



## Intensive Programme "Design, Synthesis and Validation of Imaging Probes" schedule - 2011



	Monday September 19	Tuesday September 20	Wednesday September 21	Thursday September 22	Friday September 23
<b>AM</b>	<p>9h00 - 9h30 <b>registration</b> 9h45 - 10h30 <b>Wellcome and IP introduction</b> <i>Silvio Aime</i></p> <p>11h00 - 12h30 <b>Imaging Probe: an overview</b> <i>Silvio Aime</i></p>	<p>9h00 - 10h30 <b>NMR and MRI introduction</b> <i>Walter Dastrù</i></p> <p>11h00 - 12h30 <b>Gd(III) complexes: mechanism of action and relaxometric properties</b> <i>Mauro Botta</i></p>	<p>9h00 - 10h30 <b>Hyper-polarized contrast agent</b> <i>A. Viale / F. Reineri</i></p> <p>11h00 - 12h30 <b>Hyper-polarized experiment</b> <i>F Reineri / W. Dastrù / A. Viale</i></p>	<p>9h00 - 10h30 <b>Iron oxide particles</b> <i>Robert Muller</i></p> <p>11h00 - 12h30 <b>CEST agents: basic principles, mechanism of action and classification</b> <i>Enzo Terreno</i></p>	<p>9h00 - 10h30 <b>Strategies for cellular labeling</b> Simonetta Geninatti</p> <p>11h00-12h30 <b>Nano-particles for Multi-Modality Imaging</b> <i>Klaas Nicolaj</i></p>
<b>PM</b>	<p>14h00 - 15h30 <b>Optical imaging probes</b> <i>Giannis Zacharakis</i></p> <p>16h00 -17h30 <b>PET and SPECT radiochemistry : Selected examples of Labelling of Macromolecules</b> <i>Frederic Dollé</i></p>	<p>14h00 - 15h30 <b>Mn-based Contrast Agents</b> <i>Annemie Van der Linden</i></p> <p>16h00 -17h30 <b>T1 / T2 measure experiment</b> <i>W. Dastrù</i></p>	<p>14h00 - 15h30 <b>Gd(III) complexes: basic relaxometric characterization</b> <i>Eliana Gianolio</i></p> <p>16h00 -17h30 <b>Relaxometric characterization of Gd(III) complexes and NMRD/17O analysis</b> <i>E. Gianolio / S. Baroni / F. Arena / D. Longo</i></p>	<p>14h00 - 15h30 <b>Responsive MRI Contrast Agents</b> <i>Giuseppe Digilio</i></p> <p>16h00-17h30 <b>NanoProbes</b> <i>Enzo Terreno</i></p>	<p>14h00 - 15h30 <b>NanoProbe practical session I</b> <i>D. Delli Castelli</i></p> <p>16h00 - 17h30 <b>NanoProbe practical session II</b> <i>D. Delli Castelli</i></p>
	Monday September 26	Tuesday September 27	Wednesday September 28	Thursday September 29	Friday September 30
<b>AM</b>	<p>9h00 - 10h30 <b>Physico-chemical properties of Ln(III) complexes</b> <i>Carlos Geraldes</i></p> <p>11h00 - 12h30 <b>Gd(III) complexes: the importance of kinetic and thermodynamic stability</b> <i>Imre Toth</i></p>	<p>9h00 - 10h30 <b>Basic principles and procedures of solid phase peptide synthesis</b> <i>Lorenzo Tei</i></p> <p>11h00 - 12h30 <b>Developing an imaging probe</b> <i>Lorenzo Tei / Alessandro Barge</i></p>	<p>9h00 - 10h30 <b>Computational design of Imaging Probes</b> <i>Dario Longo</i></p> <p>11h00 - 12h30 <b>Ligand synthesis part II</b> <i>Luciano Lattuada</i></p>	<p>9h00 - 10h30 <b>Preparation of Imaging Probes under power ultrasounds/microwaves irradiation</b> <i>Giancarlo Cravotto</i></p> <p>11h00 - 12h30 <b>Peptide modification and conjugation to probes</b> <i>Lorenzo Tei</i></p>	<p>9h00 - 10h30 <b>analytical HPLC</b> <i>Lorenzo Tei / Alessandro Barge</i></p> <p>11h00 - 12h30 <b>HPLC separation: from analytical to preparative method I</b> <i>Lorenzo Tei / Alessandro Barge</i></p>
<b>PM</b>	<p>14h00 - 15h30 <b>Design of Imaging Probes</b> <i>Alessandro Barge</i></p> <p>16h00-17h30 <b>Ligand synthesis part I</b> <i>Giovanbattista Giovenzana</i></p>	<p>14h00 - 15h30 <b>MRI assessment of the cell labeling experiment</b> <i>Simonetta Geninatti / Walter Dastrù</i></p> <p>16h00 - 17h30 <b>MRI assessment of the cell labeling experiment</b> <i>Simonetta Geninatti / Walter Dastrù</i></p>	<p>14h00 - 15h30 <b>Basic principles of chromatographic separation techniques</b> <i>Alessandro Barge</i></p> <p>16h00 - 17h30 <b>Peptide Synthesis</b> <i>Lorenzo Tei / Alessandro Barge</i></p>	<p>14h00 - 15h30 <b>Synthesis of metal-based imaging probe</b> <i>Lorenzo Tei / Alessandro Barge</i></p> <p>16h00 - 17h30 <b>Peptide Cleavage</b> <i>Lorenzo Tei / Alessandro Barge</i></p>	<p>14h00-15h00 <b>HPLC separation: from analytical to preparative method II</b> <i>Lorenzo Tei / Alessandro Barge</i></p> <p>15h00 - 17h30 <b>Final consideration and remarks / Final student assesment</b></p>

theoretical lesson  
practical session