Call for Proposals

INTEGRATIVE IMAGING (I²)
AT JANELIA RESEARCH CAMPUS

We are calling for proposals from Janelia group leaders and team project leads (especially any combination of those) who seek transformative methodologies and workflow development requiring light microscopy. Proposals will be supported through Janelia’s Technology and Open Science Center (TOSC) funding and will be accepted on a rolling basis beginning November 1, 2023.

Our Mission

Integrative Imaging (I²) is a new platform that co-innovates with Janelia Labs to develop ambitious methods and workflows that enable research utilizing light microscopy. Such developments may include, but are not limited to, any combination of the following:

- Complex experimental design/technical consultation
- Applying or testing novel labeling strategies
- Implementing complex imaging workflows and/or imaging modality combinations
- Image processing, visualization, and analysis workflows

We provide time, expertise, instrumentation, and project management (including integration of shared resources) to creatively design and test methods and workflows.

Program

We encourage proposals from group leaders and team project leads with research challenges requiring solutions beyond what is normally offered through any one shared resource. A technical consultation is required before proposal submission.

I² will work collaboratively to design, iteratively refine, and train the applicant lab to utilize these methods and workflows. Applicants with an accepted proposal will work alongside the I² team at all steps.
Instructions

Prior to proposal submission, applicants are required to contact I2 (i2@janelia.hhmi.org) for a technical consultation.

All proposals are limited to 1500 words and up to 4 figures, and must include the following sections:

**Background/Introduction**
Briefly introduce the scientific context of your project.

**Central Question(s)/Hypotheses**
Define the central question(s), or potential hypotheses that the development of a novel method or workflow will address.

**Impact/Significance**
Identify the programs at Janelia, and/or fields of study, that will benefit from this method or workflow.

**Current Challenges**
Describe the roadblocks that prevent you from addressing your central question or testing your hypothesis. If possible, provide preliminary data which illustrate these challenges.

**Specific Aims**
The Specific Aims will be developed during the technical consultation required before submission of the proposal.

**Approach**
Outline your vision for this collaboration.
For instance:

- How is this project multidisciplinary?
- What types of expertise do you anticipate needing?
- Who will be the project lead from your lab?
- Which other personnel will be involved from your lab and how does their expertise/experience fit into this project?

Submit proposal as a pdf to i2@janelia.hhmi.org.
Proposal Review

Proposals will be initially evaluated by \( I^2 \) staff for feasibility. Feasible proposals will then be evaluated for scientific merit by the \( I^2 \) review committee. The proposal review will be completed within 4 to 6 weeks from submission.

Review Criteria

Is there a feasible path to experimental success?
- Can the samples be safely and ethically handled at Janelia?
- Does the appropriate technology exist at Janelia (or can it be cloned from elsewhere) to generate the data?
- What expertise outside of the applicant’s lab is needed to undertake the project?

Does the project align well with \( I^2 \) mission and capabilities?
- **Scope** - Does the project use light microscopy as a core component? Would the project require collaborative and interdisciplinary development of a novel method or workflow? Does the project make use of instrumentation at Light Microscopy (LM) or the Advanced Imaging Center (AIC), or any external instruments that Janelia could clone for use on our campus?

- **Integration** - Could this project be sufficiently performed by any single shared resource?

Measurable outcome(s)
- Does the project have clearly defined milestones and criteria for evaluating success?