



Stockholm University  
Centre for Radiation Protection Research

Stockholm University Research Centre for Radiation Protection Research  
CRPR

[www.crpr-su.se](http://www.crpr-su.se)

## Summary of activities during 2016

### 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 2016

### *Head CRPR 2016*

*Andrzej Wojcik,* Professor, MBW, Stockholm University

### *CRPR board 2016*

*Eva Forssell-Aronsson,* 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 two times during 2016: May 25<sup>th</sup> and November 23<sup>rd</sup>. 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 half-day workshop was organised on the 25th of April 2016, 13:00 - 17:00 at the Royal Swedish Academy of Sciences (KVA). The title: Chernobyl – lessons learnt 30 years after. The program and presentation can be found here: <http://www.crpr-su.se/chernobyl>. A printout of the program is attached as Annex 2. The Workshop was attended by ca 120 people.

A two day workshop was organised on 8-9<sup>th</sup> September 2016 at the Royal Swedish Academy of Sciences (KVA). The title: Risk of Secondary Cancer Following Radiotherapy. The program and presentation can be found here: <http://www.crpr-su.se/smn>. A printout of the program is attached as Annex 3. The Workshop was attended by ca 90 people.

An informal, one day workshop was organised with a group of Japanese researchers who came to Stockholm in the framework of the project “International comparative project on the psychological effects of the Chernobyl accident: Reflection for Fukushima”. The head of the project is Professor Tatsuo Ujiie, Graduate School of Education and Human Development, Nagoya University. The aim of the workshop was to discuss how Sweden coped with the radioactive fallout of the Chernobyl accident in 1986. A detailed presentation was given by Leif Moberg, formally SSI.

A picture with names of the participants is shown below.

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A one week visit of Hirosaki students to Stockholm was organised during 14 February – 20 February 2016. The aim of the visit was to exchange scientific results and to support collaboration within the Memorandum of Understanding between CRPR and the Hirosaki University. The program of the visit is attached as Annex 4. A picture of the Japanese visitors is shown below.

Tomisatu Yu Yohei Yasuyo  
Miura Abe Fujishima Fukushi  
Nicole  
Lundquist



Ryo  
Saga

Yukiko  
Kaneyuki

### CRPR Seminars

24th March 2016: Radiation effects on haematopoietic stem cells. By Assoc. Prof. Satoru Monzen, Hirosaki University, Japan

1<sup>st</sup> July 2016: Mechanism of radiation resistance of insect cells. By Dr Sudhir Chandna, Head, Division of Natural Radiation Response Mechanisms, Institute of Nuclear Medicine & Allied Sciences, Delhi, India.

### Other activities 2016

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 and participates in regular Bureau telephone conferences. The 2016 MELODI meeting was organised in Oxford 19 – 23 September 2016 and was entitled “Radiation Protection Week”. It was attended by 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 WP4 program of CONCERT.

Since June 2015 CRPR participates in 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.

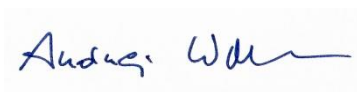
CRPR is a member of the project entitled: "How can teachers support the development of scientific literacy through teaching about risk and risk assessment?" The project is a collaboration between the SU, KTH the Blackeberg gymnasium and the Tumba gymnasium in Stockholm. It is funded by the “Stiftelsen 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 out small research projects at the CRPR.

CRPR financially supported the meeting of SWE-RAYS, August 2016, Stockholm University: <http://swerays.se/workshops/workshop%202016-2/program-2.html>

Andrzej Wojcik represented CRPR at the 2016 ICRP meeting in Chennai, India (9-15 November 2016) and, together with Eva Forssell-Aronsson, the UNSCEAR meeting in Vienna (17 June – 1 July 2016).



Andrzej Wojcik  
Head of CRPR

Stockholm, 2017 01 24

Attachments: Minutes of CRPR council meetings  
Program of the workshop Chernobyl – lessons learnt 30 years after  
Program of the workshop Risk of Secondary Cancer Following Radiotherapy  
Program of the visit of Hirosaki University students