

H Foundation Pilot Project Awards Proteomics Center of Excellence (PCE)

Release Date: June 5, 2013

Application Due Date: July 7, 2013

Funding: \$5,000 per project; potential for additional \$5,000 for joint project with 2nd CLP Core (ChemCore, HTA, CAMI, QBIC, PCE or rPPC)

Through the generous support of the *H Foundation*, members of the **Basic Sciences Research Division** of the *Robert H. Lurie Comprehensive Cancer Center of Northwestern University* can apply for a pilot project award to **advance basic and translational research projects relevant to cancer**. The pilot project awards will provide up to \$5,000 directly to the **Proteomics Center of Excellence (PCE)**. It is expected that these awards will enable investigators to obtain preliminary results that can be used to support research grant applications to external funding agencies for more extensive projects.

Award Objectives and Scope

The overall purpose of this award is to fund the use of the PCE facility to carry out pilot projects that require proteomics analysis (top-down, bottom-up or quantitative in-depth histone analysis) with a basic or translational research objective relevant to cancer. The proposals **must represent new and innovative research, not extensions of currently funded projects**, for which pilot funding is needed to generate preliminary data for longer-term programs. It is envisioned that promising pilot projects will be developed into R01, R03, or R21 grants.

PCE Services

The Proteomics Center of Excellence (PCE) was conceived in late 2009 and formally established on May 16, 2011 to provide cutting-edge proteomics research capabilities to the faculty, staff, and students at Northwestern University. Northwestern University has made a strategic investment and demonstrated a commitment to bringing next-generation proteomics research to the Chicagoland area. Further investment by the Robert H. Lurie Comprehensive Cancer Center and the Chicago Biomedical Consortium (funded by the Searle Funds at the Chicago Community Trust) has benefited the PCE in its early days. In addition to its Northwestern-centric mission, the PCE also collaborates with other local scientists through the Chicago Biomedical Consortium, outside companies, and engages the scientific community through publications, symposia and workshops. More information can be found at our website, <http://pce.northwestern.edu>.

Examples of analyses that can be done in PCE for potential pilot projects include, but are not limited to, the following:

- **Quantitative Proteomics:** Center personnel provide expert guidance to quantify and to identify proteins across multiple biological states. For proteins below 30 kDa, we will use a top-down proteomics approach, while for proteins above 30 kDa, we will use a bottom-up proteomics approach. For further information: <http://dx.doi.org/10.1021/ac3031527>.
- **Histone Quantitative Profiling:** The Proteomics Center of Excellence is very interested in the study of histone epigenetic modifications in cancer. We have established a robust assay for most of the major histone marks and can measure them with precision and accuracy. For further information: <http://dx.doi.org/10.1073/pnas.1205707109>.

Application Process

Applications Due July 7, 2013

- To discuss projects and feasibility with PCE, contact Paul Thomas, Associate Director of the PCE at pce@northwestern.edu
- Up to 2-page application (including figures and references) with the following sections: Specific Aims, Research Plan, Expected Outcomes, and Potential Pitfalls
- The application should **clearly state the cancer relevance** of the project
- Describe the innovative aspects of the application in the context of existing data and publications
- Give a brief description of how the pilot project data will be used to achieve longer-term research funding or continuation of the project
- Include any preliminary data on probe, nanoparticle, or material design and any results about cell uptake, toxicity or distribution
- Include a current NIH-style biosketch (limit 4 pages total) for the PI and any key personnel
- Applicants should not submit a budget. Applicants whose projects are reviewed will be provided a suggested research plan and associated budget prior to final award notification.

Evaluation Process

Applications will be evaluated based on:

- Cancer relevance
- Overall scientific merit, with particular attention given to the innovative characteristics of the proposal and the unique outcomes that are expected
- Likelihood of successfully achieving the application's aims within the scope of the award
- Prospects for obtaining continued funding of the project

Responsibilities of the Awardees

As a condition of funding, awardees will be expected to submit a one-page progress report two months prior to the end of the project year. Award funding will be expended within one year. Unspent funds will be withdrawn and reallocated to other projects.

Applications should be submitted via NUCATS ASSIST at: <https://grants.nubic.northwestern.edu/welcome>

Application deadline: July 7, 2013. Funding decisions will be announced in July.

For questions regarding any of the H Foundation Pilot Awards, contact Jenna TerMolen at (847) 467-0965 or email jter@northwestern.edu