

**First International MELODI Workshop:
Education and training to support research
into low-dose radiation risks**

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The strategic need for training and education

Training and education are fundamental to a successful European research programme in low-dose radiation risks. Key aims of a structured training and education network are:

- To provide a well-resourced and multidisciplinary environment for the supply of well-rounded highly skilled scientists for training and education in low-dose risk research;
- To provide a career structure that will attract top students and young scientists into the field;
- To take maximum advantage of existing centres of excellence in teaching and research in constructing the network;
- To disseminate the new research to the new generations of students;
- To be responsive to the needs for skilled researchers in the relevant disciplines.

Purpose of this workshop

- To promote the development of a focused training and education network;
- To clarify and harmonise the aims of MELODI and DoReMi for training and education.
- To discuss and receive comments on the proposed DoReMi WP3 (dedicated to training and education) work plan;
- To seek expressions of interest from institutions who may wish to participate.

Questions for discussion

- Is there a demand for graduates?
 - At what level? MSc? PhD?
- What subjects should be included in the syllabus?
 - Radiation physics? Epidemiology? Radiobiology? Probability and risk analysis? Sociology of risk perception?
- Is there a demand for focussed short courses?
 - On what topics?
- What benefits would you expect (if any) from having an integrated training and education network?
 - Or should each EC state look after its own training?
- What courses are already in existence that could be part of a network?
 - Please share your experiences.

- **1) What is the need for training?**
 - Training for researchers in low-dose risk
 - Radiation protection for professionals – doctors, regulators, radiation protection officers/advisors
 - Provide cross-discipline courses
 - Focused short courses on single topics/techniques
 - (Very wide range of suggestions)

- **2) What sort of courses?**
 - “Integrated, comprehensive, and sustainable”
 - Modular, allowing students to pick and choose
 - Attractive, must be able to provide career-step qualifications, Bologna-compliant
 - Focused on the needs of low dose radiation risks and radiation protection
 - *and/or* part of wider topics like environmental ecology, normal tissue radiobiology
 - (Wide range of suggestions so setting goals essential to maintain focus)

- **3) What courses are already in existence?**
 - EC funded training initiatives
 - Single-institution courses (several were described)
 - EC MSc radiobiology course
 - (Important not to re-invent the wheel)

4) What are the key points that MELODI (DoReMi) should focus on?

- Find the gaps
- Make best use of what is already on offer
- Provide only what is needed and wanted
- Essential to be multi-disciplinary and integrate
 - Radiobiology
 - Epidemiology
 - Radiation protection
 - Radiation physics
 - Molecular biology
 - etc
- Integrate training with EU infrastructures
- “Guarantee” integration, and sustainability

What next?

- Comprehensive investigation of existing training and funding support
- Requests for expressions of interest
- Workshop at the end of the first year to determine the way ahead.