



18th IEEE International Conference on Computational Intelligence in Bioinformatics and Computational Biology

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This conference will bring together top researchers, practitioners, academics and students from around the globe to discuss the latest advances in the field of Computational Intelligence and its application to real world problems in biology, bioinformatics, computational biology, chemical informatics, bioengineering, and related fields. Computational Intelligence approaches include artificial neural networks, fuzzy logic, evolutionary algorithms, hybrid algorithms, and other emerging techniques. Topics of interest include but are not limited to:

- Gene expression array analysis
- Neuromorphic integration of bio- and neuroinformatics
- Structure prediction and folding
- Molecular sequence alignment and analysis
- Metabolic pathway analysis
- RNA and protein folding and structure prediction
- Analysis and visualization of large biological data sets
- Motif detection
- Molecular evolution and phylogenetics
- Systems and synthetic biology
- Health: physical and mental
- Modeling, simulation, and optimization of biological systems
- Robustness and evolvability of biological networks
- Emergent properties in complex biological systems
- Ecoinformatics and applications to ecological data analysis
- Medical imaging and pattern recognition
- Medical image analysis
- Biomedical data modeling and mining
- Treatment optimization
- Biomedical model parameterization
- Brain computer interface

The use of computational intelligence must play a substantial role in submitted papers. Submissions will be peer reviewed and accepted papers will be published in the conference proceedings and will be indexed in IEEE Xplore. Selected papers, after a substantial extension, will be considered for publication in special issue of **Elsevier's Biosystems journal**.

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: <http://www.federation.edu.au/cibcb2021>

Depending on prevailing situation, the conference will be either face to face, virtual or a combination of both. For additional information, contact the Conference Secretariat at Federation University, Australia via Email: cibcb2021@federation.edu.au

Important Dates

Special session proposals:
25 March 2021

Paper Submission Deadline:
30 April 2021

Paper acceptance:
15 June 2021

Final paper submission:
15 July 2021

