



Empowering Italian Euro-bioimaging Infrastructure

Training Symposium

May 5th-6th, 2025

CNR – Research Area of Pisa



UNIVERSITÀ
DEGLI STUDI
FIRENZE



UNIVERSITÀ
DI PISA



Finanziato
dall'Unione europea
NextGenerationEU



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA

This work is partially supported under the National Recovery and Resilience Plan (NRRP), Mission 4 Component 2 Investment 3.1 – DD MUR 3264/21 - funded by the European Union – NextGenerationEU. Project code IR00023 - Concession Decree No. 101 of 16/06/2022 adopted by MUR, CUP B53C22001810006, Project PNRR-SEE LIFE - Strengthening the Italian Infrastructure of Euro-Bioimaging.

Presentation

The next **PNRR SEELIFE and Eurobioimaging Symposium** will take place in **Pisa, Italy, on May 5-6, 2025**. This event will bring together scientists from **Euro-Biolmaging Nodes, academia, and industry** to foster interdisciplinary collaborations and discuss key topics related to **Euro-Biolmaging operations and the latest advances in imaging**.

The **agenda** includes a diverse range of **training sessions** focused on enhancing **Euro-Biolmaging Italian facilities and services**, alongside **joint Industry Board sessions** covering **molecular imaging, disease models, and multidimensional imaging**. Renowned speakers will also present their latest research and insights.

Throughout the week, attendees will have ample opportunities for **networking and discussions on Euro-Biolmaging operational aspects**.

The symposium is **open to participants from different disciplines** interested in advancing imaging technologies for biomedical applications.

For more information or to attend, please contact us at:

imagingconference@ifc.cnr.it.

For further info:

<https://ifc.cnr.it/index.php/it/news/1000-pnrr-seelife-and-eurobioimaging-symposium>

Scientific programme

Monday, May 5, 2025

09:00 - 10:00 Registration

10:00 – 11:00 Opening Session

10:00 Welcome and Institutional Greetings

10:20 Invited Talk - Speakers: Silvio Aime & Alberto Luini

11:00 - 11:30 *Coffee Break*

11:30 - 11:50 Eurobioimaging Awards

11:50 – 13:10 Medical Imaging Session 1

11:50 A roadmap to improve the translation of imaging biomarkers for research infrastructures (L. Menichetti)

12:10 Development of metabolic tracers: from synthetic methods to routine for PNRR SEELIFE (E. Baglini, F. Granziera)

12:20 Metabolic imaging of microbiota and beyond: observing the invisible with PET (P. Iozzo)

12:30 The instrumentation strengthening at IBSBC-CNR with PNRR SEE LIFE (S. Belloli)

12:50 Effect of air pollution on lung-brain axis using in vivo PET and ex vivo markers (P. Rainone)

13:00 Characterization of a preclinical SPECT system for theranostic applications (S. Valtorta)

13:10 – 14:30 *Buffet Lunch*

14:30 Invited Talk: The Role of Distributed Research Infrastructures in Biomedical and Biological Imaging: The Euro-Bioimaging ERIC (Linda Chaabane)

14:50 – 16:10 Biological Imaging Session 1

14:50 SEE LIFE at IN-CNR: strengthening Euro-BioImaging infrastructure (M. Gintoli)

15:10 2-photon imaging approach to follow Ca²⁺ signalling dysregulation in astrocytes along the progression of Alzheimer's disease (M. Zonta)

15:30 Technical Strengthening of the Euro-BioImaging Infrastructure at IEOMI: The Contribution of the PNRR SEELIFE Project (A. C. De Luca)

15:50 Electron microscopy in the discovery of new organelles (A. Parashuraman)

16:10 – 16:40 *Coffee Break*

16:40 - 17:40 Poster Session

20:00 - 22:00 *Social Dinner*

Tuesday, May 6, 2025

09:00 - 10:10 Biological Imaging Session 2

- 09:00 Strengthening nanoscale optical imaging at Genoa site with PNRR SEE LIFE (P. Bianchini)
- 09:20 Single-molecule localization and MINFLUX imaging and tracking with cell-permeant dyes (P. Bianchini)
- 09:40 Enhancing research capabilities: facility upgrades at the European Laboratory for Non-Linear Spectroscopy (G. de Vito)
- 10:00 High-speed, high-resolution fluorescence imaging using confocal spinning disk microscopy (I. Costantini)

10:20 - 10:45 *Coffee Break*

11:00 - 13:00 Medical Imaging Session 2

- 10:45 Imaging capabilities of a triple-modality SPECT/CT/OI high resolution scanner (N. Belcari)
- 11:20 Real-time THz imaging of plants (A. Toncelli)
- 11:40 dDNP Polarizer: a paradigm-shifting technology for metabolic MRI (S. Monti)
- 12:00 Molecular Imaging of vulnerable and stable plaque in mouse model of Atherosclerosis, by ultrasound and targeted contrast media (S. Albanese)
- 12:20 Empowering Research Services at UniTO: the Upgrade of the Center for Molecular and Preclinical Imaging (E. Terreno)
- 12:40 NIRF imaging for theranostic applications (M. Capozza),
- 12:50 Preclinical evaluation of potential new CT agents based on Bismuth and Tungsten (R. Rizzo)

13:00-13:30 Closing Session

- 13:00 Round table with the participation of Dompè Farmaceutici, Delegates of Ministry of Education and Eurobioimaging delegates
- 13:20 Final remarks

13:30 - 14:30 *Farewell Buffet*

Informazioni ai fini dell'attribuzione dei crediti ECM

Responsabile Scientifico

Nicola Belcari
Associate Professor Medical physics / Molecular imaging
Università di PISA - Dipartimento di FISICA "E.Fermi"

Durata

9 ore formative

Sede dell'evento

CNR Area della Ricerca di PISA
Via Giuseppe Moruzzi, 56124 Pisa

Razionale Scientifico

L'evento riunirà scienziati dei nodi di Euro-Bioluming, del mondo accademico e dell'industria per favorire collaborazioni interdisciplinari e discutere temi chiave legati alle attività di Euro-Bioluming e agli ultimi sviluppi nell'imaging. L'agenda prevede una serie di sessioni di formazione dedicate al potenziamento delle strutture e dei servizi di Euro-Bioluming Italia, oltre a sessioni congiunte con l'Industry Board su imaging molecolare, modelli di malattia e imaging multidimensionale. Inoltre, esperti di fama internazionale presenteranno i loro ultimi studi e innovazioni. L'evento sia accreditato per l'Educazione Continua in Medicina (ECM). Il simposio ha l'obiettivo di erogare la formazione specialistica nel campo dell'imaging molecolare e biomedico.

Segreteria Organizzativa e Provider ECM

GEEO Eventi e Formazione (Provider 5928)
Via San Martino, 77 - 56125 Pisa
Tel. 050 2201353 - Fax 050 2209734
formazione@gecoef.it
www.gecoef.it

Destinatari della formazione

Il Simposio è inserito nel Programma Nazionale di Educazione Continua in Medicina del Ministero della Salute 2025, ID 5928-450598, n. **9 crediti ECM**, accreditato per tutte le professioni sanitarie.

Obiettivi formativi e area formativa

Obiettivo formativo tecnico-professionale: Innovazione tecnologica: valutazione, miglioramento dei processi di gestione delle tecnologie biomediche, chimiche, fisiche e dei dispositivi medici. Health Technology Assessment.