Call for Papers for Thematic Series “Applications of Graph Theory in Bioinformatics”

Introduction to the Thematic Series

Nowadays, graph theory is a mathematical branch with many applications in very different disciplines in science. Bioinformatics has become a key technology and is an interdisciplinary field of science, combining biology, mathematics, statistics, and computer science to analyze and interpret biological data, particularly applied in molecular genetics and genomics. It includes the collection, storage, retrieval, manipulation and modelling of data for analysis, visualization or prediction by means of the development of algorithms and software. In the last decades, bioinformatics applies modern computing and analytical techniques to biological information in order to understand better the biological processes, especially in fields that require processing techniques for large and complex data sets. Graph-theoretic concepts and algorithms are very useful for the discription and analysis of interactions and relationships in biological systems. You are invited to submit your latest original research results in all aspects of applying graph theory in bioinformatics to this Thematic Series. We are looking for new and innovative approaches which are of interest both to academic and industrial researchers working in the field of bioinformatics.

Scope of the Thematic Series (including but not limited to)
- genomics, genome sequencing, genetics and population analytics, gene expression, graph algorithms in bioinformatics, graph-theoretic models, mathematical modelling, biological networks, protein structure and interactions, structural bioinformatics, molecular graphs, data visualisation.

Key Dates
- Paper Submission: September 30, 2019
- Author Notification: November 30, 2019
- Tentative Publication Date: March 31, 2020

Guest Editor
- Prof. Dr. Frank Werner, Otto-von-Guericke University Magdeburg, Germany, frank.werner@ovgu.de

Submission Instructions
- Prospective authors are invited to prepare and submit manuscripts following the instructions at: https://vciba.springeropen.com/submission-guidelines
- The complete manuscript should be submitted through: https://www.editorialmanager.com/vico/default.aspx

To ensure that you submit to the correct Thematic Series, please select the appropriate Thematic Series ‘Applications of Graph Theory in Bioinformatics’ in the 'Additional Information'. In addition, indicate within your cover letter that you wish your manuscript to be considered as part of the Thematic Series on Applications of Graph Theory in Bioinformatics.