# Special Issue

# Heuristic Algorithms in Computational Biology

## Message from the Guest Editors

Computational Biology utilizes algorithms to analyze biological data and model complex biological systems. Due to the sheer volume of data and difficulty of the computational problems, these algorithms often utilize heuristics to be fast and effective. Unlike theoretically optimal algorithms, heuristic algorithms must leverage properties of the data (e.g., sparsity) or integrate domain knowledge to achieve desired performance. In computational biology, heuristic algorithms must also be amenable to optimization and parallelization to be practical at scale, making the development of algorithms in this domain especially challenging. The focus of this Special Issue is the design, analysis, and application of heuristic algorithms for computational biology. Relevant topics include the following:

- Algorithm design and analysis;
- Algorithm implementation and application;
- Surveys of existing techniques;
- Guidelines for developing new techniques;
- The application and adaptation of algorithms from other domains;
- Alternative (i.e., non-asymptotic) algorithmic analysis techniques.

## Guest Editors

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## Deadline for manuscript submissions

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The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

## Editor-in-Chief

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