Northwestern University Skin Biology and Diseases Resource-based Center



EXTENDED DEADLINE: Request for Pilot and Feasibility Proposals 2025

** An ideal way to get funding to use the Cores and cover your pilot project **

Some examples of projects:

Elucidate basic skin biology: Leverage your area of expertise and test in skin

Work with Cores to introduce new technologists for research at NU and nationally

Apply our extensive instrumentation to probe the impact of treatment of human disease

Use our range of tools to introduce genes and proteins into disease models

In extending the program, we are especially **looking for ESTABLISHED SCIENTISTS OUTSIDE OF DERMATOLOGY** who can partner with us through this program to explore "repurposing" of science in your laboratory towards skin biology and disease. The ultimate goal of these SBDRC-funded Pilot and Feasibility studies is the future submission of MPI proposals that will lead to a publication, new federally funded skin-related grants and expanded work in cutaneous biology research.

Pilot and Feasibility studies are funded at \$25,000/year for 1 year, with a possible 2nd year renewal pending a progress report. A great project for a senior investigator with a grad student or post-doc.

All we need is:

- **2-3 Page Research Plan** summarizing background, significance, specific aims, hypothesis, and approaches for the proposed study.
- Projected use of the SBDRC Core(s): Core directors are delighted to discuss potential use.
- **Projected Budget and Budget Justification** of proposed study (Limit: \$25K direct costs; <u>></u>40% of budget must be allocated for SBDRC Core services and charged directly)
- NIH Biosketch of PI with List of Current PI Funding; Data Sharing Plan
- Must be ready to submit/provide IRB and ACUC approvals before funding is provided.

Extended application deadline is May 1, 2025; Start date August 1, 2025
Applications may be submitted on our website: skinresearch.northwestern.edu

Highlights of Core functions (see online for more details):

**The <u>Skin Tissue Engineering and Morphology (STEM) Core</u> provides human skin tissues and primary cultures of skin cells and generates human 3D skin equivalent cultures of human and mouse keratinocytes (heaelthy; animal models; gene-altered); this core can also work with you in developing skin models of skin disease models.

**The <u>Translating Experimental Skin Testing with Immune Tracing, Informatics and Technology (TEST IT²) Core</u> has a wide range of instruments for multispectral imaging, spatial and single cell transcriptomics. An in vivo unit for testing on human volunteers; A tissue repository that may meet your needs; and a dedicated skin-focused bioinformaticist to assist in interpretation.

**The <u>Gene Editing, Transduction and Nanotechnology (GET iN) Core</u> generates: i) constructs to deliver into cell systems using lenti/retroviral models, AAV, and viral/non-viral CRISPR-Cas; ii) reporter cells for *in vivo* and *in vitro* cell tracking; (iii) ability to simultaneously express multiple transgenes and shRNAs; and (iv) target expression by vectors with skin cell-specific promoters.

Questions regarding the Pilot and Feasibility Program or the application process can be directed to: Dr. Amy Paller apaller@northwestern.edu, Dr. Rui Yi yir@northwestern.edu, or Dr. Kurt Lu kurt.lu@northwestern.edu