

Stockholm University Research Centre for Radiation Protection Research CRPR

www.crpr-su.se

Summary of activities for 2015

Introduction

With the establishment of CRPR in October 2008, Stockholm University wants to promote excellence and long term national competence in radiation protection research. Stockholm University has a long standing tradition in education and research on the effects of ionizing radiation on man and the environment. The location of CRPR at the Stockholm University provides CRPR with a unique set up of radiation facilities for investigations of effects of low doses and dose rates of low and high LET radiation. CRPR shall promote international cooperation and invite colleagues in Europe to use the low dose and dose rate exposure facilities. Moreover, CRPR represents the SU in the council of the MELODI initiative.

The Centre was created as an independent unit within the Department of Genetics, Microbiology and Toxicology (GMT) at Stockholm University at the Science Faculty of Stockholm University and comprises researchers who are active within the fields of radiobiology, radioecology and radiation dosimetry. In January 2013 GMT fused with two other institutes to form the new Department of Molecular Biosciences, The Wenner-Gren Institute – MBW (http://www.su.se/mbw/).

The Centre is headed by a Board of five members, one for each of the three research fields and two others whose competence is judged to be of value for the Centre's operation. The Board members and the chairperson of the board are appointed for three years by the Chancellor based on the recommendations of the Board of the Faculty of Science. The Board has the overall responsibility for the Centre's operation and programme.

The Head of the Centre is appointed for a three year period by the chancellor after hearing the Faculty of Sciences and the board of MBW. The head of the Centre shall not be a member of the board. The Head of the Centre is in charge of the daily activities and should be an employee of the University.

The activities of the Centre are financed from external sources.

From 2013, the webpage of CRPR is http://www.crpr-su.se.

Activity during 2015

Head CRPR 2015

Andrzej Wojcik, Professor, MBW, Stockholm University

CRPR board 2015

Eva Forssell-Aronssson, Professor, Chairperson, Dept of Radiation Physics, Sahlgrenska Academy

at University of Gothenburg

Eva Simic, Head of research, SSM

Iuliana Toma-Dasu, Associate Professor, Medical Radiation Physics, Stockholm University and

Karolinska Institutet

Mats Harms-Ringdahl, Professor emeritus, MBW Stockholm University

Clare Bradshaw, Associate professor, Department of Ecology, Environment and Plant Sciences,

Stockholm University

The CRPR board met three times during 2015: March 12th, June 4th and December 17th. The minutes from the meetings are attached as annex 1.

Support has been provided for the CRPR activities by the Swedish Radiation Safety Authority (SSM)

The activity of the CRPR is described below:

Workshops

A workshop was organised on 1-4 September 2015, in collaboration with prof. Tomoko Nakanishi, Professor at the Graduate School of Agricultural Sciences, Tokyo 113-8657, Japan. Prof. Nakanishi came to Sweden with a group of students and visited the Sahlgrenska University and the Stockholm University. The program and more detailed information is given in Annex 2.

A one day workshop was organised in collaboration with SSM on the future of radiation protection research in Sweden. Date: 25th September.

CRPR Seminars

How well can we predict the risks from low doses of radiation? By Dr. Colin Martin, Honorary Senior Lecturer, University of Glasgow, UK, Member of ICRP Committee 3 – Protection in Medicine. Date: Friday, June 5th, Stockholm University

Radiation effects on the immune system with special reference to tumours, by Prof. Udo Gaipl, Head of Radiation Immunobiology, Department of Radiation Oncology, University Hospital of Erlangen, Germany. Date: Wednesday, September 16th, Stockholm University

Other activities 2015

CRPR is one of the founding members of the MELODI association that started 2010 (http://www.melodi-online.eu/). MELODI is a European Platform dedicated to low dose radiation risk research. MELODI will propose R&T priorities for Europe in its field of competence and will seek the views of stakeholders on the priorities for research, keep them

informed on progress made, and contribute to the dissemination of knowledge. CRPR is represented in MELODI by Mats Harms-Ringdahl, who is a member of the MELODI bureau. The 2015 MELODI meeting was organised in Munich 9 – 11 November 2015 and was entitled "Next Generation Radiation Protection Research". It was attended by Mats Harms-Ringdahl, Siamak Haghdoost and Andrzej Wojcik.

CRPR organized a course in radiation biology (15 credits) at Stockholm University for undergraduate and master students.

CRPR organized a European training course (CELOD, 13.04.2015 – 24.04 2015) at Stockholm University, within the WP3 program of DoReMi.

CRPR co-organised a European training course Environmental Radiobiology (Assessing Risk to Humans and the Environment, 22-26th June 2015), UMB, Norway within the WP3 program of DoReMi.

In June 2015 CRPR joined the European Joint Programme CONCERT - http://www.concert-h2020.eu/en . CRPR is a task leader in WP6 on Education and Training. CONCERT is operating as an umbrella structure for the research initiatives jointly launched by the radiation protection research platforms MELODI, ALLIANCE, NERIS and EURADOS.

CRPR is a member of the FP7 Euratom OPERRA project that will exploit the synergies of EURATOM and other EC programmes considering the most relevant joint program areas and mechanisms for funding joint activities in low radiation dose research.

CRPR is a member of the project entitled: "How can teachers support the development of scientific literacy through teaching about risk and risk assessment?" The project is a collaboration between the SU, KTH the Blackeberg gymnasium and the Tumba gymnasium in Stockholm. It is funded by the "Stiftelsen Marcus och Amelia Wallenbergs Minnesfond". The web page is here: http://www.riskedu.se/.

Andrzej Wojcik gave several lectures on health effects of radiation at the Blackeberg gymnasium and the Internationella Engelska Gymnasiet. Moreover, a field trip was organised with students from the Internationella Engelska Gymnasiet to the Ytterby mine, where natural background radiation was measured.

Several students from the Blackeberg gymnasium and the Internationella Engelska Gymnasiet carried our small research projects at the CRPR.

CRPR financially supported the meeting of SWE-RAYS, August 2015, Gotherburg University: http://swerays.se/workshops/workshop%202015.html

Andrzej Wojcik represented CRPR at the 2015 ICRP meeting in Seoul, Korea (17-25 October 2015).

Andrzej Wojcik

Andre Woll

Stockholm, 2015 03 02

Head of CRPR

Attachments: Minutes of CRPR council meetings

Program of the Joint Swedish-Japanese workshop