

AUSTRIAN BIOIMAGING/CMI



PROVIDING ACCESS, SERVICES AND TRAINING TO THE STATE-OF-THE-ART IMAGING TECHNOLOGIES

Cutting-edge imaging technologies are one of the driving forces in modern biology and preclinical studies. They enable scientists to visualize biological samples at various scales and quantify their structure, molecular dynamics, physical properties, and chemical composition with unprecedented precision. Imaging technologies help not only to address grant societal challenges but also allow breakthrough biological discoveries and their translation into medical application. With the emergence of new frontiers of opportunity, one of the key challenges for scientists is to gain access to specific imaging technologies that are either not available at their home institutions or for which expertise is lacking. Austrian Bioimaging was founded in response to this development. As a consortium of eight universities and leading research institutions, it provides open access to 60+ imaging instruments spanning the entire resolution range of interests for biological and pre-clinical studies, offers expertise for data visualization, training, and other support facilities for all national and international researchers.

Austrian Bioimaging/CMI in a nutshell

- 29 Technology units (2022)
- >60 Imaging instruments
- >40 Cutting-edge imaging technologies
- Data processing and visualization as standalone
- >40 Staff involved (facility teams and researchers)
- >200 Users (cumulative in the last two years)
- >5 Trainings and workshop (cumulative in the last two years)
- Provides additional services for users (e.g., project consulting and methodological setup, human body donor, wet and histology labs, animal housing, imaging probes)

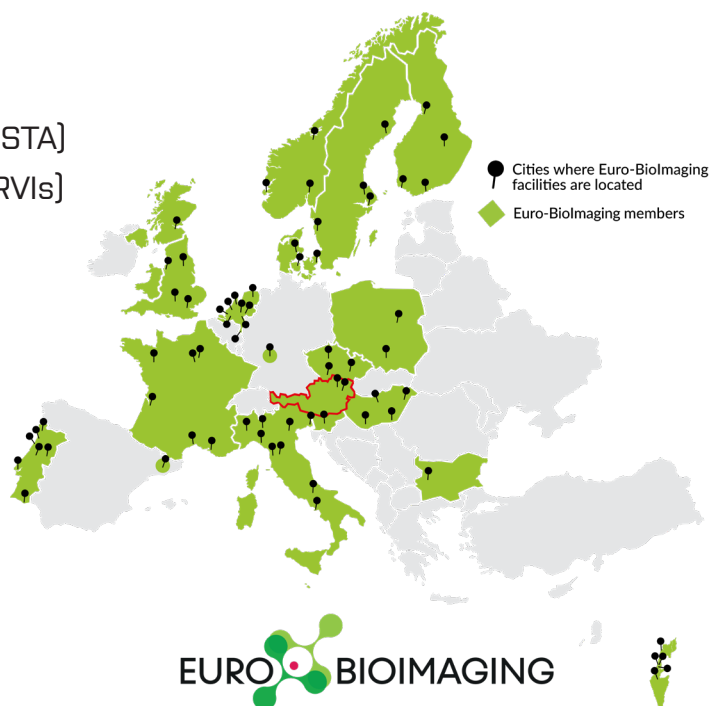


Austrian Bioimaging/CMI offers open access to 30+ imaging technologies across scales, including the technologies highlighted here. Abbreviations: AFM, atomic force microscopy; CLEM, correlative light electron microscopy; CT, computed tomography; EM, electron microscopy; HREM, high resolution episcopic microscopy; LSCM, laser scanning confocal microscopy; LSFM, light sheet fluorescence microscopy; MPM, multiphoton microscopy; MRI, magnetic resonance imaging; MSI, Mass Spectrometry Imaging; OCM, optical coherence microscopy; PAI, photoacoustic imaging; PAM, photoacoustic microscopy; PET, positron emission tomography; PP, plant phenotyping; US, high-resolution ultrasound imaging; XRF, micro-X-ray fluorescence Spectrometry

Members of Austrian Biolmaging/CMI consortium

- Medical University of Vienna
- Vienna BioCenter Core Facilities (VBCF)
- Technical University of Vienna
- University of Veterinary Medicine of Vienna
- University of Vienna
- Institute of Science and Technology Austria (ISTA)
- Center for Virtual Reality and Visualization (VRVIs)
- Ludwig Boltzmann Society

In recognition of its outstanding role as a service provider with high quality standards, Austrian Biolmaging/CMI has also become the official **Euro-Biolmaging Node of Austria** in 2021. Through Euro-Biolmaging, access is provided to trans-national users, international networks, and European funding opportunities for the services offered by the nodes.



Expanding the Biomedical Horizon with Correlated Multimodal Imaging (CMI)

One of the strengths of Austrian Biolmaging is the R&D of correlative multimodality imaging. Apart from recent advances, no single imaging technology can provide holistic information about a given sample. This limitation can be overcome by combining and multimodally correlating imaging technologies. Close cooperation of Austrian Biolmaging/CMI partners in multimodality pipelines will trigger innovative approaches and interdisciplinary projects.

Austrian Biolmaging/CMI is coordinated by its Managing Director **Dr. Baubak Bajoghli**, who has applied microscopy techniques and multimodal imaging in his basic and translational research studies published in 30+ peer-reviewed articles.

“ All scientists, regardless of their affiliation, area of expertise or field of activity, can benefit from services of Austrian Biolmaging/CMI. Share your ideas and projects with us! ”



CONTACT

Austrian Biolmaging/CMI
office@austrian-bioimaging.at
<https://austrian-bioimaging.at>



Follow us on LinkedIn

