

# MELODI

## Multidisciplinary European Low Dose Initiative - Approach for Radiation Protection

<http://www.melodi-online.eu>

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**EURATOM**

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**MELODI IS AN EUROPEAN PLATFORM DEDICATED TO LOW DOSE RADIATION RISK RESEARCH. IN 2010 MELODI WAS FOUNDED AS A REGISTERED ASSOCIATION WITH 15 MEMBERS.**

**The purpose of MELODI is:**

- **MELODI** will propose R&T priorities for Europe in its field of competence
  - EUROPE 2020 Strategy.
- **MELODI** will seek the views of stakeholders on the priorities for research, keep them informed on progress made, and contribute to the dissemination of knowledge.

MELODI will interface with international partners like WHO (World Health Organization) and IAEA (International Atomic Energy Agency).

# OTHER EUROPEAN PLATFORMS

There are other European Platforms that cooperate with **MELODI**

**EURAMED** (The European Alliance for Medical Radiation Protection Research)

**EURADOS** (The European Radiation Dosimetry Group)

**NERIS** (EUROPEAN PLATFORM ON PREPAREDNESS FOR NUCLEAR AND RADIOLOGICAL EMERGENCY RESPONSE AND RECOVERY)

**ALLIANCE** (The European Radioecology Alliance)

# STRATEGIC RESEARCH AGENDA (SRA)

**MELODI** organizes Working Groups (WG) for its activities. In particular, there is a WG for establishing a long term (> 20 years) the **Strategic Research Agenda (SRA)**.

The **SRA** is intended to guide the priorities for national and European research programmes and the preparation of competitive calls at the European level. A key priority for radiation protection research is to improve health risk estimates for exposures corresponding to the dose limits for occupational exposures and to reference levels for the exposure of the population in emergency situations. The approaches will need to be multidisciplinary and innovative.

# STRATEGIC RESEARCH AGENDA (SRA)

The **SRA** is annually updated by the **MELODI** WG **SRA**, taking into account results of ongoing and completed research and key radiation protection research issues, which arise during the year. An open consultation process via website and the annual **MELODI** workshops are regularly conducted, the results of which are taken into account in the revised SRA report.

Prior to calls, in addition to the **SRA** report, **MELODI** prepares a **short statement** presenting the top priorities.

# KEY QUESTIONS AND GAP ANALYSIS

**SRA** identifies key research questions in low dose or low dose-rate radiation risk research. There are **gaps** that should be eliminated to answers key research questions.

**Key questions** and **gaps** are also summarized in **MELODI** Statements for calls' preparation.

# SRA 2017 KEY QUESTIONS

- 1) Dose and dose rate dependence of cancer risk**
- 2) Non-cancer effects**
- 3) Individual radiation sensitivity**

## GAP IN MELODI STATEMENT 2018

- To explore the shape of the dose-response relationship for radiation-induced health effects
- To understand the potential impact of individual susceptibility on radiation-induced health
- To identify, develop and validate biomarkers for exposure, early and late effects for cancer or/and non-cancer diseases
- **To explore and define the role of epigenetic modifications in radiation-induced health effects**
- To explore the roles of specific target cells for radiation-induced late developing health effects
- To understand the health effects of inhomogeneous dose distributions, radiation quality and internal emitters
- Infrastructures gap: Optimizing the quality of results, data integration and management via
- Infrastructures networking



# OTHER EUROPEAN PLATFORMS

Also the other European Platforms identifies **Key Questions** and **Gaps**.

Platforms try to cooperate to find **Gaps** that could be in common among them.

## EXAMPLE OF COOPERATION

### **NFRP-14:** Improving low-dose radiation risk appraisal in medicine

This action should add clarity on detriment from new medical applications of ionising radiation in view of their fast deployment.

This action should take into account the gapS analysis performed by **MELODI**, EURADOS and EURAMED, and address the key issue of individual sensitivity and susceptibility to radiation.

## OTHER ACTIVITY

Another **MELODI** activity is to ensure the availability of key infrastructures as an essential basis for research activities, and the maintenance of competences in radiation research and health risk assessment in the long term via an integrated European approach for training and education. For these purposes, **MELODI** in February 2014 established three working groups, one on the **MELODI SRA**, one on **Infrastructures** and a third on **Education and Training**.

# HOW DOES MELODI WORK

New Statuses approved during Extraordinary **General Assembly** of **MELODI**, held in Rovinj, Croatia on 4th October 2018 (<http://www.melodi-online.eu>)

## The Association is composed of:

- **SIGNATORY MEMBERS** (institutional)
- **SUBSCRIBING MEMBERS** (institutional)
- **ASSOCIATED MEMBERS** (individual)
- **HONORARY MEMBERS** (individual)

# EXECUTIVE COUNCIL

The **Executive Council** consists of a minimum of six (6) and a maximum of twelve (12) members elected by the **General Assembly**.

At least fifty (50) percent of the Members in the **Executive Council** shall be from **SIGNATORY MEMBERS**.

The **Executive Council** should be at least composed of a Chair, a Vice Chair, a Secretary, a Treasurer, who are elected directly by the **General Assembly** for these functions, and two other **ordinary Executive Council Members**.



## Composition of the Executive Council

<b>Thomas Jung</b>	Bfs / Germany	<b>Chair</b>
<b>Nathalie Impens</b>	SCK-CEN / Belgium	<b>Vice-Chair</b>
<b>Fieke Dekkers</b>	RIVM / The Netherlands	<b>Secretary</b>
<b>Katalyn Lumnický</b>	NRIRR / Hungary	<i>proxy to Secretary</i>
<b>Jean-Rene Jourdain</b>	IRSN / France	<b>Treasurer</b>
<b>Susana Constantino Santos</b>	Uni. Lisboa / Portugal	<i>proxy to Treasure</i>
<b>Sisko Salomaa</b>	UEF / Finland	<b>Stakeholder and Communication Manager</b>
<b>Umberto Galderisi</b>	Uni.Napoli / Italy	<i>proxy to Stakeholder and Communication Manager</i>
<b>Andrzej Wojcik</b>	Uni. Stockholm / Sweden	<i>proxy to Stakeholder and Communication Manager</i>
<b>Laure Sabatier</b>	CEA / France	<b>Internal Operations Coordinator</b>
<b>Andrea Ottolenghi</b>	Uni.Pavia / Italy	<i>proxy to Internal Operations Coordinator</i>
<b>Angelika Bohnstedt</b>	KIT / Germany	<i>proxy to Internal Operations Coordinator</i>

October 2018