Celebrating Our 15th Year

IEEE Signal Processing in Medicine and Biology Symposium

Saturday, December 6, 2025

Temple University, Philadelphia, Pennsylvania

IEEE SPMB25, now in its 14th year, is a virtual symposium that provides an international forum for collaboration between bioengineering and signal processing researchers. A complete archive of the conference can be found at ieeespmb.org. We expect approximately 150 researchers from over 25 countries to attend this virtual event. We specifically encourage graduate students to attend and present early versions of their dissertation research. Over the years, we have had many graduate students use this symposium as a forum for enhancing their professional development and improving their research.

The symposium is sponsored by the IEEE Region 2 Philadelphia Section, Temple University, and the Neural Engineering Data Consortium. This symposium is intended to bring together a wide range of professionals interested in applications of artificial intelligence (AI), signal processing and clinical applications in medicine and biology. Signal processing and AI are rapidly transforming healthcare due to the significant success deep learning technology has enjoyed recently. The enormous amounts of data that can be mined from devices and medical records is enabling a new generation of technology based on big data.

The symposium will consist of two plenary talks, two oral sessions and a poster session. We usually accept 12 papers for oral presentations and 12 to 15 posters. Acceptance rates for the conference average about 50%. Papers that are not accepted for presentation are offered a chance to be resubmitted as a poster.

The conference will be held online using Zoom since this seems to be work best for our international audience. In addition to publication of your paper or abstract, a video recording of your contribution will be made available from the conference technical program web page. Please refer to last year's program to see examples of these presentations.

The conference technical committee will also select a best paper based on both the written submission and oral presentation. Poster submissions are not eligible for this award.

Symposium Topics:

Traditional topics include:

- Signal and image analysis (e.g., EEG, ECG, MRI)
- Artificial intelligence, machine learning and data mining
- Clinical applications of signal processing and AI technology
- Applications of emerging computing technology such as quantum computing and low power microelectronics

Applications of particular interest this year include:

- Generative models and foundational models
- Multimodal decision-making support
- Genomics, genetics and proteomics
- Smart health systems based on artificial intelligence

If you have questions about the relevance of a planned submission, feel free to contact the technical committee at help@ieeespmb.org for guidance.

Paper/Abstract Submission:

Presenters may choose to submit to one of two peer-reviewed tracks:

(1) Paper: An original paper, typically but not limited to four to six pages, that includes an oral presentation.

(2) Poster: A short abstract that will be presented as a poster. A summary video of your poster will also be included as part of the conference web site.

Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements. To review the history of our conference publications, search for "IEEE SPMB" in IEEE Xplore.

Authors can only present one contribution to the conference and can appear as first author on only one contribution. Contributions can be submitted via email to submit@ieeespmb.org. Contributions must follow the approved conference formats (see guidelines). Please note that for submissions to be reviewed, they must be formatted according to the guidelines.

Videos of your presentations will also be archived online. Final poster submissions include a copy of the poster.

Important Dates:

Paper Submission:	Jul. 1, 2025
Notification:	Sept. 1, 2025
Paper Revisions:	Oct. 1, 2025
Early Registration:	Nov. 15, 2025
Final Program:	Dec. 1, 2025

General Chairs:
Joseph Picone (Temple)
Ammar Ahmed (Aptiv)

Technical Program Committee:
Amir Jahanian (Bielefeld)
Khem Poudel (MTSU)

Web: http://www.ieeespmb.org/2023
Contact: help@ieeespmb.org