

Call For Paper

2025 IEEE International Conference on Bioinformatics and Biomedicine (IEEE BIBM 2025) December 15-18, 2025, Wuhan, China

<https://ieeebibm.org/BIBM2025/>

The IEEE International Conference on Bioinformatics and Biomedicine (BIBM) has established itself as the premier research conference in bioinformatics and biomedicine. IEEE BIBM 2025 provides a leading forum for disseminating the latest research in bioinformatics and health informatics. It brings together academic and industrial scientists from computer science, biology, chemistry, medicine, mathematics and statistics.

We solicit high-quality original research papers (including significant work-in-progress) in any aspect of bioinformatics, genomics, and biomedicine. New computational techniques and methods and their application in life science and medical domains are especially encouraged. Relevant topics include but are not limited to:

- 1. Bioinformatics and Computational Biology of Molecular Structure, Function and Evolution**
 - 1.a. Evolution, Phylogeny, Comparative Genomics
 - 1.b. Protein/RNA Structure, Function and Interactions
 - 1.c. 3D genome
- 2. Computational Systems Biology**
 - 2.a. Pathway Analysis
 - 2.b. Biological Network Analysis
 - 2.c. Interactomics
 - 2.d. Gene Expression and Regulation
 - 2.e. Post-translational Modifications
 - 2.f. Alternative Splicing
 - 2.g. Non-coding RNA Analysis
- 3. Next Generation Sequencing and High-throughput Methods**
 - 3.a. Next-Gen Sequencing
 - 3.b. Microarray Data Analysis
 - 3.c. SNPs and Haplotype Analysis, GWAS, Personalized Genomics
 - 3.d. Transcriptomics
 - 3.e. Metabolomics
 - 3.f. Proteomics
 - 3.g. Epigenomics
- 4. Cheminformatics and pharmacogenomics**
 - 4.a. Cheminformatics and Computer-Aided Drug Design
 - 4.b. Molecular Docking
 - 4.c. Molecular Modeling
 - 4.d. Pharmacogenomics
- 5. Cross-Cutting Computational Methods and Bioinformatics of Disease**
 - 5.a. Data Mining, Machine Learning, and Artificial Intelligence
 - 5.b. Big Data Analytics

- 5.c. High Performance Computing
- 5.d. Information Retrieval, Ontologies, Natural Language Processing, and Text Mining
- 5.e. Data Visualization
- 5.f. Computational Modeling and Data Integration
- 5.g. Precision Medicine
- 5.h. Genome-Phenome Analysis
- 5.i. Biomarker Discovery
- 5.j. Pathogen bioinformatics

6. Biomedical and Health Informatics

- 6.a. Data Mining, Machine Learning, and Artificial Intelligence
- 6.b. Big Data Analytics
- 6.c. Information Retrieval, Ontologies, Natural Language Processing, and Text Mining
- 6.d. Biomedical Image Analysis
- 6.e. Biomedical Signal Analysis
- 6.f. Healthcare Knowledge Representation & Reasoning
- 6.g. Data Visualization
- 6.h. Data Interoperability and Health Information Exchange
- 6.i. Human-computer Interaction and Human Factors
- 6.j. Clinical and Health Information Systems
- 6.k. Consumer Informatics and Personal Health Records
- 6.l. Electronic Medical/Health Records and Standards
- 6.m. Mobile Health
- 6.n. Clinical Decision Support

Journal special issues

IEEE BIBM has a tradition to publish selected papers as special issues in highly respected journals. We will publish the special issues publications with many journals including Methods, IEEE Transactions on NanoBioscience, BMC Bioinformatics, BMC Genomics, BMC Medical Informatics and Decision Making, BMC Medical Genomics, BMC Medical Research Methodology, BMC Genomics Data , BMC Medical Imaging and International Journal of Data Mining and Bioinformatics

Student Travel Award

BIBM 2025 will offer as many student travel awards (around 25-30 awards) to student authors as possible based on the sponsorship fees (including post-doc). All student authors are eligible to apply for the student travel awards.

Paper Submission

Please submit a full-length paper (up to **8 page IEEE 2-column format**) through the online submission system (you can download the format instruction here (http://www.ieee.org/conferences_events/conferences/publishing/templates.html)). **The paper submission is double blind. Please don't include any authors and/or affiliations in the paper.**

Electronic submissions (in PDF or Postscript format) are required. Selected participants will be asked to submit their revised papers in a format to be specified at the time of acceptance.

Online Submission: <https://wi-lab.com/cyberchair/2025/bibm25/index.php>

Important Dates

- Electronic submission of full papers: Aug, 3, 2025
- Notification of paper acceptance: Oct 5, 2025
- Camera-ready of accepted papers: Nov 10, 2025
- Conference: Dec. 15-18, 2025