

BY JACQUES REPUSSARD

European radiation protection research on the move

The Multidisciplinary European Low Dose Initiative (MELODI) was founded in 2009 to address gaps in scientific knowledge of the effects of low doses of ionising radiation on humans and the environment, which may have the potential to undermine the robustness and effectiveness of the radiation protection regulatory system. Such knowledge gaps may constitute obstacles to innovation and the improvement of techniques needed to ensure adequate protection of people and the environment, and may be one of the causes of the patent lack of consensus in society in Europe in particular, about the optimal conditions for the use of nuclear technology for energy, medicine, research, etc.

MELODI has identified several key challenges which need to be addressed collectively:

» First, the problem is not only scientific; it also raises issues of the organisation of multidisciplinary research across Europe. To achieve this, an operational plan is needed to integrate the scientific expertise and resources in Europe, with the aim of challenging the knowledge gaps in radiation protection

research. The objective is to attract scientists working with new technologies and platforms in order to investigate radiation protection scientific issues and thus stimulate the formation of research teams gathering different disciplines.

» Second, a holistic scientific strategy based on well established priorities should be developed in order to rationalise research efforts and to enhance the feasibility and success rate of research projects by ensuring that the resources needed are available.

» Third, a coherent, stable and reliable Europe-wide funding system should be established for a significant period. This system should be competitive and based on scientific excellence, and act as a driver for the implementation of the recognised strategic priorities across the whole spectrum of radiation protection scientific issues.

» Last, but not least, radiation protection research must also investigate societal aspects of the problem.

The 6th MELODI public workshop, held in October 2014 showed the progress made:

» The signing of a Memorandum of Understanding (MOU) between MELODI and sister platforms (radioecology with ALLIANCE; dosimetry with EURADOS; emergency preparedness with NERIS) has brought together the respective communities, not to merge them, but to identify how common actions could benefit them all. Similarly, a few months ago, another similar MOU was signed between MELODI, EURADOS and the five main European medical associations which gather health professionals directly concerned by the use of ionising radiation for medical purposes: EANM (nuclear medicine), ESTRO (radiotherapy), ESR and EFRS (radiology), EFOMP (medical physicists). Thus, gradually, a new radiation protection platform centred on the beneficial use of medical exposure has emerged, with its own priorities consistent with those of MELODI and EURADOS.

» A key aspect of the research strategies to be developed hinges on the development of a good consensus on research priorities, and on needs for access to experimental infrastructures or other scientific data (biobanks, cohorts, etc.), as well as

training and education resources needed to provide radiation protection research with highly qualified scientists. MELODI now has unique experience in developing such priorities, and assembling them in strategic research agenda (SRA) proposals, which are then discussed and tested in open workshops gathering representative portions of the scientific communities concerned. Thus in Barcelona, the sixth version of the MELODI SRA was presented. It is available on the MELODI website www.melodi-online.eu

» The further development of future EURATOM calls aiming for a wider range of scientific aspects of radiation protection research and a strategic approach to funding of radiation protection research in Europe. It will also provide reliable and attractive competitive call programmes open to the whole scientific community, including non-EU countries who have arrangements with the EU allowing them to participate (with their own funds) in EURATOM R&D programmes. The progression from the network of excellence instrument (DoReMi) to the OPERRA project, which tests

new avenues for multidisciplinary open calls, and lately to the proposal for the EJP CONCERT provides a strong signal to the research communities about the consistent effort currently being made under the H2020 banner to enhance radiation protection research in Europe over the years ahead. CONCERT will thus gather a majority of European research institutions and universities with a high interest in radiation protection research.

MELODI and the other European platforms work together to deliver a bright future for the research communities concerned with radiation protection science, facilitating advanced research programmes addressing important and highly complex issues with a good chance of success. These associations are open for membership. Please join them to strengthen their actions, and benefit from the influential network they already represent today.

Dr. Jacques Repussard is the President of the Multidisciplinary European Low Dose Initiative (MELODI).



ESR
EUROSAFE
IMAGING

VISIT THE
EUROSAFE IMAGING
POSTER EXHIBITION

ECR LIVE & EPOS LOUNGE
FIRST LEVEL

More than 30 posters on radiation protection practices by experts from the ESR, European and international institutions, radiological subspecialty societies, related medical professions and industry partners.

www.eurosafeimaging.org