Dear Vision Research Faculty (please share with any faculty we may have inadvertently missed, and your lab/research teams),

The four P30 Vision Research core directors Yang Hu, Steve Baccus, Tirin Moore, and Tom Clandinin and I are happy to announce that our four cores are open for proposals for Year 4. Preference of support will be given to collaborative projects and to projects that represent the full spectrum of vision research at Stanford. Support is available to vision research investigators from all Stanford departments (e.g. Neurobiology, Ophthalmology, Biology, Psychology). Please see below for instructions to submit proposals, and the text of the call for proposals below:

Instructions

1. Navigate to http://med.stanford.edu/ophthalmology/research/P30_Vision_Research_Core/Submit_a_proposal.html and fill out the form.
2. Please fill out on the first page administrative information, and on the second your response to the call for proposals (see below).
3. If you have any questions, please contact our P30 Core administrator, Desun Oka, at okad@stanford.edu.

Call for Proposals: P30 Computational Core

The computational core has funds to support vision research by offsetting a portion of costs for shared computational resources such as for,

- high performance computing and remote storage. This includes services for large capacity networked storage and high performance GPU computing hardware and advanced system administrative support to aid in the design of novel computational approaches,
- new shared high speed computing cluster resources,
- networked storage that support multiple investigators,
- access to biostatistics or bioinformatics for study data analyses, power analyses for experimental planning, or analyses of large datasets including "omics"
- a staff programmer to facilitate the collaborative exchange of existing software between labs, and to develop innovative computational approaches that benefit multiple labs, or
- other computing or computational resources relevant to bioinformatics or biostatistics in vision research.

If you are interested in benefiting from this aspect of the computational core in the coming year, please provide a short paragraph describing the project as well as an estimate of the cost(s) or effort needed (e.g. from programmer).

Call for Proposals: P30 Device Design and Fabrication Core

The device design and fabrication (DDF) core has funds to support the custom fabrication of devices and machines for vision research. The DDF core funds can be used to offset up to 50% of the costs for the design and construction of a broad spectrum of custom parts and equipment for experimental measurements, such as with imaging, microscopy, electrophysiology and behavior. The core will support 1) Design and construction of new devices by the Neurobiology department machinist and/or 2) 3-D printing/additive manufacturing of novel devices designed by

investigators and/or with the aid of the machinist. **If you are interested in support from the DDF core, please provide a short paragraph describing the project that will benefit from it in the coming year, as well as an estimate of the number of personnel (e.g. machinist) hours and/or 3-D printing costs.**

Call for Proposals: P30 Imaging Core

The Imaging Core has funds to support training and research in advanced microscopy. These funds can (1) cover the training of new users in any of the microscopy modalities, for example those offered by the Neuroscience Microscopy Service run by Andrew Olson, and (2) offset hourly use charges associated with core microscopes, as well as subsequent data analysis using the specialized software available in that or other facilities. Our goal is to offset >50% of the cost for using each microscope, and all of the cost associated with data analysis, depending on the demand.

In addition to the funds to support work through the NMS or other Microscopy Cores, the Imaging Core also includes funds to offset the costs of running advanced and in vivo imaging experiments using custom microscopes in departmental or individual labs. These costs are expected to cover both maintenance and repair of these microscopes, lasers and associated electronics, as well as support the purchase of components that might add new, innovative capacities. **If you are interested in benefiting from the Imaging Core, please provide a short paragraph describing the projects that will benefit from in vivo imaging capacity, and an estimate of your proposed costs, or if for training/core facility use, the lab members' names, positions, and roles on the project, and the number of hours of training, hours of imaging, and hours of data analysis that you would like to obtain support for.**

Call for Proposals: P30 Neurogenetics/Viral Vector Core

The Neurogenetics Core has funds to support viral vector production, as well as vector design and related collaborative cross-fertilization. Based on surveying current use, the primary application of this core is expected to focus on AAV production, but we can also consider other genetic/viral vector requests. The current plan is to deeply subsidize AAV (~$600/prep compared to the usual >$2500/prep), and to offer scalable sizing (e.g. $300/half-prep).
If you are interested in benefiting from the Neurogenetics Core, please provide a short paragraph describing the project and vector(s) desired.

Sincerely,

Jeffrey L. Goldberg, MD, PhD
Professor and Chair
Ophthalmology
Stanford University