



H Foundation Pilot Project Awards Center for Advanced Molecular Imaging (CAMI)



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 (HTA, ChemCore, rPPC, QBIC, PCE or DTC)

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 with cancer relevance**. These pilot awards will provide up to \$5,000 for use in the [Center for Advanced Molecular Imaging](#) designed to stimulate basic and translational cancer research. The award will be given directly to CAMI on behalf of an investigator. An additional \$5,000 of funding may be requested for projects utilizing both CAMI and another CLP core. It is expected that these awards will enable investigators to obtain preliminary results that will 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 CAMI facility, in order to carry out pilot imaging projects with basic or translational research objectives with cancer relevance. 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.

Examples of potential pilot projects include, but are not limited to, the following:

- Longitudinal imaging of tumor metastases
- Longitudinal imaging of tumor function and volume, in response to treatment
- Using DCE-MRI and DWI to characterize the response to an anti-vascular agent
- Pharmacokinetics/pharmacodynamics of a novel cancer drug
- Extend a current project that uses invasive methods, e.g., histology, to a non-invasive imaging method

CAMI Services

Northwestern University's Center for Advanced Molecular Imaging (CAMI) was created to drive interdisciplinary research bridging the gap between basic science and science-based medicine, with an emphasis on *in vivo* imaging. CAMI provides a wide range of imaging instrumentation and support facilities for molecular imaging of biological events, in intact organisms.

Service/Instruments:

- High field magnetic resonance imaging and spectroscopy (Bruker 9.4T and 7T magnets). Example types of MRI: diffusion weighted imaging (DWI), diffusion tensor imaging (DTI), dynamic contrast enhanced (DCE), magnetic resonance angiography (MRA), relaxivity (T₁, T₂, and T₂^{*})
- Whole body bioluminescence and fluorescence imaging (IVIS Spectrum, non-barrier facility)
- Surgery suite
- Cell culture room

- Image analysis

Please see the CAMI website for additional information: <http://cami.northwestern.edu/>

Application Process

Application deadline: July 7, 2013.

- Discuss project feasibility and budgeting with CAMI, contact Chad R Haney, PhD chad.haney@northwestern.edu or Alex Waters, PhD at EAlexWaters@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, especially regarding the proposed imaging, organ/tissue to be imaged, tumor/animal model, or imaging contrast agent in the context of existing data and publications. For example, the pancreas is difficult to image, so a longitudinal pancreatic cancer study could involve some innovation.
- Give a brief description of how the pilot project data will be used to achieve longer-term research funding or continuation of the proposed project
- Describe any existing data about the **imaging** of the proposed tumor model, drug, or imaging contrast agent.
- Include any preliminary data to support the tumor/animal model, drug, or imaging contrast agent
- 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. However, when discussing the proposal with CAMI make sure that the proposal can be completed with \$5000.

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

Evaluation Process

Applications will be evaluated based on:

- Cancer relevance of the proposed imaging.
- 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 proposed project

Funding decisions will be announced in July.

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 must be expended within one year. Unspent funds will be withdrawn and reallocated to other projects.

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