



# Parallel Bio-Computing 2015

Workshop on Parallel Computational Biology  
September 6–9, 2015, Krakow, Poland

Bioinformatics is the science of managing, mining, and extracting knowledge from biological data. With the ubiquitous adoption of high-throughput sequencing and other bio-technologies, and the concurrent proliferation of multi- and many-core parallel architectures, the field experiences new challenges in delivering scalable and efficient solutions to the front-line of life sciences. This pertains not only to the algorithms and applications but also to the entire large-scale infrastructure including workflows design, data storage and presentation, etc.

The goal of this Workshop is to present the latest research in high-performance computing applied to bioinformatics. We are especially interested in parallel and distributed algorithms, memory efficient algorithms, and design of high-performance software for clusters, grids and clouds. Submission of articles dealing with parallelization of applications on multi-/many-core, massively parallel systems, accelerator architectures and large distributed systems are specifically encouraged. Topics of interest include but are not limited to:

- Bioinformatics databases
- Computational genomics and proteomics
- DNA assembly, clustering, and mapping
- Gene expression and microarrays
- Gene identification and annotation
- Molecular sequence analysis
- Phylogeny reconstruction algorithms
- Protein structure prediction and modeling
- Parallel algorithms for biological analysis
- Parallel architectures for biological applications
- System tools that support large scale high-performance bio-computing
- Workflow and storage systems for biological analysis

The PBC Workshop (<http://pbc.ppam.pl>) will be held in conjunction with the Eleventh International Conference on Parallel Processing and Applied Mathematics PPAM 2015, Krakow, Poland, September 6-9, 2015 (<http://www.ppam.pl>).

## PAPER SUBMISSION AND PUBLICATION

The workshop will consist of dedicated sessions containing selected papers. Papers will be refereed and accepted on the basis of their originality, scientific merit and relevance to the Workshop topics. Papers presented during the workshop will be included into the proceedings of PPAM and published after the conference.

## IMPORTANT DATES

Submission of Papers:	May 11, 2015
Notification of Acceptance:	June 5, 2015
Camera-ready Papers:	November 15, 2015

*Please visit the official PBC web page: <http://pbc.ppam.pl/>*

## PROGRAMME COMMITTEE

Jaroslaw Zola, SUNY at Buffalo, USA – *workshop chair*

Bertil Schmidt, Univ. of Mainz – *program chair*

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