

@UlowaNeuro Notes

February 2021

When we say “The Best Ideas Come From Collaboration” it’s not a marketing gimmick. We know that innovation is fueled when we bring our individual strengths to bear collectively in pursuit of revolutionary discoveries.

We developed the [INI Research Programs of Excellence](#) on this foundation—collaborations between fundamental researchers and clinicians to build bridges from bench to bedside and back. The groups came together around themes that allow them to target some of the most vexing questions in brain science from multiple perspectives. For example, the Bipolar Disorder RPOE is investigating through numerous avenues, including brain imaging, genetics, cellular models, animal models, and TMS therapy.

RPOE members come from four different colleges and 14 departments across the university and comprise faculty at every level from our newest assistant professors to our senior faculty with decades of experience. Trainees from these labs are an integral part of the work. We were elated to see a first author paper in 2020 from undergraduate Megan Hynd, one of our INI Summer Scholars and a member of the Wessel Lab, which participates in two RPOE teams.

These research teams have already produced tremendous results with scores of publications as well as R01s and other external funding. A new [Center for Noninvasive Brain Stimulation](#), headed by Aaron Boes, grew out of the work of the Neuromodulation RPOE. Iowa’s long-standing reputation in epilepsy research is extended through the work of two of our RPOE teams Mitochondrial Dynamics and Calcium Cycling and Composition and Trafficking of Neuronal Ion Channels. Work in the Curing Heritable Blindness RPOE has serendipitously turned up a potential diabetes treatment, as Sheffield lab postdoc Calvin Carter and graduate student Sunny Huang demonstrated that [electromagnetic fields](#) can be used to treat type 2 diabetes in mice.

Watch for a new request for proposals this fall for the next round of RPOEs. Now would be a great time to start talking with potential collaborators and laying the ground work for applications that reflect the breadth of your field and the diversity of training opportunities.

This week we are [announcing](#) our newest Junior Research Program of Excellence recipients, Marco Hefti and Beth Newell. With two years of funding for early-career scholars, this program has proved an excellent launch pad for our past recipients, including Jan Wessel, Hanna Stevens, Brian Dlouhy and Aislinn Williams whose jRPOEs formed the basis for their first R01 applications.

The INI remains committed to supporting collaborations and to challenging ourselves to push the boundaries of what is known and what is possible.