

Computational Structural Bioinformatics (CSBW 2017), call for papers
August 20-23, 2017, Boston, MA, USA

This year, the Computational Structural Bioinformatics Workshop will be held in conjunction with ACM-BCB 2017. The rapid accumulation of macromolecular structures presents a unique set of challenges and opportunities in the analysis, comparison, modeling, and prediction of macromolecular structures and interactions. This workshop aims to bring together researchers with expertise in bioinformatics, computational biology, structural biology, data mining, optimization and high performance computing to discuss new results, techniques, and research problems in computational structural bioinformatics.

CSBW invites high quality original papers and posters on developments in computational problems relating to molecular structure. Authors of accepted papers will be provided approximately 15-20 minutes to provide an oral summary of their work, with time for questions. Please refer to the website below for details on format and submission. At least one author of an accepted paper is required to register for the workshop to present the paper. Registration to CSBW is complimentary with registration to ACM-BCB 2017.

Workshop webpage: <http://www.cs.odu.edu/~bioinfo/CSBW.php>

ACM-BCB webpage: <http://acm-bcb.org>

IMPORTANT DATES:

May 08, 2017: Paper submission deadline

Jun 05, 2017: Notification of paper acceptance

Jun 19, 2017: Camera-ready paper submission deadline

Aug 20-23, 2017: workshop/ACM-BCB conference (the workshop will be held on Aug. 20)

Submitted manuscripts should not exceed 6 pages in the ACM template (<http://www.acm.org/publications/proceedings-template>) . Submission will be done through the following site: <https://easychair.org/conferences/?conf=csbw2017>

The accepted papers will be published at the ACM-BCB proceedings.

Selected papers will be offered to submit an extended version to the CSBW 2017 special issue in the Journal Molecules -

http://www.mdpi.com/journal/molecules/special_issues/CSBW_2017.

CSBW also seeks poster abstracts on developments or significant works in progress towards computational problems relating to molecular structure. Posters sessions will expand scientific dialogue at the workshop and train students in scientific communication. Authors of accepted posters

will have unhurried opportunities to communicate their results in poster sessions taking place during the day.

Possible topics include, but are not limited to:

- Structure representations
- Structure prediction and refinement
- Structure comparison and alignment
- Molecular interaction, docking, and simulation
- Coarse-grained modeling
- Mining structural data
- Structural genomics
- Applications of high performance computing to structural problems
- Applications of graph theory and optimization to structural problems
- Structure-based drug design
- Biomolecular graphics

WORKSHOP CHAIRS:

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