Call for Nomination – Systems Fellows Program
Fellowship to begin Fall 2024

Solving today's most complex societal problems presents a challenge that requires more than a range of expertise and advanced knowledge in different domains. It also requires the integration of breakthrough technologies, cutting-edge analytics, and progressive research, with an understanding of human interaction, policy implications, and governance. Such problem-solving calls for a new research approach with a holistic perspective that seeks to uncover and investigate hidden interconnections between different elements of a system and considers the unique role of humans.

The Systems Fellows Program supports graduate students who want to participate in the convergence of knowledge and expertise from diverse disciplines to identify, formulate, and address a complex system problem. This approach requires faculty and students to explore research questions at the intersection of their respective fields, conduct joint research projects, and develop methodologies that can be used to re-integrate knowledge in pursuit of a new science of systems.

Purdue Systems Collaboratory invites <u>faculty from all Purdue colleges</u> to work with colleagues from other Purdue colleges and nominate their outstanding Ph.D. students for the Systems Fellows Program.

Faculty interested in Systems Thinking theory and application can utilize the Systems Fellows Program and Systems Collaboratory to:

- Support (partial) funding for graduate students to conduct impactful research
- Engage with interdisciplinary and transdisciplinary researchers across the Purdue campus
- Build collaborations with external partners in industry, non-profit, and governmental sectors

For more information about current and previous Systems Fellows and their research projects, visit https://www.purdue.edu/collaboratory/programs/fellows/index.html

Student Eligibility and Responsibilities:

- The program is open to graduate research students from all colleges at Purdue University
- The student's research must be related to addressing a systems problem or advancing systems science
- The primary home of the student is in his/her home college, and is co-supervised by a faculty from another college at Purdue University
- The student nominee must have completed at least one year of his/her graduate research program
- Systems Fellows are required to submit an annual report outlining their progress and showcasing the relevance of their research to systems thinking/science, and obtain evaluations from their faculty co-advisors
- Systems Fellows will be required to contribute to the Collaboratory's activities including establishing an interdisciplinary network of faculty, staff and students. Other examples include assisting with seminars and courses, mentoring, course coordination, presenting at PSC-organized events.
- System Fellows and faculty co-advisors must identify and produce at least one peer-reviewed publication as well as one research dissemination activity such as a conference presentation. Other research outputs are encouraged including stakeholder workshops and future grant proposals.

- Appropriate attribution/ acknowledgement to PSC to be used for any publications and conference presentations generated from this fellowship. (Specific acknowledgement language will be provided).

Faculty Co-Advisors responsibilities
- Faculty co-advisors are required to provide their evaluations for the annual report of the Systems Fellows and submit them to PSC
- Faculty co-advisors are required to attend the PSC stake-holders bi-annual meetings
- Faculty co-advisors are encouraged to develop external grant proposals based on the research works of the Systems Fellows
- Faculty co-advisors are encouraged to contribute to the PSC's activities (for example, attending the PURSYST seminars)

Fellowship support
- The Purdue Systems Collaboratory provides 50% of the student stipend and tuition, per year, renewable for up to three years, contingent upon satisfactory academic and scholarly progress and work performance
- The remaining 50% of the student support is provided by equal contributions of the faculty co-advisors or their departments*

Students should submit their application by **April 15th**, selected candidates will be notified before the end of the 2024 Spring semester. Send application materials to Kat Burkhart at caburkha@purdue.edu.

Required documents for the submission are (in one pdf file with the file name as "student first name-last name"):

- A research project summary of no more than two pages describing the nature of the student's research topic, highlighting its "systems perspective", including future plans for this research including grants/publications/funding/etc. Document format must be a single-spaced document and sent as a single PDF document. Use a standard paper size (8 1/2" x 11), at least one-half inch margins (top, bottom, left, and right) for all pages, and a Calibri, Arial, or Times New Roman font size of 11 points or larger.
- A short "management and mentoring plan" outlining the role of each advisor, how the background and expertise of each advisor support the research topic and a proposed schedule for the interaction of the team
- Short NSF-style CVs of the two faculty members, CV and academic transcript of the nominated student

 * The Collaboratory's Systems Fellows Program can be used in conjunction with other fellowships/assistantships, for more information, please reach out to Kat Burkhart (caburkha@purdue.edu).