



ESRF

The European Synchrotron

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Biology and Medicine at the ESRF

Promoting cutting-edge biomedical research using Synchrotron Radiation

ESRF BIOMED SEMINAR SERIES

EPN Campus Grenoble, ESRF Auditorium - biomed@esrf.fr

Monthly Fridays from 10h to 11h

Please join at biomed-subscribe@esrf.fr !!

Why: to strengthen interactions between ESRF scientists and promote collaborations with the scientific community in Grenoble interested in applying synchrotron radiation in their biomedical research

How: organizing seminar series that combine biomedical themes with synchrotron technologies

When: Quarterly series dedicated to a particular topic, organized as monthly seminars of 1h duration (i.e. 3 seminars/topic). **Fridays from 10h to 11h.**

Target audience: mainly for non-specialists

Seminar format: 2 short presentations (15') + round table discussion in an informal atmosphere



- Beamline features and applications in biology/medicine
- In-house/collaboration research activities

Suggestions are more than welcome!

A mailing list (biomed@esrf.fr) has been created for correspondence

Interested people can subscribe at biomed-subscribe@esrf.fr

We have subscribers from ESRF, IBS, EMBL, ILL, CEA and CHU

ESRF BIOMED KICK-OFF MEETING 17th March 2017

9h00	Welcome coffee and Introduction	Montse Soler-Lopez <i>coordinator</i>
X-ray imaging for biomedical research at the ESRF: who and how		
9h05	X-ray microscopy for functional imaging, radiation biology and therapy	Alberto Bravin <i>ID17 Beamline</i>
9h15	X-ray fluorescence and spectroscopy for probing metal ions in tissues	Hiram Castillo-Michel <i>ID21 Beamline</i>
9h25	X-ray microscopy for probing metal ions in cells	Sylvain Bohic <i>ID16 Beamline</i>
X-ray scattering for biomedical research at the ESRF: who and how		
9h35	X-ray diffraction from functional biological systems	Narayan Theyencheri <i>ID02 Beamline</i>
9h45	X-ray scattering and diffraction for fast structural dynamics of molecular assemblies	Matteo Levantino <i>ID09 Beamline</i>
9h55	Bio-inspired studies at liquid interfaces	Oleg Konovalov <i>ID10 Beamline</i>
10h05	X-ray scattering for molecular shape reconstruction	Martha Brennich <i>BM29 Beamline</i>
X-ray crystallography for biomedical research at the ESRF: who and how		
10h15	X-ray crystallography for 3D atomic structure determination	Christoph Mueller-Dieckmann <i>MX Beamlines</i>
10h25	Nanofocus X-ray diffraction for high-spatial-resolution	Manfred Burghammer <i>ID13 Beamline</i>
Support to X-ray-based biology and biomedical research		
10h35	Partnership for Structural Biology (PSB)	Florent Bernaudat <i>PSB Coordinator</i>
10h45	Partnership for Soft Condensed Matter (PSCM)	Diego Pontoni <i>PSCM Coordinator</i>
10h55	Biomedical Facility (BMF)	Alberto bravin <i>BMF Manager</i>
11h05	End of the meeting	

“A great success, with many attendees. May need to go for a larger room!”

“This meeting was a real eye-opener - I was unaware of how broad the spectrum of techniques was at the ESRF for studying biological samples, not only at the atomic scale but also at the level of the cell, tissue and whole organism. My IBS colleagues with whom I discussed also came away with a similar impression”

“Very useful to see the different approaches available at different ESRF beamlines”

“Although I have been working at the ESRF for many years I did not know all persons presenting and all these different beamlines/groups involved in Biology and Medicine at the ESRF. Very good starting point for collaborations or just getting advice from other colleagues”

“While the PSB has done a great job in connecting the ESRF Structural Biology group with biologists at the IBS, EMBL and ILL, your meeting placed a whole new group of ESRF staff and beamlines on our radar. While listening to the various speakers on Friday it became clear that there is a great potential for fruitful new interactions between the ESRF and other PSB biologists, which this kind of meeting should help foster”

“Great kick-off meeting. The BioMed topical bridge will have many positive effects, including enhanced interactions of the PSCM with the PSB”

“The solution scattering section broadened my understanding of what types of experiments are being carried out at ESRF. In fact, we are thinking of inviting some of the speakers also to our Blue Seminar series at EMBL”

“I would definitely like to attend more such kind of seminars. This is helpful also for young researchers to broaden their fields and exchange ideas”

Spring 2017: Synchrotron Radiation and Nanotoxicology in Biomedical Research

- 5th May Synchrotron-based analysis of nanoparticles *in tissues*
- 9th June Synchrotron-based analysis of nanoparticles *in cells*
- 30th June Synchrotron-based analysis of nanoparticles *in organisms*

Stay tuned at biomed@esrf.fr !