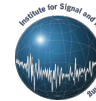




Tenth Annual



Temple University  
College of Engineering

# IEEE Signal Processing in Medicine and Biology Symposium (SPMB20)

Saturday, December 5, 2020

Temple University, Philadelphia, Pennsylvania

IEEE SPMB20 is a regional symposium intended to provide a highly interactive forum where bioengineering and signal processing researchers can collaborate on emerging trends in signal processing. We expect approximately 125 researchers to attend. We specifically encourage graduate students to attend and present their thesis or dissertation research. This is an excellent opportunity to network with leading professionals in your field and to form new collaborations.

Signal processing plays a vital role in applications ranging from medical electronics to data mining of electronic medical records. The enormous amounts of data that can be acquired from devices are enabling a new generation of technology based on big data. This symposium is intended to bring together a wide range of professionals interested in applications of signal processing medicine and biology. The symposium is sponsored by the IEEE Region 2 Philadelphia Section, Temple University and the Neural Engineering Data Consortium.

The symposium will consist of two plenary talks, three oral sessions and a poster session. Exhibits and demonstrations are encouraged as well. Interested parties should contact the conference organizers at [help@ieeespmb.org](mailto:help@ieeespmb.org) for further details. Please consult our [conference archive](#) for additional information about the history of this conference.

To celebrate the 10<sup>th</sup> year of the conference, we are collaborating with [Novela Neurotech](#) and [NeuroTechX](#) to host the [Neureka 2020 Epilepsy Challenge](#). We will host a special session on this challenge. Participants are encouraged to submit a paper.

## Symposium Topics:

Traditional signal processing topics include:

- Signal analysis (e.g., EEG, ECG, EMG)
- Medical imaging (e.g., MRI, fMRI)
- Machine learning, data mining and classification
- Big data resources and applications
- Signal processing methods in bioinformatics

Applications of particular interest this year include:

- Electronic medical records
- Wearable healthcare devices
- Data mining and analytics in healthcare
- Security and reliability in wireless medical technologies
- Biomedical nanosensors and wireless technologies
- Biomedical instrumentation and electrical stimulation
- Precision healthcare

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

## Paper/Abstract Submission:

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

- (1) Paper: An original four to six-page paper for oral presentation.
- (2) Poster: A short abstract (one-page min.) that will be presented as a poster.

All papers and abstracts will be submitted to [IEEE Xplore](#) for indexing (search for "IEEE SPMB" to find past conferences).

Papers/abstracts can be submitted via email to [submit@ieeespmb.org](mailto:submit@ieeespmb.org). Contributions must follow the approved conference formats. See [guidelines](#) for more information. Final poster submissions include a copy of the poster.

## Important Dates:

|                    |              |
|--------------------|--------------|
| Paper Submission   | Jul. 1, 2020 |
| Notification       | Sep. 1, 2020 |
| Paper Revisions    | Oct. 1, 2020 |
| Early Registration | Nov. 1, 2020 |
| Final Program      | Dec. 5, 2020 |

## Organizing Committee:

### General Chairs:

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Ivan Selesnick (NYU-Tandon)

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### Local Arrangements:

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Web: <http://www.ieeespmb.org/2020>

Contact: [help@ieeespmb.org](mailto:help@ieeespmb.org)

