

# IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology 23-25 August 2017 – Manchester, UK

# IEEE CIBCB 2017

[www.cibcb2017.org](http://www.cibcb2017.org)

## IEEE CIBCB 2017

The IEEE Conference on Computational in Bioinformatics and Computational Biology (IEEE CIBCB) has become a major technical event in the field of Computational Intelligence (CI) and its application to problems in bioinformatics, computational biology, and biomedical engineering. IEEE CIBCB 2017 provides a global forum for academic and industrial scientists from computer science, biology, chemistry, medicine, mathematics, statistics, and engineering, to discuss and present their latest research findings from theory to applications.

IEEE CIBCB will be held at the INNSIDE Hotel, Manchester, UK. Manchester is a city which has grown from the first industrial city and the home of the first programmable computer, to be the central hub of the "Powerhouse of the North" of England – an influential, modern, knowledge-based city amongst the top European locations for science, healthcare, education, business and leisure.

2017 marks also the return of IEEE CIBCB to Europe, having been hosted here only once before (Paris, 2011) since its foundation in 2004. We believe that the UK and Manchester is the right location to expand the popularity of this exciting research field and the CIBCB conference itself in this part of the world.

## Call for Papers

Papers for IEEE CIBCB 2017 should be submitted electronically through the Conference website at [www.cibcb2017.org](http://www.cibcb2017.org), and will be refereed by experts in the fields and ranked based on the criteria of originality, significance, quality and clarity. Topics of interest include but are not limited to:

### CI in Bioinformatics

- Evolution, phylogeny, comparative genomics
- Gene expression array analysis
- Metabolic pathway analysis
- MicroRNA analysis
- Molecular sequence alignment and analysis
- Pattern recognition/data mining/optimization methods in Bioinformatics
- Visualization of large biological data sets

### CI in Computational Biology

- Systems and synthetic biology
- Structure prediction and folding
- Modelling, simulation, and optimization of biological systems
- Biological network reconstruction/robustness/evolvability
- Epigenomics

### CI in Biomedical Engineering, Bioprocessing and Healthcare Informatics

- Medical imaging and pattern recognition
- Biomedical data modelling/data mining/model parametrization
- Parallel/high performance computing
- Big data analysis and tools for biological and medical data
- Biomarker discovery and development
- Health data acquisition/analysis/mining
- Healthcare information systems/knowledge representation/reasoning
- Personalized medicine and treatment optimization
- Biopharmaceutical manufacturing
- Closed-loop optimization methods/platforms

## Call for Special Session Proposals

IEEE CIBCB 2017 solicits proposals for special sessions within the technical scope of the conference. Special session proposals should include the session title, a brief description of the scope, contact information and brief CV of the organizers. Inquiries regarding special session proposals should be addressed to the Special Session Chair.

## Call for Tutorials

IEEE CIBCB 2017 will feature tutorials covering fundamental and advanced topics in computational intelligence and its application to problems within the scope of the conference. A tutorial proposal should include title, outline, enrolment, and presenter/organizer biography. Inquiries regarding tutorial proposals should be addressed to the Tutorial Chair.

## Call for Competitions

IEEE CIBCB 2017 enters all accepted posters into a Best Poster Competition. All conference attendees will have the chance to vote in the Competition on site. The best judged poster will win a prize and featured on the IEEE CIBCB 2017 website. Inquiries regarding the Competition should be addressed to the Competition Chair.



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### Special Chair:

Joseph Brown (Russia)

### Competition Chair:

Pedro Mendes (UK)

### Local Chair:

Yu-Wang Chen (UK)

## Important Dates

### Special sessions proposals:

13 January 2017

### Tutorial proposals:

10 February 2017

### Paper submission:

31 March 2017

### Paper acceptance notification:

2 June 2017

### Final paper submission and early registration deadline:

30 June 2017



For additional information please contact the conference organisers at [cibcb2017@gmail.com](mailto:cibcb2017@gmail.com)