

## 2<sup>nd</sup> workshop

# Drawing lessons from stem cells and animal models outside the radiation field

Tuesday and Wednesday June 16<sup>th</sup> and 17<sup>th</sup> 2015  
Lake House, SCK-CEN, Boeretang 200, 2400 Mol, Belgium

### Programme Tuesday June 16<sup>th</sup> 2015

9:00 – 9:30	<b>Welcome coffee and registration</b> <i>Secretaries: Betty Vandingelen &amp; Els Van Musscher</i>
9.30 – 9:40	<b>Welcome address</b> <b>Frank Hardeman (SCK-CEN, BE)</b>
9:50-10:10	<b>Introduction on the FP7-EU-OPERRA project</b> <b>Jean-René Jourdain (IRSN, FR)</b>
10.10-10.25	<b>Integrating knowledge from non-radiation research</b> <b>Elisabeth Cardis (CREAL, ES)</b>
10.25-10.55	<b>Aim of the workshop - Importance of animal models and stem cell research in health</b> <b>Conclusions of the 1<sup>st</sup> workshop</b> <b>Sarah Baatout</b>
10.55-11.15	<b>Coffee break</b>
11:15 – 12:30	<b>Cognitive studies: stem cell research and animal models: part I</b> <b>Moderators: Isabelle Dublineau (IRSN, FR) and Rafi Benotmane (SCK-CEN, BE)</b> <i>Secretary: Mieke Verslegers</i>
12:30 – 13:45	<b>Lunch and group picture</b>
13:45 – 14:45	<b>Cognitive studies: stem cell research and animal models: part II</b> <b>Moderators: Isabelle Dublineau (IRSN, FR) and Rafi Benotmane (SCK-CEN, BE)</b> <i>Secretary: Tine Verreet</i>
14.45 - 15.15	<b>Coffee break</b>

15.15 – 17:00	<b>Immunology: stem cell research and animal models</b>
	<b>Moderators: Christophe Badie (HPA, UK), Serge Candéias (CEA, FR), Roel Quintens/Marjan Moreels (SCK•CEN, BE)</b> <i>Secretary: Ellina Macaeva</i>
17.00-17.15	<b>Conclusions of the day</b>
17.15 – 18.00	<b>Drink and end of the first day</b>

### Programme Wednesday June 17<sup>th</sup> 2015

08:30 – 9:00	<b>Welcome coffee</b>
09:00 – 09:15	<b>Conclusions on research needs on cognitive studies: stem cells and animal studies</b> <b>Isabelle Dublineau (IRSN, FR) and Rafi Benotmane (SCK•CEN, BE)</b>
09:15-09:30	<b>Conclusions on research needs on immunology: stem cell research and animal models</b> <b>Christophe Badie (HPA, UK), Serge Candéias (CEA, FR), Roel Quintens/Marjan Moreels (SCK•CEN, BE)</b>
09:30-11.00	<b>Cardio-vascular diseases: stem cell research and animal models : part I</b> <b>Moderators: An Aerts (SCK•CEN, BE), Anna Saran (ENEA, IT)</b> <i>Secretary: Bjorn Baselet</i>
11:00 – 11:20	<b>Coffee break</b>
11:20 – 12:30	<b>Cardio-vascular diseases: stem cell research and animal models : part II</b> <b>Moderators: An Aerts (SCK•CEN, BE), Anna Saran (ENEA, IT)</b> <i>Secretary: Karen Stalmans</i>
12:30-13.45	<b>Lunch break</b>

13:45 – 15:15	<b>Embryology, fertility preservation and transgenerational effects: stem cell research and animal models : part I</b>
	<b>Moderators: Hanane Derradji (SCK·CEN, BE), Patrick Smeesters (Art 31, EU and FANC, BE)</b> <i>Secretary: Jasmine Buset</i>
15.15-15.35	<b>Coffee break</b>
15.35 – 16.15	<b>Embryology, fertility preservation and transgenerational effects: stem cell research and animal models: part II</b>
	<b>Moderators: Hanane Derradji (SCK·CEN, BE), Patrick Smeesters (Art 31, EU and FANC, BE)</b> <i>Secretary: Mieke Neefs</i>
16.15 - 16.30	<b>Conclusions on research needs on cardio-vascular diseases: stem cell research and animal models</b>
	<b>An Aerts (SCK·CEN, BE), Anna Saran (ENEA, I)</b>
16-30 - 16.45	<b>Conclusions on research needs on embryology: stem cell research and animal models</b>
	<b>Hanane Derradji (SCK·CEN, BE), Patrick Smeesters (Art 31, EU and FANC, BE)</b>
16:45 – 17:30	<b>Concluding remarks and strategy of roadmap</b>
	<b>Panel of all moderators</b>  <i>Secretary: Kai Craenen</i>
17:00 – 18:00	<b>Farewell drink</b>

## **Context of the workshop:**

This workshop is financially supported by the EU-FP7-OPERRA (Open Project for European Radiation Research Area) activities. Long-term animal studies have played fundamental roles for studies on radiation effects providing important complementary data to those obtained from human epidemiological studies.

## **Aim of the workshop:**

The aim of this workshop is :

- To integrate research activities outside the radiation protection field to promote continuing development of suitable whole animal models for radiation carcinogenesis and non- cancer diseases at low doses which bear clear relationships to human diseases.
- To integrate current knowledge on stem cells models into radiobiological studies at low doses.

A list of existing studies with recommendations for key animal models will be performed.

- Animal models to be selected to assess diseases of relevant tissues and organs, including the immune and hematopoietic systems, heart, brain and in embryology following exposure to low dose radiation.
- A roadmap for further collaboration between radiation and non-radiation specialists will be discussed.
- Identification of laboratories and institutions having experience in animal models and stem cell research that are adaptable to radiation research.