

Sixth Annual

# IEEE Signal Processing in Medicine and Biology Symposium (SPMB16)

Saturday, December 3, 2016

Temple University, Philadelphia, Pennsylvania

IEEE SPMB16 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. Awards for best student paper and presentation will be given. 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 IEEE-USA, IEEE Region 2, IEEE Region 2 Philadelphia Section, Temple University, the Neural Engineering Data Consortium and NYU Polytechnic School of Engineering.

The symposium will consist of two plenary talks, two oral sessions and two poster sessions. 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.

## 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
- Linear, nonlinear, and adaptive filtering and prediction
- Time-frequency and non-stationary signal analysis

Applications of particular interest this year include:

- 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
- Emerging medical devices, technologies and applications

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 one-page abstract that will be presented as a poster.

All papers and abstracts are indexed in IEEE Xplore (search for "IEEE SPMB").

Papers/abstracts can be submitted via email to [submit@ieeespmb.org](mailto:submit@ieeespmb.org). Papers must be prepared using the standard IEEE conference paper template (see [IEEE Templates](#) for more information.)

## Important Dates:

Submission	Sept. 15, 2016
Notification	Oct. 15, 2016
Early Registration	Nov. 1, 2016

## Organizing Committee:

### General Chairs:

Joseph Picone (Temple)  
Ivan Selesnick (NYU-Poly)

### Conference Co-Chair:

Charles Rubenstein (Pratt)

### Program Chairs:

Iyad Obeid (Temple)  
Nashwa Elaraby (Penn State)  
Vira Oleksyuk (Temple)  
Xiaomu Song (Widener)

### Industrial Liaison:

Mike Mayor (IEEE SPS)

### Publications Chair:

Georgios Lazarou (USA)

### Local Arrangements:

Shawn Fagan (Temple)  
Tamika Butler (Temple)  
Gabriella Suarez (Temple)

**Web:** <http://www.ieeespmb.org/2016>

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

