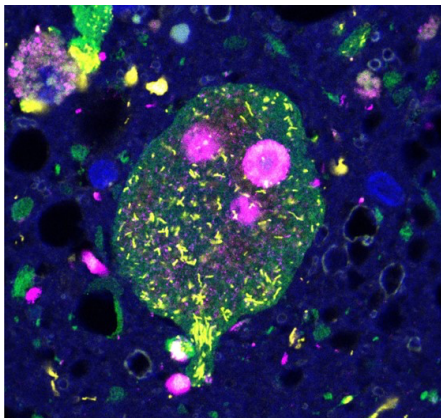


We are about two weeks out from the [submission deadline](#) for our next cohort of Research Programs of Excellence, and I hope many of you are honing your applications. This initiative has truly been transformative, pulling collaborative teams together to focus on tackling some of the most vexing issues in neuroscience with a multidisciplinary approach.

Our [four current teams](#) include 15 faculty members from four colleges and seven departments across the university. They are making discoveries that are only possible through collaboration.

INI members from the Colleges of Medicine, Pharmacy and Liberal Arts and Sciences are working together on the Schizophrenia RPOE. They are using complementary techniques to probe the role of the cerebellum in both rodents and humans, providing both translational and mechanistic perspectives on schizophrenia. It is also significant that this is an all-female team of investigators, led by **Krystal Parker** with **Bengi Baran**, **Marie Gainé**, **Amanda McCleery**, and **Aislinn Williams**.

The “Exceptional Ability and Autism” RPOE includes collaborators from the College of Medicine and College of Education and is advancing our knowledge and understanding of twice-exceptionality. Led by **Jake Michaelson**, they are the first to demonstrate that processing speed specifically is influenced by mitochondrial DNA, a key finding given that an imbalance between verbal ability and processing speed is common among individuals who are intellectually gifted and also have one or more learning disabilities.



*Locus coeruleus neuron from a patient with dementia, showing tyrosine hydroxylase in green (marking the swollen neuron), alpha-synuclein in pink (showing Lewy bodies) and phospho-tau in yellow, showing pre-tangles. (SMASH Dementia RPOE)*

We estimated that our first cohort of RPOEs (2017-2022) generated \$60.5 million in external funding and the current cohort is on its way to a similar return on this INI and Carver Trust research investment. **Aaron Boes's** Neuroplasticity RPOE has already generated \$10 million in external funding and reported three first-in-human discoveries. The SMASH Dementia RPOE team, led by **Catherine Marcinkiewicz**, has secured four grants with five others pending.

In devoting a substantial portion of the Carver Trust gift specifically to collaborative projects, we are living our values as an Iowa Neuroscience community. We know we are stronger together and the proof is in the insight and innovation generated in our labs every day.