

EDITORIAL

Introducing *PLOS Complex Systems*

Hocine Cherifi *

Université de Bourgogne, Dijon, France

* hocine.cherifi@u-bourgogne.fr

Welcome to the inaugural issue of *PLOS Complex Systems*. This journal results from the increasing understanding that complex systems are at the heart of many of the most exciting phenomena and urgent challenges. Our mission is to offer a specialized forum for investigating, comprehending, and advancing complex systems science while encouraging interdisciplinary cooperation and cutting-edge research techniques.

A wide range of academic disciplines, including physics, biology, ecology, economics, sociology, and computer science, are all related to complex systems. These topics are linked by the knowledge that interactions between system components often produce emergent behavior that is challenging to anticipate from the features of the separate pieces. Novel empirical methods, sophisticated computational tools, and new theoretical frameworks are needed to comprehend these emerging phenomena.

Our vision is to establish ourselves as the leading platform for high-quality research tackling the interdisciplinarity of complex systems. Indeed, challenges such as climate change, financial market stability, and the spread of infectious diseases do not conform to the boundaries of traditional academic disciplines. Solving these problems requires collaboration among experts from various fields, each bringing their perspectives and expertise. Our goal is to encourage a thorough approach to scientific inquiry that crosses disciplinary boundaries. By publishing carefully peer-reviewed, open-access articles, we aim to increase transparency, quicken the speed of discovery, and ease the diffusion of knowledge.

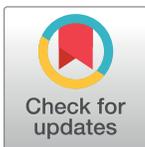
We at *PLOS Complex Systems* are dedicated to encouraging cross-disciplinary cooperation. We welcome submissions integrating techniques and perspectives from many domains, bridging disciplinary barriers. Experts from a broad spectrum of disciplines make up our editorial board, guaranteeing that we can effectively assess and promote interdisciplinary research.

The study of complex systems often necessitates the development of novel research methodologies. Complex systems research is at the vanguard of methodological innovation, from machine learning and big data analytics to agent-based modeling and network analysis.

Researchers can gain new insights and inform policy decisions by simulating, analyzing, and interpreting the behaviors of complex systems.

We are committed to publishing innovative research that raises the bar in complex systems science and acknowledges methodological innovation's significance. Our dedication to open-access publishing guarantees that these methodological developments are publicly accessible to scholars and professionals across the globe, encouraging more development and application.

We place a high priority on research repeatability and transparency in keeping with PLOS's overarching Open Science mission. Large datasets and complex models are standard in complex systems research. Hence, techniques and conclusions must be transparent to guarantee the validity and dependability of scientific discoveries. We encourage authors to share data and code wherever possible, requiring them to describe their methods thoroughly. By



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promoting transparency and reproducibility, we aim to build trust in complex systems research and facilitate the replication of studies.

A thriving and involved scientific community is necessary for any journal to be successful. We are committed to supporting a community of passionate academics, professionals, and educators. Therefore, we will actively interact with our community through webinars, conferences, workshops, and other gatherings encouraging cooperation and idea sharing. We also encourage our readers and authors to participate in the peer review process. Your feedback is precious in keeping our journal's high standards and shaping its future.

As editor-in-chief for *PLOS Complex Systems*, I am committed to maintaining the highest scientific integrity and rigor. We can greatly impact complex systems science by encouraging interdisciplinary collaboration, methodological innovation and ensuring that everything is transparent and repeatable.

PLOS Complex Systems will catalyze solutions to complex challenges. By offering a venue that unites various viewpoints and state-of-the-art research, we can improve our comprehension of complex systems and how they affect the world. I invite you to go on this thrilling adventure with us. Together, we can build a dynamic, inclusive, and impactful community dedicated to advancing the science of complex systems.

Thank you for your support.