CBC-LEVER PILOT PROJECT FUNDING In Vivo Studies using Patient-Derived Xenograft Tumor Models

Application Due Date: November 23, 2015 Funding: up to \$25,000 per award

Overview: The Patient-Derived Xenograft (PDX) Core Facility is a shared resource created to support the researchers of the Chicago Region Physical Sciences-Oncology Center (<u>CR-PSOC</u>), funded by a \$10 million U54 grant from the National Cancer Institute. The Chicago Biomedical Consortium (<u>CBC</u>) awarded a \$1.5 million Lever grant in conjunction with the U54 to further enable CR-PSOC investigators to develop and translate innovations deriving from physical sciences approaches to cancer research.

To facilitate broad access to these powerful but expensive new models for human disease, this new core facility has set aside \$50,000 of Lever funds to support pilot *in vivo* studies using PDX models for investigators outside of the CR-PSOC. These *in vivo* studies will be managed by the <u>Developmental Therapeutics Core</u> within Northwestern's <u>Center for Developmental Therapeutics</u>.

About PDX: Patient-derived xenograft tumors retain histological characteristics that are similar to the patient tumors from which they were derived. Thus, these models are thought to be closer to the clinical situation than traditional xenograft models.

Available Models within PDX Core Facility:

Breast	Colon
Glioblastoma	Lung
Renal	Ovarian
Pancreatic	Leukemia (AML)
Mesothelioma	Neuroblastoma
Multiple Myeloma	

The criteria for established PDX models is that PDX tumors grow after serial passages in mice in at least 3 passages, PDX tumors are confirmed histologically to be malignant, and PDX tumor slices are cryopreserved for future in vivo studies. We demonstrate the ability to take a cryopreserved tumor fragment and reimplant in a mouse with subsequent tumor growth.

Eligibility: Investigators at a CBC university who are tenured, tenure-track, clinical investigator track or research-track faculty and not currently affiliated with the Chicago Region Physical Sciences-Oncology Center (CR-PSOC).

Application Procedure: Proposals containing a cover page, current biosketches in NIH format, and project description no more than 2 pages in length, and budget and budget justification should be submitted to <u>cdt-info@northwestern.edu</u>. Matching funds are welcomed to expand the scope of the project but not required. A sample budget for PDX related studies can be found here: <u>http://cdt.northwestern.edu/content/pdxbudget</u>

Proposals will be reviewed by committee and evaluated based on scientific merit and the potential value added by use of the Core's PDX models to the development of an anticancer therapeutic or greater understanding of cancer biology.

Awardee notification and responsibilities: Awardees will be notified by email within 30 days of final due date. All publicity regarding this award and publications that result from the funded work must include the following exact acknowledgment: "*This work was funded by the Chicago Biomedical Consortium with support from the Searle Funds at The Chicago Community Trust.*" The Center of Developmental Therapeutics and the Developmental Therapeutics Core must be acknowledged in the acknowledgment section in any publications resulting from use of patient-derived xenograft models. The letter of award will include full text of award terms and conditions.