**IEEE INTERNATIONAL SYMPOSIUM ON BIOMEDICAL IMAGING**

**ISBI 2024**

27-30 MAY, 2024 – ATHENS, GREECE
MEGARON ATHENS INTERNATIONAL CONFERENCE CENTRE (MAICC)

**VISIT WEBSITE**
biomedicalimaging.org/2024

# Call for papers

The IEEE International Symposium on Biomedical Imaging (ISBI) is a scientific conference dedicated to the mathematical, algorithmic, and computational aspects of biological and biomedical imaging, across all scales of observation. It fosters knowledge transfer among different imaging communities, including technological, clinical and industrial communities, and contributes to an integrative approach to biomedical imaging. It offers an appealing environment for young researchers to pitch on their research and interact with a diverse network of scientists and experts in the entire spectrum of Biomedical Imaging. ISBI is a joint initiative of the IEEE Signal Processing Society (SPS) and the IEEE Engineering in Medicine and Biology Society (EMBS).

The 2024 edition will be an in-person meeting that will take place in Athens, Greece, and will include tutorials, challenges, and a scientific program comprising plenary talks, special sessions, as well as oral and poster presentations of peer-reviewed papers.

All submissions must be original, and not under concurrent review at any other conference or journal. Accepted 4-page regular papers will be published in the symposium proceedings by IEEE Xplore.

To encourage attendance by a broader audience of imaging scientists and clinical professionals, ISBI 2024 will continue to have a second track featuring posters selected from 1-page abstract submissions without subsequent archival publication.

**Highlights of the 2024 edition include:**

- pharma-meets-imaging: for the first time, the role of imaging in pharmaceutical development will be highlighted over a dedicated half-day session.

- art-in-biomedical-imaging: for the first time, ISBI24 will foster an Art-in-Biomedical-Imaging contest, asking participants to go beyond conventional concepts of medical imaging and image analysis and show their artistic talent.
- pitch competition: following the successful ISBI23 initiative, symposium participants can share their startup ideas with the ISBI community.

High-quality papers are solicited containing original contributions in the topics of interest.

**Topics of interest include, but are not restricted to:**
- image formation and reconstruction
- physical, biological, and statistical modelling
- computational and statistical image processing and analysis
- image segmentation
- image quality assessment
- machine learning for image analysis
- dynamic/ multimodal/ multiplexed/ multiscale imaging
- computer-aided diagnosis
- integration of imaging and non-imaging biomarkers
- imaging informatics
- visualization in biomedical imaging, and biomedical applications
- computational pathology, spatial transcriptomics, single cell analysis, and other tissue-based imaging methods

**Emerging topics include:**
- challenging frontiers in AI for medical imaging: interpretability, domain shifts and adaptation, trustworthiness
- the role of medical imaging in in silico modelling, precision medicine and clinical applications
- virtual twins and medical imaging

**Submissions are accepted only via the following link.**

# Organizers

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**Challenges**
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**Tutorials**
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