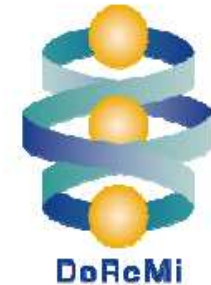




DoReMi/MELODI Training and Education Workshop:



Towards the integration of training and education for European low-dose radiation risk research

9:00 – 12:30 Wednesday 2 November 2011

**Held in conjunction with the Third International MELODI Workshop
November 2-4, 2011, Rome, Italy**

Programme:

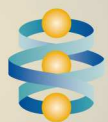
8:30 – 9:00 Registration and coffee

9:00 – 9:05 Welcome and introduction (Andrea Ottolenghi)

9:05 – 9:20 DoReMi and MELODI (Sisko Salomaa)

9:20 – 9:40 **The DoReMi T+E initiatives: (Vere Smyth)** Current initiatives; options for networking; proposal to form a T+E network; achieving sustainability beyond DoReMi

9:40 **Invited presentation: (Sarah Norman)** Gray Institute for Radiation Oncology & Biology, University of Oxford, UK



9:55 Invited presentation (Deborah Oughton)

Presentation on the Bologna accredited Radioecology MSc run at UMB, Norway; the education and training initiatives under the STAR project

10:10 Invited presentation (Mario Helm) Technical University of Dresden MSc Radiobiology course, Germany

10:25 Invited presentation (Laure Sabatier) T+E in France (details to be confirmed)

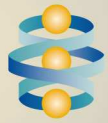
10:40 Invited presentation (Klaus Trott) European MSc in radiobiology

10:55 Invited presentation (Manuela Costone) International joint courses: the experience of Erasmus Mundus

11:10 Open panel discussion on proposal on the continuing structure for a network; to hold annual meeting workshops; to plan for cooperative sharing/sponsorship of courses/students and co-hosting training events

12:20 Wind-up and summary of proposals for the next steps

12:30 Finish, light lunch



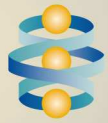
The DoReMi Training and Education Initiatives

Vere Smyth

Andrea Ottolenghi

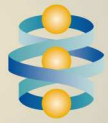
Klaus Trott

Dipartimento di Fisica Nucleare e Teorica
Università degli Studi di Pavia
Pavia, Italy



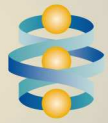
Contents

- DoReMi T+E objectives
- DoReMi-sponsored courses
- Networking beyond DoReMi
- Options for networking
- A proposal for a T+E forum
- Questions we would like to answer



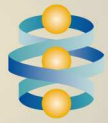
Objectives of DoReMi Workpackage 3

- WP3 is the training and education workpackage of DoReMi
- Provides T+E support for the project
- Contributes towards the development of a Network of Excellence by attracting and providing an education environment for the next generation of researchers
- Can sponsor education initiatives up to 2015
- Longer term goal of continuing sustainable T+E programme



Scope - field of interest

- Covers the scientific disciplines underpinning current and future research into the effects of ionising radiation on biological systems
- Essentially multidisciplinary, embracing radiobiology, (molecular-) epidemiology, radiation physics, systems biology, mathematical modelling, etc.
- The ultimate aim is to attract and provide for the next generation of high-level research scientists in the field of low-dose ionising radiation risk, but the scope can accommodate related sciences such as radioecology, radiotherapy, etc.



DoReMi-sponsored short course modules

First series 2011

February 14 – 25, 2011: Human radiation genetics (including in utero and cognitive effects), as well as space health effects. SCK-CEN, Mol, Belgium. Organiser: Sarah Baatout

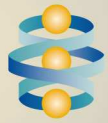
February 28 - March 11, 2011: Molecular radiation carcinogenesis. HMGU, Neuherberg, Germany. Organiser: Mike Atkinson

March 14 - March 25: Radiation epidemiology and radioecology, HMGU, Neuherberg, Germany. Organisers: Mike Atkinson and Klaus Trott

March 28 - April 8: Cellular effects of low doses and low dose-rates with focus on DNA damage and stress response. SU, Stockholm, Sweden. Organiser: Andrzej Wojcik

May 2 - May 13: Interdisciplinary radiation research focussing on radiation protection. BfS, Neuherberg, Germany. Organiser: Ulrike Kulka

May 30 - June 10: Modelling radiation effects from initial physical events, UNIPV, Pavia, Italy. Organiser: Andrea Ottolenghi



Second series 2012

Radiation-induced effects with particular emphasis on genetics, development, teratology, cognition as well as space-related health issues. SCK-CEN, Mol, Belgium. Organiser: Sarah Baatout

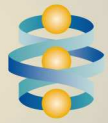
Training course in molecular mechanism of radiation carcinogenesis. HMGU, Neuherberg, Germany. Organiser: Mike Atkinson

Radiation epidemiology and radioecology.
HMGU, Neuherberg, Germany. Organisers: Dr. Michael Rosemann

Cellular effects of low doses and low dose-rates with focus on DNA damage and stress response. SU, Stockholm, Sweden. Organiser: Andrzej Wojcik

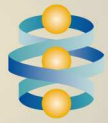
Interdisciplinary Radiation Research Focussing on Low Doses. BfS, Neuherberg, Germany.
Organiser: Prof. Wolfgang Weiss

Modelling radiation effects from initial physical events.
UNIPV, Pavia, Italy. Organiser: Andrea Ottolenghi



Proposed third series

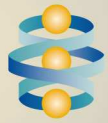
- To be announced spring 2012 to allow time to incorporate into the 2012-13 academic year
- Courses to be held between autumn 2012 and spring 2013
- Topics, length, etc. to be determined from feedback from previous courses.



The need for a T+E network to involve the wider EU community

Report of the High Level and Expert Group on European Low Dose Risk Research (see <http://www.hleg.de/fr.pdf>):

- “Many EU member states have lost key competencies and are no longer capable of independently retaining their current research activities in radiation sciences”.
- “MELODI will respond to these needs and aim at establishing an integrated approach to E&T in radiation research in Europe. Particular consideration will be given to the better integration of research and teaching at Universities and at non-university research organisations”.



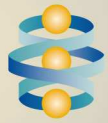
Options for networking

The nodes:

- students, professors, universities, research institutes.

The links:

- Students would like to pick outside modules, research projects, etc. from within the base of the university that will confer a degree;
- Professors should be able to teach as guest lecturers at institutions other than their place of primary employment;
- Universities should be able to include course modules offered at other institutions as part of their own degrees, or open up course modules to outside students
- Research institutes should be able to attract students from any university.

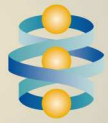


For this we need:

- Mutual recognition (European Credit Transfer and Accumulation System (ECTS); the Bologna Process)
- A marketplace for advertising, buying, and selling; arranging network links
- An organiser
- Money

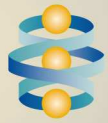
What do we have already?

- Short courses, summer schools, etc. that are not formally part of degree courses
- Existing multi-institution degree courses (European MSc in radiobiology)
- Erasmus Mundus
- Details to come in next presentations . . .



What is the best way forward for radiation risk research?

- Purpose-developed virtual school?
- DoReMi/MELODI sponsored course/s?
 - More short courses?
 - Sponsor multi institution MSc?
- Erasmus Mundus?
- Grass-roots marketplace?



Proposal for a DoReMi/MELODI Training and Education Networking Forum (a “grassroots marketplace”)

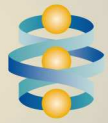
What will it consist of?

Forum Steering Committee

- Formed from the existing DoReMi Training and Education Committee
- Plus up to 6 members from other educational/research institutions which are not in the DoReMi Consortium
- Organisation and coordination of the forum.

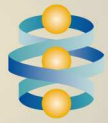
Annual one-day forum

- One-day workshop held in conjunction with the annual MELODI International Workshop
- Numbers will be restricted in order to provide an environment that will encourage active participation and discussion.



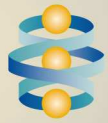
The purpose of the forum is:

- Networking function; to get the key individuals from the key institutions together
- Define the T+E needs of the low-dose research community
- Discuss and resolve practical problems of access and mutual recognition
- Review current activities - invited presentations, open discussions
- Propose/discuss new T+E initiatives - course modules, summer schools etc. to be incorporated in networked programmes
- To give notice of and promote new and existing networking schemes



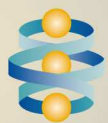
How will it be funded?

- The forum will be supported by MELODI, hosted by the sponsor of the annual International Workshop
- The Steering Committee and invited speakers to the forum will initially be supported by DoReMi, either through consortium partners or the fund to cover the expenses of “experts”.
- Provision will need to be made after 2015 when DoReMi ends for future support of the SC, through MELODI or other grants.



Open panel discussion topics:

- Role and objectives for DoReMi T+E
- The DoReMi courses:
 - Are they serving a useful purpose?
 - Can we make them more useful?
- How to network with other courses
- The MSc in radiobiology:
 - Is there a need for it?
- Erasmus Mundus Masters Courses (EMMCs)?
- DoReMi/MELODI Training and Education Networking Forum?
 - Good idea?
 - Role and objectives?
- What do we do next?



DoReMi Integrating Low Dose Research

Thank you

Wednesday 2 November 2011, Rome