic studies.

#### **Title: The Conceptual Framework and Application of Receptor Models**

**Name of the lecturer:** Philip K. Hopke

**E-mail of the lecturer:** hopkepk@clarkson.edu

**Affiliation incl. country of the lecturer:** Center for Air Resources Engineering and Science, Clarkson University, New York, USA

**Summary (max 100 words):** This tutorial will present the underlying chemical basis for distinct profiles for the different types of emission sources and how these differences in profiles then permit the application of receptor models. The conceptual framework of receptor models, a mass balance approach, will be described. The resulting mathematical approaches can be then implemented depending on what a priori information is available. The use of ancillary data such as meteorology and back trajectories will be introduced. Applications of several types of models to various particle composition problems will be described with an emphasis on the practical use of Positive Matrix Factorization for both elemental and organic species data.

#### **Title: Translating (research) evidence into policy: the case of health systems interventions**

**Name of the lecturer:** Xavier Bosch-Capblanch

**E-mail of the lecturer:** X.Bosch@unibas.ch

**Affiliation incl. country of the lecturer:** Swiss Tropical- and Public Health- Institute, Basel Switzerland

**Summary (max 100 words):** It is widely accepted that policies have to be informed by the best available evidence. However, it is equally notorious that even when evidence is available, it can also be ignored by policy makers. 'What to do?', 'what is best?' are not obvious questions and with unique answers. We have focused on the gap between research and policy in the area of health systems and addressed the challenges in the process of translating evidence to policy, drawing from the approaches used in clinical guidelines. We will describe the rationale, approaches and tools to develop health systems guidance.