



Molecular Mechanisms of Radiation Carcinogenesis

20.06.2016 – 01.07.2016, 2-week training course
at Helmholtz-Center Munich / Germany

General information:

CONCERT (www.concert-h2020.eu) is a Euratom-funded European Joint Programme set up to promote and integrate European research into the risks and protection from exposure to ionising radiation. CONCERT is promoting education and training in support of the research programme and making more widely available training opportunities in order to help attract top-level students into the field. As part of this initiative, a 2-week training course on "Molecular Mechanisms of Radiation Carcinogenesis" is organised by the Helmholtz-Center Munich and the Technical University Munich. It is open to postgraduate students and to scientists studying biological or medical aspects of ionizing irradiation in laboratories in the European Union.

Scope of the course:

Advanced training by lectures and laboratory practica will provide insight in the molecular processes that are involved in the development of spontaneous and radiation-induced cancer. Due to the importance of secondary, therapy-associated tumors as a side-effect of radiotherapy, basics of radio-oncology practise are also covered.

Special emphasis is put on cancer types with high risk to develop after radiation exposure (e.g. the lymphopoietic system, thyroid, bone, breast). The course will consist of 4 teaching and 1 laboratory units dealing with:

- Basics of cancer pathways and genetic factors
- Key steps in the malignant transformation of cells and the involved molecular pathways
- Experimental models to study radiation carcinogenesis (model organisms, cells)
- Radiation-induced cancers
- Molecular techniques for analysis of radiation-induced changes in the transcriptome, epigenome and proteome.

The course will be completed by a field trip to the radiation oncology facilities of the Technical University medical school.

Organisation of the course:

The course is organised by the Helmholtz-Centre Munich (Dr. Michael Rosemann) in collaboration with the Radio-Oncology Department of the Technical University Munich.

Course Faculty:

M.J. Atkinson (Munich)	R. Boteva (Sofia)
K.R. Trott (London/Pavia)	K. Lauber (Munich)
R. Coppes (Groningen)	I. Hoefig (Munich)
C. Mothersill (Ontario)	L. Manti (Napoli)
S. Chevillard (Paris)	U. Oesterreicher (Munich)
S. Moertl (Munich)	S. Klymenko (Kiyv)
N. Anastasov (Munich)	G. Keller (Munich)
M. Eidemueller (Munich)	A. Saran (Rom)
K. Unger (Munich)	N. Pellegata (Munich)
O. Azimzadeh (Munich)	R. Kappler (Munich)
G. Multhoff (Munich)	H-Scherthan (Munich)
T. Schmid (Munich)	M. Rosemann (Munich)
M. Aubele (Munich)	G. Keller (Munich)
R.P. Gale (LA, London)	

Registration :

The course is open to any postgraduate student or scientist working in an EU academic Institution. Participants from CONCERT member institution will get free accomodation in a shared 2 bed rooms (for single-bed rooms an extra 25 € will be charged). Public transport and travel fees to the site visits will be covered. There is no course fee. A certificate of attendance will be issued to each participant at the end of the course. People wishing to apply should send an e-mail to rosemann@helmholtz-muenchen.de including

1. A letter of application
2. A CV with a short description of the scientific career
3. A supporting letter from the supervisor/head of laboratory (only for PhD students)

The deadline for applications is May 20th 2016. Information confirming the acceptance as course participant will be sent by May 25th 2016.

Updated information on the course is available at <http://www.helmholtz-muenchen.de/isb/forschung/plattformen/concert-training/training/index.html>

Please note, that due to limitations at laboratory space there is a maximum number of 12 participants.

The venue :

Helmholtz Zentrum München is located on the northern periphery of the capital of Bavaria. As the German Research Center for Environmental Health, its research focus are important common diseases which develop from the interaction of lifestyle, environmental factors and personal genetic background, focusing particularly on diabetes mellitus and chronic lung diseases.

Helmholtz Zentrum München is a research institution of the Federal Republic of Germany and the Free State of Bavaria. It is a member of the Helmholtz Association of German Research Centers.

