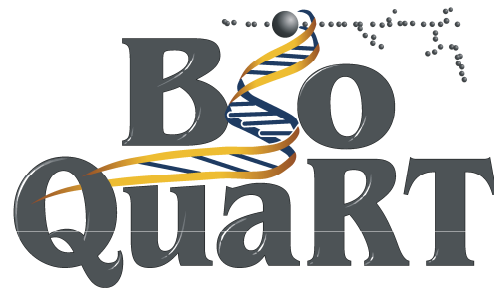


EMRP JRP-SIB06

Biologically Weighed Quantities for Radiotherapy



Midterm Dissemination Workshop

Aix-en-Provence-en-Provence, 07

June 2013



WELCOME to the BioQuaRT Satellite Workshop

**Please sign the circulated list for your
participation in the workshop
and in the dinner (if applicable)**

Participants in BioQuaRT Workshop at NEUDOS-12 and in the Dinner

Family Name	First Name	Affiliation	Workshop	Dinner
AMBROZOVA	Iva	NPI		
BORTOT	Davide	PoliMi		
BOTTOLIER-DEPOIS	Jean-Francois	IRSN		
CHIRIOTTI	Sabina	SCK-CEN		

- European Metrology Research Programme (EMRP):
 - metrology-focused EU coordinated R&D programme
 - jointly funded by the EMRP participating countries within EURAMET and the European Union
 - operated by European Association of National Metrology Institutes (EURAMET e.V.)
- BioQuaRT is one of 30 Joint Research Projects (JRP) that were successful in the 2011 EMRP calls.

EMRP JRP BioQuaRT (Jun 2012 – May 2015)

Consortium

 <p>Physikalisch-Technische Bundesanstalt Braunschweig und Berlin</p>	 <p>IRSN INSTITUT DE RADIOPROTECTION ET DE SÛRETÉ NUCLÉAIRE</p>	 		 <p>INFN Istituto Nazionale di Fisica Nucleare Laboratori Nazionali di Legnaro</p>
 <p>NPL National Physical Laboratory</p>			 <p>ARI Klinikum rechts der Isar Technische Universität München</p>	

Collaborators

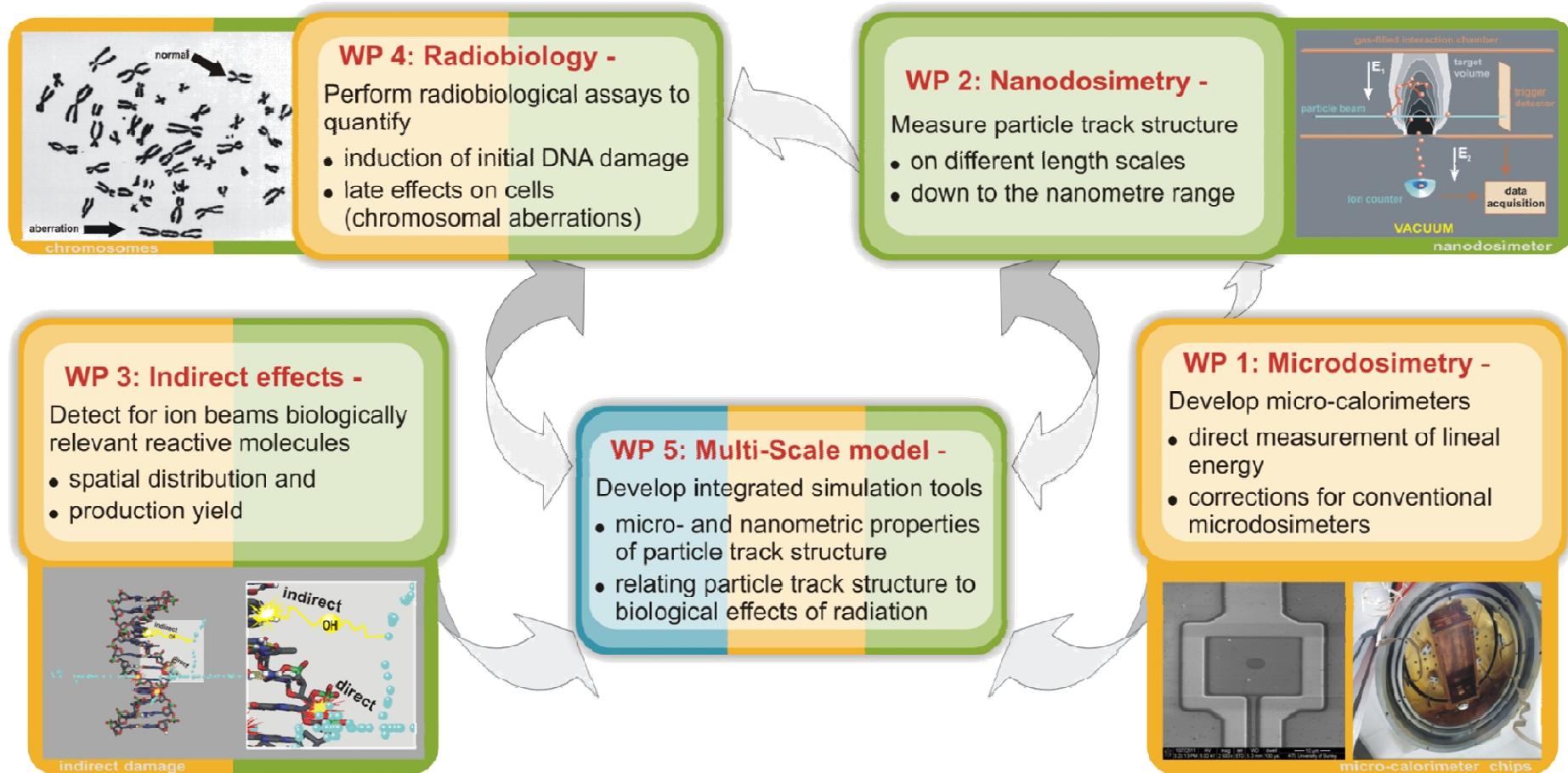
 <p>LOMA LINDA UNIVERSITY</p>						 <p>METAS Federal Office of Metrology</p>
	 <p>Royal Surrey County Hospital NHS Foundation Trust</p>		 <p>Helmholtz Zentrum münchen</p>			
 <p>Clatterbridge Centre for Oncology NHS Foundation Trust</p>						

The Overarching Objectives of BioQuaRT

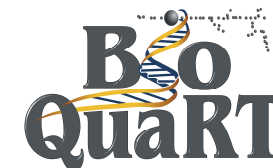


- Experimental techniques for characterisation of ion track structure in terms of
 - microdosimetry
 - nanodosimetry at different length scales
 - production of reactive species
- Multi-scale simulation of track structure and relating it to early and late biological effects
- Utilising track structure parameters on the macroscopic scale (e.g. treatment planning)

EMRP JRP BioQuaRT Work Package Structure

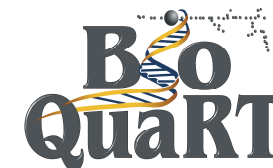


Programme of the Workshop



14:00	Hans Rabus	A vision for a new concept of radiation quality based on charged particle track structure.
14:15	Hugo Palmans	Towards direct measurement of lineal energy in tissue-equivalent absorbers and corrections for microdosimetric gas counters and silicon detectors.
14:40	Gerhard Hilgers	Measuring the features of ion track structure with nanometric resolution.
15:05	Hugo Palmans	Quantification of the production yield of reactive oxygen species and their 2D and 3D distribution in ion tracks.
15:30	Coffee Break	

Programme of the Workshop



16:00	Gaëtan Gruel	Benchmarking simulations by measured yields of initial DNA damage and late effects for ion beam irradiation of human and mammal cells.
16:25	Carmen Villagrasa	Developing a multi-scale simulation model for charged particle track structure and the biological effects of track structure at the cellular level.
16:50	Davide Moro	Complementing BioQuaRT goals: the INFN Project MITRA on advanced microdosimetry of ion beams.
17:10	Marco Silari	Highlights from the Advanced Radiation Dosimetry European Network Training initiative (ARDENT)
17:35	Hans Rabus	Implementing the vision: the further route of BioQuaRT.
17:45	End of BioQuaRT Dissemination workshop	