DESIGN, SYNTHESIS AND VALIDATION OF MOLECULAR IMAGING PROBES INTENSIVE PROGRAMME	
Learning objectives	The purpose of this theoretical and practical integrated course is to cover the design, synthesis and characterization of imaging probes including their functionalization and labelling for different imaging modalities.
Public **Prerequisites**	Master or PhD students in molecular imaging, biology, chemistry or physics Basic knowledge of organic / coordination chemistry, NMR/MRI
Lectures content and practical work	- Principle of Imaging Probes and Contrast Agents - Synthesis and Functionalization of imaging probes - Peptide synthesis and conjugation to probes - Gd-complexes, CEST agents, Lanthanide complexes, Iron oxide particles, PET/SPECT labelling - Cell labelling experiment
Training methods	50 % lectures, 40 % lab work and 10 % exercises
Coordination / registration	Dario Longo / Walter Dastrù Phone: +39 011 6706493 – email: walter.dastru@unito.it **Scientific advisors: Prof. Silvio Aime**
Course language	English
Duration	10 working days
Course location	Department of Chemistry IFM – Molecular Imaging Center – Turin (ITALY)
Registration fees	All Master and PhD students from the University of Antwerp, Paris Sud 11, INSTN, Crete, Mons-Hainaut and Coimbra (partners of the IP) will receive a support of the European Commission to attend the course. Others, please send an inquiry to the coordinator: dario.longo@unito.it
Number of participants	25 participants maximum
Course leader	Prof. Enzo Terreno – email: enzo.terreno@unito.it Dr. Alessandro Barge – email: alessandro.barge@unito.it
Credits	6 ECTS

This project has been funded with support from the European Commission. Overall responsibilities are taken by the UA and the Commission cannot be held responsible for any use which may be made of the information contained therein.