



IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology



Niagara Falls, Canada
August 12-15, 2015

**General Chair:**

Sheridan Houghten
(Canada)

Program Chair:

Kay Wiese (Canada)

Technical Co-Chairs:

Wendy Ashlock (Canada)
Madhu Chetty (Australia)
Alioune Ngom (Canada)

Finance Chair:

Gary Fogel (USA)

Publicity Chairs:

Dan Ashlock (Canada)
Sansanee Auephanwiriyakul
(Thailand)
Michael Lones (UK)
Gonzalo Ruz (Chile)

Tutorial Chair:

Clare Bates Congdon (USA)

Proceedings Chair:

Steven Corns (USA)

Special Sessions Chair:

Vassilis Plagianakos
(Greece)

Local Arrangements Chair:

Joseph Brown (Canada)

Call For Papers

This conference will bring together top researchers, practitioners, and students from around the world to discuss the latest advances in Computational Intelligence and other areas of Artificial Intelligence, as applied to real world problems in biology, bioinformatics, computational biology, medicine, bioengineering, and related fields. Topics of interest include but are not limited to:

- Gene expression array analysis
- Epigenetics
- Structure prediction and folding
- Molecular sequence alignment and analysis
- Metabolic pathway analysis
- MicroRNA analysis
- Motif detection
- Molecular evolution and phylogenetics
- Systems and synthetic biology
- Modeling, simulation, and optimization of biological systems
- Robustness and evolvability of biological networks
- Biological network reconstruction
- Effective use of BLAST and alternatives
- Ecoinformatics and applications to ecological data analysis
- Medical imaging and pattern recognition
- Biomedical data modeling and mining
- Biomedical model parameterization
- Big data analysis and tools for biological and medical data
- Biomarker discovery and development
- Personalized medicine and treatment optimization
- Neuroscience

The use of computational intelligence or artificial intelligence must play a substantial role in submitted papers. Submissions will be peer reviewed and accepted papers will be published in the conference proceedings, will be indexed in IEEE Xplore and will be considered for publication in journal special issues.

Submission Procedure

Prospective authors are invited to submit papers in IEEE format, including results, figures, and references. Accepted papers longer than eight pages will have an additional per page charge. Submission details can be found at: www.cibcb.org.

For additional information, contact the General Chair, Sheridan Houghten, Department of Computer Science, Brock University, St. Catharines, Ontario. Email: houghten@brocku.ca.

Important Dates

Special session proposals:
January 16, 2015

Paper Submission Deadline:
~~March 20, 2015~~ April 3, 2015

Paper acceptance:
~~May 22, 2015~~ May 29, 2015

Final paper submission:
June 26, 2015

Conference:
August 12-15, 2015