

RFA: Pharmacogenomics iPSC Pilot Gene Editing Service

PGRN Pharmacogenomics iPSC Library and Service (PiLS), is seeking applications for pilot projects, to utilize gene edited iPSC clones for SNP validation studies for pharmacogenomics research. Three projects will be selected for service at minimal cost to the investigators.

- Using induced pluripotent stem cells (iPSCs) generated as part of the PiLS iPSC library from healthy donors, we will generate gene edited iPSC lines suitable for your SNP validation studies.
- Gene-edited cells as well as control isogenic iPSCs from (at least) 2 independent iPSC lines will be shipped to project leaders' institutes for further studies.
- Currently available techniques favor projects utilizing iPSCs with a single allele knockout approach (please see the PGRN/PiLS website), but a seamless SNP editing approach will also be considered depending on technique improvements.
- Each project leader covers the cost of vector generation (approximately \$2,000 per project) and shipment, but all other costs will be covered by the PiLS at the University of Florida.
- Pre-submission inquiry can be e-mailed to Katherine Santostefano, PhD (hankows@pathology.ufl.edu)

Eligibility: Any current PGRN member in an academic institute can submit a proposal

Application process: Applicants should write a 5 page proposal (A-F).

- A. Title, SNP of interest, name(s) of applicants, affiliations
- B. Specific aims using the provided iPSCs (1 page)
- C. Significance and innovation of your overall project (1 page)
- D. Research plan using the provided iPSCs (2 pages)
- E. Timeline and milestones
- F. Feasibility (up to 0.5 pages)
- G. References
- H. Biosketch (NIH format).

The deadline for the complete application is December 31, 2017.

Letters of intent are encouraged, to be submitted by November 30, 2017.

Letters of intent and final applications should be sent electronically (as a single pdf file) to Katherine Santostefano, PhD (hankows@pathology.ufl.edu)

Important dates:

- 10/5/2017 – RFA announcement
- 10/19/2017 – Opportunity for on-site inquiry at ASHG-PGRN satellite meeting poster session
- 11/30/2017 – Letter of intent deadline
- 12/31/2017 – Application deadline
- 1/31/2018 – Announcement of 3 selected proposals
- July 2018 – Expected shipment of the gene-edited iPSC lines to the investigators

Selection criteria:

- Significance & Innovation – See NIH “Definitions of Criteria and Considerations for Research Project Grant”: <https://grants.nih.gov/grants/peer/critiques/rpg.htm> - **25% of score weight**
- Research plan (Experimental Approach) - **25% of score weight**
- Investigators & Environment - **25% of score weight**
- Timeline, milestones and feasibility - **25% of score weight**
 - Does the applicant present a clear, logical plan to complete the proposed work within a reasonable timeline?
 - Does the applicant (and/or co-investigators) demonstrate feasibility of proposed research using the generated iPSC lines? Include information on previous use of iPSCs, collaborations with iPSC researchers, etc.

Each of these criteria will be scored on a 1 to 9 scale (1 being perfect) and averaged out for a final score. The reviewed proposals will then be ranked by the PiLS-pilot project committee and selection will be made according to available resources. Decisions will be announced on **January 31, 2018**.

Progress report:

The selected applicants are expected to submit progress reports one year after receiving the cell lines.