



Stockholm University
Centre for Radiation Protection Research

Stockholm University Research Centre for Radiation Protection Research
CRPR

www.crpr-su.se

Summary of activities during 2018

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 different dose rates and radiation qualities. CRPR shall promote international cooperation and invite colleagues from Sweden and Europe to use the radiation exposure facilities.

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 2018

Head CRPR 2018

Andrzej Wojcik, Professor, MBW, Stockholm University

CRPR board 2018

Eva Forssell-Aronsson, Professor, Chairperson, Dept of Radiation Physics, Sahlgrenska Academy at University of Gothenburg

Kåre Axell, Research section, SSM

Iuliana Toma-Dasu, 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 once during 2018: 25th October 2018. The minutes from the meeting are attached as annex 1.

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

The activities of the CRPR during 2018 are described below

Workshops and international courses

A two day workshop was organised on 6-7th September 2018 at the Royal Swedish Academy of Sciences (KVA). The title: current challenges of patient re-irradiation. The program and presentations can be found here: <http://www.crpr-su.se/reert>. The Workshop was attended by ca 100 people, of which ca 50 were from Sweden.

A one week OECD course “NEA International Radiological Protection School (IRPS)” was organised at the Stockholm University during 20-24 August 2018. The course was attended by 43 participants from 29 countries and was a joint effort by NEA, SSM and CRPR.

CRPR Seminars

7th August 2018: Response of the haematopoietic system to ionizing radiation. By Assoc. Prof. Satoru Monzen, Hirosaki University, Japan

9th March 2018: Mechanisms of radiotherapy-induced second malignant neoplasms. By Dr Sudhir Chandna, Head, Division of Natural Radiation Response Mechanisms, Institute of Nuclear Medicine & Allied Sciences, Delhi, India.

Other activities 2018

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 2018 MELODI meeting was organised in Rovinj, 19 – 23 September 2016 and was entitled “Radiation

Protection Week". It was attended by the following people from CRP: Mats Harms-Ringdahl, Lovisa Lundholm, Lei Cheng, Pamela Akuwudike, Milagrosa Lopez Riego and Andrzej Wojcik. Andrzej Wojcik was elected as member of the MELODI Executive Board.

CRPR organized a course in radiation biology (15 credits) at Stockholm University for undergraduate and master students (20 March – 01 June 2018).

CRPR organized a European training course (CELOD, 23 April -) at Stockholm University, within the Education and Training 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.

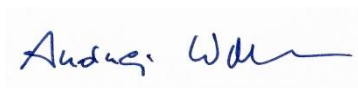
CRPR is a member of the project entitled: "How can teachers support the development of scientific literacy through teaching about risk and risk assessment?" The project is a collaboration between the SU, KI the Blackeberg gymnasium and the Tumba gymnasium in Stockholm. It is funded by the "Skolforskningsinstitutet". 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 2018, Uppsala University.

Andrzej Wojcik represented CRPR at the 2018 ICRP Committee 1 meeting in Chicago, USA (19-21 September 2018) and, together with Eva Forssell-Aronsson, the 65th UNSCEAR meeting in Vienna (11 – 14 June 2018).



Andrzej Wojcik
Head of CRPR

Stockholm, 2019 09 20

Attachment: Minutes of CRPR council meeting

Minutes of the board meeting of CRPR
25th October 2018, 09:30 – 11:30
Stockholm University, Room E515, Svante Arrheniusväg 20C, floor 5

People present: Eva Forssell-Aronsson, Mats Harms-Ringdahl and Andrzej Wojcik.

1. *Opening of the meeting* *Eva*

Eva opened the meeting and welcomed all participants

2. *Approval of agenda* *Eva*

The agenda was approved.

3. *Minutes from the meeting 2017 10 25* *Eva*

The minutes were approved.

4. *Information from MELODI* *Mats*

Mats and Andrzej gave information from the ERPW 2018 in Rovinj. MELODI Executive council elected 12 members, Andrzej replaced Mats. The role of MEOLDI in structuring EURATOM calls was discussed.

5. *Information from Kärnavfallsrådet* *Mats*

Kärnavfallsrådet (KAR) will visit Berlin to take up contacts with the new BFS section dealing with spent fuel repository. KAR will be active for another 2 years (at least) and Mats agreed to serve as member.

6. *Information from CONCERT* *Andrzej*

Information about CONCERT activities and last call was given.

7. *Information from RENE B* *Andrzej*

Information about RENE B activities was provided.

8. *Information from rei-irradiation workshop* *Andrzej*

Workshop was successful, ca 100 participants. Information to be found at www.crpr-su.se/rert

9. *Information from ICRP/ICRU* *Andrzej*

C1 met in Chicago in September 2018, alongside the RR 2018 meeting. 90 year anniversary meeting of ICRP/ICRU took place in Stockholm 15-18 October 2018. A C1/C3 meeting on individual response to radiation will take place in Japan

in December 2018. Andrzej will participate.

10. Mapping the situation in Sweden before SSM's call for positions

Andrzej

SSM plans to announce new 4-year positions. The possibility to map the needs for financing positions at various levels was discussed.

11. Economy for 2019

Andrzej

An application for support of activity during 2019 was sent to SSM and was approved. This will allow CRPR to support i.a. the 2019 Swerays meeting.

12. Planning for activities in 2019

All

Iuliana and Andrzej plan a seminar at KVA related to radiobiological issues of radiotherapy (for 2020). This would be the 4th seminar in series (2014: biological basis of RT, 2016: risk of second malignant neoplasms, 2018; current challenges of patient re-irradiation). KVA was contacted regarding dates and an answer is awaited.

13. Additional issues

All

None

14. Next meeting

Andrzej

The next meeting will take place in early 2019.

Stockholm, 2018 10 25

Eva Forssell-Aronsson

Andrzej Wojcik