

**Training School - Beyond Conventional Tissue Imaging**  
**Final MC meeting - Closing Budget and Action Analysis**  
**Workshop - (Infra)red Biomedical Optics**

**Program at a Glance**

	Wednesday 22-feb-17	Thursday 23-feb-17	Friday 24-feb-17	
09:00				
10:00 :30	Student Registration	Poster presentation	MC Registration	
10:00 :30	Opening			Laboratories @ CNR-IFN
11:00	COFFEE BREAK			
12:00 :30	Lecture 1 <b>Cinzia Giannini</b>	Lecture 4 <b>Rainer Hillenbrand</b>	Action BM1205 <b>WorkGroup Meetings</b>	
12:00 :30	Lecture 2 <b>Dror Fixler</b>	Lecture 5 <b>Daniel M. de Bruin</b>		Lecture 6 <b>Milena D'Angelo</b>
13:00 :30			Lecture 7 <b>Stefano Buzaccaro</b>	Session 3 Poster presentation
13:00 :30	LUNCH BREAK			
15:00	Lecture 3 <b>Peter Gardner</b>	Workshop and Training School Joint Session 1 <b>Biomedical Multispectral Imaging</b>	Parallel Sessions: <b>Focus Group 6</b> and <b>Focus Group 7</b>	Action BM1205 <b>WorkGroup Meetings</b>
16:00 :30	Student Presentations			
17:00 :30	Parallel Sessions: <b>Focus Group 1</b> and <b>Focus Group 2</b>			
18:00 :30		Parallel Sessions: <b>Focus Group 3</b> and <b>Focus Group 4</b>	Action BM1205 <b>MC Meeting</b>	
19:00				
21:00	SOCIAL DINNER			

**Program**

Wednesday 22nd		
Time	Location	Activity
09:30	Museum Hall	TS - Registration
10:30	Aula B	TS - Opening <i>Salvatore Vitale Nuzzo</i> , Director of Physics Department <i>Dragan Indjin</i> , Chair of COST action BM1205 and of Training School <i>Maurizio Dabbicco</i> , Chair of TS - Beyond conventional tissue imaging
11:00	Museum Hall	Coffee break
		TS - Day One <i>Chair, Maurizio Dabbicco</i>
11:30	Aula B	Lecture 1 - <b>Label-free Super-resolution Imaging</b> <i>Cinzia Giannini</i> , National Research Council - Institute of Crystallography, Bari , IT
12:30	Aula B	Lecture 2 - <b>Nanophonics-assisted nanoscopy</b> <i>Dror Fixler</i> , Bar-Ilan University, Ramat Gan, IL
13:30	at your choice	Lunch break
15:00	Aula B	Lecture 3 - <b>Fundamental aspects of infrared hyper-spectral imaging for pathology</b> <i>Peter Gardner</i> , University of Manchester, Manchester, UK
16:00	Aula B	Student Presentations <i>Ana Marin</i> , <b>Multi-modal determination of bruise dynamics parameters</b> <i>Zofia Lorenc</i> , <b>3D optical phantom to study NIRS sensitivity in a muscle</b>
16:20	CNR-IC laboratory	Focus Group 1 - <b>X-ray microimaging laboratory</b> <i>Cinzia Giannini</i> , National Research Council - Institute of Crystallography, Bari , IT
16:20	Aula B	Focus Group 2 - <b>Nanotechnology in tissue imaging: from discovery to applications</b> <i>Dror Fixler</i> , Bar-Ilan University, Ramat Gan, IL

Thursday 23rd		
Time	Location	Activity
09:30	Museum Hall	Poster presentations
09:30	Museum Hall	WorkShop and MC members registration
11:00	Museum Hall	Coffee break
11:30	Aula C	Action BM1205 - WorkGroup meeting
		TS - Day Two
		<i>Chair, Gaetano Scamarcio</i>
11:30	Aula B	Lecture 4 - <b>Infrared nanospectroscopy</b> <i>Rainer Hillenbrand, nanoGUNE, San Sebastian (Basque Country), ES</i>
12:30	Aula B	Lecture 5 - <b>State-of-art endomicroscopy</b> <i>Daniel Martijn de Bruin, Academic Medical Center, Amsterdam, NL</i>
13:30	at your choice	Lunch break
17:20	Aula B	Focus Group 3 - <b>Title to be defined</b> <i>Peter Gardner, University of Manchester, Manchester, UK</i>
17:20	Aula C	Focus Group 4 - <b>R&amp;D of nanospectroscopies</b> <i>Rainer Hillenbrand, nanoGUNE, San Sebastian (Basque Country), ES</i>
	Aula B	WS - Session on <b>Biomedical multispectral imaging</b> <i>Chair, Daniel Martijn de Bruin</i>
15:00		<b>Future perspectives and challenges in medical photonics</b> <i>Mitra Almasian, Academic Medical Center, Amsterdam, NL</i>
15:20		<b>Multispectral imaging of cutaneous lesions</b> <i>Ekaterina Borisova, Bulgarian Academy of Science, Sofia, BL</i>
15:40		<b>IQCL sources in the mid infrared for biophotonics</b> <i>Johannes Koeth, CEO nanoplus GmbH, Gerbrunn, DE</i>
16:00		Invited - <b>Infrared spectroscopic imaging for biomedical applications</b> <i>Peter Gardner, University of Manchester, Manchester, UK</i>
16:30		<b>Progress in MIR and THz optical feedback interferometry for (biomedical) sensing and imaging</b> <i>Dragan Indjin, University of Leeds, Leeds, UK</i>
16:50		<b>THz spectroscopy and imaging techniques in cancer detection</b> <i>Irmantas Kasalynas, Center for Physical Science and Technology, Vilnius, LT</i>
17:20	Aula C	Action BM1205 - Management Committee meeting
21:00	Terranima	Social Dinner
Friday 24th		
Time	Location	Activity
09:30	CNR-IFN laboratories	AFM, SEM, micro-Raman, laser microstructuring, laser interferometry, gas sensing
	Aula B	WS - Session on <b>Infrared photonics</b> <i>Chair, Dragan Indjin</i>
09:30		Invited - <b>Tip-enhanced laser self-mixing with QCLs</b> <i>Gaetano Scamarcio, University of Bari, Bari, IT</i>
10:00		<b>MIR optical feedback interferometry for biomarker detection</b> <i>Maria Carmela Cardilli, Institute of Photonics and Nanotechnology, National Research Council, Bari, IT</i>
10:20		<b>Quarz-enhanced photo-acoustic spectroscopy with QCLs</b> <i>Vincenzo Spagnolo, Polytechnic University of Bari, Bari, IT</i>
10:40		<b>Self-mode-locking phenomena in multi-mode Quantum Cascade Lasers</b> <i>Lorenzo Columbo, Polytechnic University of Torino, Torino, IT</i>
11:00	Museum Hall	Coffee break
11:30	Museum Hall	Poster presentation

TS - Day Three	
<i>Chair, Gerardo Palazzo</i>	
11:30 Aula B	Lecture 6 - <b>Correlation plenoptic imaging</b> <i>Milena D'Angelo, University of Bari, Bari, IT</i>
12:30 Aula B	Lecture 7 - <b>Optical correlation techniques for bio-materials</b> <i>Stefano Buzzaccaro, Polytechnic University of Milan, Milano, IT</i>
13:30 at your choice	Lunch break
15:00 University laboratory	Focus Group 6 - <b>Correlation and quantum imaging laboratory</b> <i>Milena D'Angelo, University of Bari, Bari, IT</i>
15:00 Aula B	Focus Group 7 - <b>Optical correlation techniques at work: exploring soft matter with new methods</b> <i>Stefano Buzzaccaro, Polytechnic University of Milan, Milano, IT</i>
15:00 Aula C	Action BM1205 - Closing address and opening perspectives

### Posters

1	<i>Alberta Terzi</i>	X ray scattering investigation of collagen engineered tissues: correlation between structural and mechanical properties
2	<i>Aldo Mazzilli</i>	Brillouin microscope for ophthalmology
3	<i>Daria Majchrowicz</i> <i>Marzena Hirsch</i>	Interferometric optical fiber sensors using nanofilms with potential application in biophotonic
4	<i>Emilia Malinowska</i> <i>Monika Kosowska</i>	Raman laser spectroscopic system for tissue
5	<i>Francesco Maria Di Lena</i>	Correlation plenoptic imaging
6	<i>Maria Carmela Cardilli</i>	Amide detection by MIR optical feedback interferometry
7	<i>Mario Colapinto</i>	Detection of absorbing and scattering agents in agarose gel by laser self-mixing MIR interferometry
8	<i>Katarzyna Karpienko</i>	Fibre-optic sensors with signal analysis in spectral domain
9	<i>Jost Stergar</i>	Biomedical hyperspectral imaging
10	<i>Lorenzo Columbo</i> <i>Massimo Brambilla</i>	Multimode dynamics of a THz QCL: from chaos to coherent dynamics and mode-locking
11	<i>Cinzia Di Franco</i> <i>et al.</i>	Fabrication and characterization of ultra-sensitive bio-functionalized electrolyte-gated organic transistors (EGOFET)
12	<i>Pietro Patimisco</i> <i>et al.</i>	Recent advances of the quartz-enhanced photoacoustic trace gas detection technique