

Research Experience and Mentoring Program for Visiting Faculty

[The Center for Advanced Regenerative Engineering \(CARE\)](#) invites faculty in bioengineering-related disciplines to join CARE for a mini-sabbatical as a visiting faculty member to participate in regenerative engineering research funded by the National Science Foundation.



The project is titled “*EFRI-CEE: Epigenetic Cell Reprogramming In Situ: A Novel Tool for Regenerative Engineering.*” Its aims are

- 1) To integrate nanoscale optical imaging, cell, and molecular biology, physics, and advanced materials science to identify strategies that regulate chromatin supranucleosomal structure.
- 2) To enhance the adaptive potential of eukaryotic cells and help induce cellular stemness, with the ultimate goal of facilitating tissue regeneration and function.

The overall goal of this EFRI project in support of this vision is to develop new concepts and tools for enhancing cellular plasticity by examining the role of chromatin structure as a regulator of non-replicative cell adaptability through the exploration of the transcriptional landscape.

The candidate will gain new knowledge and skills that we expect will result in new collaborations and enhance their research program.

The successful candidate will have an opportunity to:

- 1) Gain access to and training on specialized instrumentation in the laboratories of the PIs.
- 2) Gain access and training at core facilities on campus
- 3) Purchase supplies and materials as necessary to obtain preliminary data that they can use to write proposals in collaboration with EFRI PIs
- 4) Receive mentorship and career advice from the EFRI PIs through weekly communications
- 5) A monthly stipend will be provided. Visiting appointment length and start date are flexible.

Contact

For more information, please contact CARE director Guillermo Ameer at g-ameer@northwestern.edu