



Public Health
England



Durham
University



Universitat Autònoma
de Barcelona

DoReMi LD-RadStat: Workshop for statisticians interested in contributing to EU low dose radiation research

CREAL, Barcelona - 26th to 28th October 2015

Timetable

Note on locations:

The workshop will take place in the Xipre Room at CREAL (www.creal.cat/en/index.html), which is on Barcelona Biomedical Research Park (<http://www.prbb.org/>), Carrer del Dr. Aiguader, 88 08003 Barcelona, Spain.

Registration, coffee breaks and lunch will take place on the first floor terrace.

Monday 26th October 2015 – DoReMi, Radiation biology and related applications

08:00 – 09:00: Registration and coffee

09:00 – 09:30: Welcome and introduction to DoReMi – Liz Ainsbury

09:30 – 10:00: Perspectives on low dose epidemiological studies - role of uncertainty – Elisabeth Cardis

10:00 – 10:30: Biological dosimetry – statistical challenges – Paco Barquinero/Pere Puig

10:30 – 11:00: Coffee

11:00 – 11:30: Bayesian solutions to biodosimetry count data problems, and software solutions – Manuel Higuera

11:30 – 12:00: Applications of count data distributions to radiation biology – Jochen Einbeck

12:00 – 12:30: Pitfalls of stochastic biomarkers: disregarding intrinsic variation – Daniel Samaga

12:30 – 13:30: Lunch

13:30 – 14:00: Heterogenous correlation of multi-level omics data for the consideration of inter-tumoural heterogeneity – Herbert Braselmann

14:00 – 14:30: Biophysical Monte Carlo modelling of irradiated cells – Krzysztof Fornalski

14:30 – 15:00: Semiparametric discrete kernel estimations for count data – Celestin Kokonendji

15:00 – 15:30: Coffee

15:30 – 16:00: Overview of topics related to model selection for regression - Riccardo De Bin

16:00 – 16:30: Data Integration in Early Drug Developments – Adetayo Kasim

16:30 – 17:00: A brief outlook of mathematical tools to deal with imprecise (quantitative or structural) knowledge – Eric Chojnacki

17:00 – 17:30: Overview of Day 1, discussion and questions

20:00: Dinner at Attic Restaurant, 120 Las Ramblas (<http://www.atticrestaurant.cat/>)

Tuesday 27th October 2015 – Epidemiology and modelling

09:30 – 10:00: Dose uncertainty, MCML and sampling density– Graham Byrnes
10:00 – 10:30: Statistical analysis of German uranium miners cohort – Christina Sobotzki

10:30 – 11:00: Coffee

11:00 – 11:30: EPI-CT – statistical challenges in a European study on radiation exposure from pediatric CTs and cancer risk– Michael Hauptmann
11:30 – 12:00: Dose-responses for cerebrovascular and heart diseases in atomic bomb survivors – an analysis involving multi-model inference techniques – Helmut Schöllnberger
12:00 – 12:30: Modelling radiation induced atherosclerosis in ApoE-/- mice– Fieke Dekkers

12:30 – 13:30: Lunch

13:30 – 14:00: Mechanistic analysis of lung cancer mortality in the Wismut cohort – Ignacio Zaballa
14:00 – 14:30: R implementation of the linear ERR model: applications to radiation epidemiology - David Morina
14:30 – 15:00: Bioinformatics Data Analysis in Radiation Epidemiology – Juan Ramon González

15:00 – 15:30: Coffee

15:30 – 16:00: Bayesian dose-response analysis for epidemiological studies with complex uncertainty in dose estimation - Deukwoo Kwon
16:00 – 16:30: MC modelling of initial radiation effects with PARTRAC – Elke Schmitt
16:30 – 17:00: Uncertainties in dose reconstruction and their impacts on radiotherapy late effects dose-response relationships - Rodrigue Allodji and Jeremy Bezin
17:00 – 17:30: Approaches for taking into account the heterogeneity of the dose-distribution in organs when estimating the risks – Florent De Vathaire
17:30 – 18:00: Overview of Day 2, discussion and questions

Wednesday 28th October 2015 – The way forward

09:00 – 13:00: Parallel breakout sessions to discuss how uncertainty analysis techniques in the context of each discipline can help solve DoReMi research questions going forward
Session 1: Radiation biology
Session 2: Epidemiology
Session 3: Modelling

Coffee will be available at 10:30.

12:30 – 13:30: Lunch

13:30 – 15:00: Reports from breakout sessions and group discussion on next steps – submission of extended abstracts to 'Research Perspectives CRM Barcelona;' formalisation of the network and/or a research proposal to CONCERT?

15:00: Close