

CALL FOR PAPERS – BICOB-2023
**15th International Conference on
Bioinformatics and Computational Biology**

March 20–22, 2023 – Virtual/Online conference, USA

BICOB-2023

in parallel with
CATA-2023

Paper submission: <https://easychair.org/conferences/?conf=bicob2023>

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

The 15th International Conference on Bioinformatics and Computational Biology, BICOB-2023, seeks original contributions in the fields of bioinformatics, computational biology, systems biology, medical informatics and the related areas. BICOB-2023 will be held online (virtually, due to the coronavirus pandemic) between 20–22 March 2023. The BICOB conference started in 2009 and established itself as one of the important conferences in the field. It offers one of the front platforms for disseminating latest research results and techniques in bioinformatics, computational biology, genomics, and medical informatics. BICOB-2023 also will provide a vibrant atmosphere and venue for bioinformatics and computational biology scientists to present and publish their research results, investigations, and studies. The conference includes a **Best Paper Award** to be presented during the conference virtual 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, RNA 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.

All areas of computational and data-driven techniques with impact on life sciences are welcome including big data, high-performance computing, GWAS, multi-omics studies; and emerging topics like *Covid-19*, *Sars-Cov-2*, and the related topics.

Important Dates:

Paper submission deadline	November 30, 2022
Paper Notification	January 21, 2023
Registration & Camera-ready final version	February 15, 2023

Submission Procedures:

Electronic submission in *EasyChair* with full paper is expected. Please include title, author's name(s) and affiliation, mailing address, and email of the principal author. The submission site: <https://easychair.org/conferences/?conf=bicob2023>
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).

Publication: Accepted papers will be published fully and freely available online by EasyChair EPiC Series (full text pdf will be available online) and will be indexed in Scopus, EI, and INSPEC. Moreover, all *BICOB-2023* papers will also be searchable and available online.

Journal Publication: Authors of selected high quality papers in BICOB-2023 will be invited to submit an extended version of their papers for possible publication in the Journal of Bioinformatics and Computational Biology JBCB, (*and other journals in the field*).

For more information: please contact **Program Chairs:** Tamer Aldwairi – Email: aldwairi@temple.edu Tel: +1-662-313-8462
Oliver Eulenstein – Email: oeulens@iastate.edu Tel: +1-515-294-2407
Conference Chair: Hisham Al-Mubaid – Email: hisham@uhcl.edu Tel: +1-281-283-3802
Publicity Chair: Nurit Haspel – Email: nurit.haspel@umb.edu Tel: +1-617-287-6414
Conference Website: <https://sceweb.sce.uhcl.edu/bicob23/>