

CALL FOR PAPERS

12th International Conference on Bioinformatics and Computational Biology

March 23–25, 2020 – San Francisco, CA, USA

BICOB-2020

in parallel with
CATA-2020

Paper submission: <https://easychair.org/conferences/?conf=bicob2020>

*****All accepted papers will be published online in EasyChair EPiC Series (full text pdf) *****

Significant advances have been witnessed in most areas of bioinformatics and computational biology in recent years, and BICOB-2020 is one of the conference venues for all areas of bioinformatics, computational biology, and medical informatics. BICOB-2020 is the 12th year of the conference and will be held between 23–25 March 2020 in San Francisco, CA, USA. It is one of the front platforms for disseminating latest research results and techniques in bioinformatics, computational biology, genomics, and medical informatics. BICOB-2020 will provide a vibrant atmosphere and venue for bioinformatics and computational biology scientists to present and publish their research results, investigations, and studies. Moreover, bioinformatics and computational biology continue to be a vibrant research area with broadening applications and new emerging challenges. BICOB-2020 seeks original and high-quality contributions in the fields of bioinformatics, computational biology, systems biology, medical informatics and the related areas. The conference includes a **Best Paper Award** to be presented during the conference banquet. We also encourage work in progress and research results in the emerging and evolutionary computational areas. Work in the computational methods related to, or with application in, bioinformatics is also encouraged including computational intelligence and its application in bioinformatics, bio-data mining and text mining, evolutionary algorithms, nature-inspired computation, machine learning and bio-NLP, biomedical ontology, biomathematics, modeling and simulation, pattern recognition, data visualization, biostatistics. The topics of interest include (and are not limited to):

- **Genome analysis:** Genome assembly, Next-Gen genomics, genome and chromosome annotation, gene finding, alternative splicing, EST analysis and comparative genomics.
- **Sequence analysis:** Multiple sequence alignment, sequence search and clustering, next-generation sequencing NGS, function prediction, motif discovery, functional site recognition in protein, RNA and DNA sequences.
- **Phylogenetics:** Phylogeny estimation, models of evolution, comparative biological methods, and population genetics.
- **Systems biology:** Systems approaches to molecular biology, multiscale modeling, pathways, gene networks, transcriptomics - microarray data analysis, proteomics, and epigenomics.
- **Healthcare Informatics:** Healthcare data analysis and mining. Clinical decision support systems, and healthcare information systems.
- **Structural Bioinformatics:** Structure matching, prediction, analysis and comparison; methods for docking; protein design
- **Analysis of high-throughput biological data:** Microarrays (protein, array CGH, genome tiling, and other arrays), EST, SAGE, MPSS, proteomics, mass spectrometry, query languages, interoperability, bio-ontology and bio-data mining.
- **Genetics and population analysis:** Linkage analysis, association analysis, population simulation, haplotyping, marker discovery, and genotype calling.

Moreover, BICOB welcomes submissions in all areas of computing with impact on life sciences including algorithms, databases, languages, systems, and high-performance computing. For example: Parallel and high-performance techniques, computational biology on emerging architectures and hardware accelerators.

Important Dates:

Paper submission deadline	October 28, 2019
Notification of acceptance	December 30, 2019
Registration materials due	January 15, 2020
Camera-ready final paper version	January 31, 2020

Submission Procedures:

Papers will be accepted only by electronic submission in PDF format. A full paper, including title, author's name(s) and affiliation, mailing address, and email of the principal author, should be submitted online at the submission website: <https://easychair.org/conferences/?conf=bicob2020> on or before October 28, 2019. The submitted manuscript should closely reflect the final paper as it will appear in the proceedings published in the EasyChair EPiC Series, which will be a maximum of 10 pages (+4 pages with additional page fees) in EasyChair EPiC Series format (See https://easychair.org/publications/for_authors). Accepted papers will be published fully online by EasyChair EPiC Series (full text pdf will be available online) and will be indexed in Scopus, EI, and INSPEC. Moreover, all *BICOB-2020* papers will also be searchable and available online at www.seachDL.org and will appear in Google Scholar full text.

Journal Publication: Authors of selected high quality papers in BICOB-2020 will be invited to submit an extended version of their papers for possible publication in bioinformatics journals including the Journal of Bioinformatics and Computational Biology (JBCB) (*selected papers in previous several BICOB conferences were published in JBCB*).

For more information: please contact

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