

VIII. MEDITERRANEAN THEMATIC WORKSHOP ON ADVANCED MOLECULAR IMAGING MEDAMI 2024

https://indico.cern.ch/e/medami2024

Palazzo Pancaldi, Livorno, Italy, May 24-26, 2024

Molecular Imaging of Inflammation and Infection:

- Clinical Rationale and Unmet Needs
- Imaging Modalities, Technologies, and Protocols
 - Present & Future Research & Development









Dear Colleague,

Following the series of previously conducted symposia on dedicated molecular imaging instrumentation and applications, we are currently organizing **the 8**th **edition** with a focus on molecular imaging of inflammation and infection that will take place in the city of Livorno on the coast of Tuscany (about 30 km from Pisa), facing Elba's island. The event will follow the PSMR 2024 - 10th Conference on PET, SPECT, and MR Multimodal Technologies, Total Body and Fast Timing in Medical Imaging: Fast Timing Detectors and Total Body Imaging, organized in nearby island Elba, May 20-23, 2024 (see https://psmr2024.df.unipi.it/), which you might also consider attending. Transportation will be organized from Elba to Livorno for participants of both conferences.

The MEDAMI workshops are unique in that they address a medical imaging topic from the medical, clinical, and instrumentation perspectives. We invite experts from different backgrounds relevant to the selected subject disciplines, including biology, nuclear medicine, radiochemistry, physics, and engineering to foster multidisciplinary interactions leading to novel, cutting-edge applications using the latest technological developments. In addition to the particular subject of the conference, the stakeholders from academia, medical institutions and organizations, regulatory agencies, industry, and patient advocacy groups have the opportunity to jointly discuss the strategic directions of the biomedical imaging field. We will extend the invitation to participate to experts from other disciplines and areas, e.g., microbiologists, surgeons, and cardiologists.

Some of the **key topics** that the 2024 forum shall address are:

- Molecular imaging of Inflammation and Infection in research and clinical practice status and next frontiers
- Advances in multimodality imaging to increase our understanding of the role of inflammation in healthy and diseased tissue
- Role of high sensitivity / total-body scanners in infection and inflammation imaging
- Role of dynamic imaging in separating inflammation from infection and other diseases
- Technical advances in radiomic analysis for detecting inflammation and infection
- Relevant tracers for inflammation and infection
- Can AI/ML/Deep Learning contribute to molecular imaging of inflammation and infection?
- Data harmonization and standardization
- The role of molecular imaging in fast precision therapy of inflammation and infection
- Role of Animal Models in the Investigation of Inflammatory Processes and Infectious Diseases
- Is there more need for higher resolution or lower cost scanners for accessibility to a broader global community, including developing countries?

The program of MEDAMI 2024 will include invited talks by key international experts and opinion leaders. Participants will be invited to contribute with oral and poster presentations.

Important dates:

- 15 December 2023: Call for abstracts
- 28 February 2024: Abstracts Submission Deadline
- 15 March 2024: Early Bird Registration Opening
- 15 March 2024: Notification to Authors
- 15 April 2024: Early Bird Registration closing
- May 24-26, 2024: Conference

Conference Chairpersons:

John O. Prior, Lausanne University Hospital and University of Lausanne, Switzerland (Co-Chair) **Olivier Gheysens**, University Hospital Saint-Luc and Catholic University of Louvain, Belgium (Co-Chair)

On behalf of the **MEDAMI Organizing Committee**:

- N. Belcari, INFN, Pisa, Italy
- J. M. Benlloch, I3M, CSIC, Valencia, Spain
- F. Garibaldi, ISS & INFN, Rome, Italy
- A. Gonzalez, I₃M, CSIC, Valencia, Spain
- Y. Haemisch, Direct Conversion/Varex, Munich, Germany
- P. Križan, University of Ljubljana, Slovenia
- R. Lecomte, Universite de Sherbrooke, Canada
- P. Lecoq, CERN, Geneva, Switzerland
- C. Levin, Stanford University, USA
- S. Majewski, University of California, Davis, USA
- R. Pestotnik, Jožef Stefan Institute, Ljubljana, Slovenia
- V. Sossi, University of British Columbia, Vancouver
- C. Tsoumpas, UMCG, University of Groningen, Netherlands