

CNB-MAC 2022

August 7, 2022
Chicago, Illinois, USA

7th International Workshop on Computational Network Biology: Modeling, Analysis, and Control

The Seventh International Workshop on Computational Network Biology: Modeling, Analysis, and Control (CNB-MAC 2022) will be held in **Chicago, Illinois, on August 7**. The workshop will be organized in conjunction with the 13th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB 2022), 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 2022 solicits **original research papers** that report new research findings that have not been published elsewhere, **highlight abstracts** 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 and/or computational approaches for studying biological networks, systems, and pathways and the analysis of large-scale OMICS data from a systems perspective. **New this year**, CNB-MAC 2022 will offer events to foster networking and collaboration (including a mentoring session and a roundtable discussion).

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
- Epidemiology and exposure networks
- Networks to model molecular structure and function
- Network architectures in deep learning applications
- Networks in precision medicine

All paper, highlight, and abstract submissions should be made through the EasyChair online submission system: <https://www.easychair.org/conferences/?conf=cnbmac2022>

Partner journal: As in previous years, full-length original research papers accepted for presentation at CNB-MAC 2022 will be published in a special issue of CNB-MAC 2022 partner journal. This year, we are partnering with the *Journal of Computational Biology (JCB)*.

Important dates:

- Full paper submission deadline: June 22, 2022
- Highlight abstract submission deadline: July 1, 2022
- Poster abstract submission deadline: July 1, 2022

All papers and abstracts will be notified by July 13, 2022.

<https://cnbmac.org/>