

CNB-MAC 2018

Third International Workshop on Computational Network Biology: Modeling, Analysis, and Control
Washington, D.C., August 29, 2018

The Fifth International Workshop on Computational Network Biology: Modeling, Analysis, and Control (CNB-MAC 2018) will be held in Washington, D.C., August 29, 2018. The workshop will be organized in conjunction with the 9th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB 2018), the flagship conference of the ACM SIGBio. The workshop aims to provide an international scientific forum for presenting recent advances in computational network biology that involve modeling, analysis, and control of biological systems and system-oriented analysis of large-scale OMICS data.

CNB-MAC 2018 solicits original research papers that report new research findings that have not been published elsewhere, highlights that present advances in the field that have been reported in recent journal publications, and poster abstracts for rapid dissemination of the latest research results in computational network biology. The main emphasis of the workshop will be on rigorous mathematical/computational approaches for studying biological networks, systems, and pathways and the analysis of large-scale OMICS data from a systems perspective.

Topics of interest include (but are not limited to):

- Inference of biological networks
- Modeling and simulation of biological networks
- Multi-scale modeling of human-microbiome-environment interactions
- Network-based analysis of OMICS data
- Network dynamics and network control
- Detection, modeling, and analysis of regulatory modules in biological networks
- Network-based prediction of drug response and potential drug targets
- Pathways and networks in complex diseases
- Incorporation of prior knowledge in biological system and data analysis

All paper, highlight, and abstract submissions should be made through the EasyChair online submission system:

<https://www.easychair.org/conferences/?conf=cnbmac2018>

Partner journals: Full-length original research papers accepted for presentation at CNB-MAC 2018 will be published in special issues of CNB-MAC 2018 partner journals (journals to be announced later). In the previous year, CNB-MAC papers have been published in *BMC Bioinformatics*, *BMC Genomics*, *BMC Systems Biology*.

Important dates:

- Paper submission deadline: May 28, 2018
- Paper acceptance notification: June 18, 2018
- Highlight submission deadline: June 20, 2018
- Poster submission deadline: June 20, 2018
- Highlight/poster notifications: June 22, 2018

Organizers:

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