DoReMi News
Integrating Low Dose Research

Issue 2013 1

Editorial

Work package 4 – Infrastructures

High quality infrastructures and technology platforms are fundamental to scientific research. WP4 is committed to identifying critical infrastructure resources within and outside of DoReMi, promoting their use and facilitating access to these research platforms to meet the needs of the radiation biology community to drive forward low dose research.

The original members of the DoReMi consortium collectively possess a considerable number of irradiation facilities allowing for both in vitro and in vivo studies over a wide range of doses for many types of radiation. Nevertheless, a survey of DoReMi partners revealed a number of gaps. These gaps have since been filled by the addition of new partners and facilities through external and internal calls adding very low dose rate gamma irradiation facilities for in vitro and in vivo studies as well as a state-of-the art microbeam facility.

Radiation research biobanks and databases are another important resource. The recently concluded FP7 project STORE, has created a database for housing data from previous, ongoing and future animal studies and human exposure cohorts and serves as a pointer to archived biological material. Following a DoReMi-STORE workshop in January 2012 in Rome, the importance of this initiative was highlighted in an editorial entitled "The low-level nuclear threat" and a news feature entitled "Raiders of the lost archives" both published in the journal Nature in 2012. This important resource has now been integrated into DoReMi.

Epidemiological cohorts are critical for understanding the long-term consequences of low dose radiation exposure. Through an extensive series of surveys, interviews and workshops, DoReMi has identified over 60 exposure cohorts encompassing occupational, environmental and medical exposure that may provide the opportunity to conduct molecular studies to better understand the mechanisms behind the long-term effects of low dose exposure and to search for molecular markers for radiation exposure. An important task in the near future will be to archive the data from the cohorts into STORE to provide ready access to these data for all radiation biology scientists.

To unravel the mechanisms behind low dose effects, state-of-the-art analytical platforms are essential. Existing research platforms within DoReMi can be complemented by 'omics, imaging and systems biology platforms for example. DoReMi will continue to monitor existing European resources as well as a number of ambitious research platforms under development under the ESFRI program including ELIXER (infrastructure for biological information), ISBE (systems biology), infrafrontier (systematic phenotyping, archiving and distribution of mouse models), and euro-bioimaging (biological and biomedical imaging).

As we enter the 2nd half of the DoReMi project, WP4 will continue to keep the radiation biology community informed of the vast array of available infrastructures while facilitating access to these resources.

For more information, see DoReMi webpage on Infrastructures.

Laure Sabatier, WP4 leader

New beneficiaries have joined DoReMi

As a result of the 2nd competitive call, altogether 10 new organisations have joined DoReMi from January 2013 onwards. The DoReMi consortium now counts with altogether 32 organisations from Europe and Japan. The list of DoReMi partners is available here.

TRA Statement, version 2

This TRA statement, version 2, updates the DoReMi Transitional Research Agenda published in September 2010, as well as the TRA Statement – Where are we now – published on 22 September 2011. The purpose of the TRA is to guide the planning, prioritization and facilitation of DoReMi research activities. This revision of the original statement provides a summary of the progress made within DoReMi and other relevant initiatives, and then uses this information to formulate our research priorities for the forthcoming 18 months. More information is available here.

Opportunities

Post-doc positions are available in Institut Curie, France. See the announcements here.

PubMed database

You will find in the DoReMi Scientific Information Center a link to a PubMed page displaying the references of articles published within the last 30 days on "low dose radiation effects". More information available here.

Subscription info

DoReMi Newsletters are published roughly every three months. They are sent to subscribers and published on DoReMi website. If you wish to receive the DoReMi Newsletters directly by email, please subscribe by sending a message to doremi@stuk.fi.

DoReMi and related events

Future events

- *The programme of **DoReMi Epigenetics workshop**, 24–26 April 2013 in Stockholm, Sweden, is now available. The abstract submission is open until 28 March and the registration is open until 5 April. More information available here.*
- ***The 5th International MELODI Workshop** will be organised on 7–10 October 2013 in Brussels, Belgium. More information available here.*
- *A one-day symposium **DNA Damage Response and Repair in Radiation Therapy** will be organised on 12–13 June 2013 in Stockholm, Sweden. More information available here.*
- *NEUDOS12 – **Neutron and Ion Dosimetry Symposium** will be organised on 3–7 June 2013 in Aix-en-Province, France. More information available here.*
- ***The 40th Annual Meeting of the European Radiation Research Society** will be held in Dublin Castle, Ireland on 1–5 September 2013. More information available here.*

Highlights and interesting documents available

- *In the DoReMi Scientific Information Center you can find latest peer-reviewed publications from DoReMi, altogether 25 articles so far.*

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