@UlowaNeuro Notes

October 2022

If you haven't been to PBDB recently, I encourage you to find your way to the south end of the first floor to see our fantastic new sculpture, "Receptive Field." This represents a dynamic new collaboration. INI commissioned the work from **Dan Miller**, associate professor of art and art history in the College of Liberal Arts and Sciences, and he in turn consulted with our neuroscientists, including **Josh Weiner** and **Aaron Boes**, to bring his idea to life.



This piece highlights the importance of visualization and creativity in science. We think about science often in two ways – in the lab with pipets and tubes and cryostats or in terms of data and statistical analysis. I want to encourage a broader idea of where and how we look for scientific inspiration. True creativity comes from being able to visualize a process from beginning to end that you've only seen as colorless liquids in a tube or as a complex matrix calculation. Our era of neuroscience has become so focused on circuits, neurons, and systems in the brain that we sometimes miss the bigger picture.

I think of the pioneering work of our former lowa colleagues Antonio and Hanna Damasio. They undertook the creative work of mapping the functions of the brain and extended their maps to include emotion and memory. Dan's work incorporates this into a physical structure, visualizing how the external world maps onto the brain We can interact with it and see particular brain regions light up in response to particular sensory stimuli.

This sculpture also helps us to remember that our research and clinical work has profound impact on real people. For Dan, this piece reflects his efforts to better absorb and integrate the challenges of having a family member with a neurodevelopmental

disability. In a similar way, I've found music to be a powerful connector with my son Seamus. From time to time, I share our duets on Twitter. Putting thoughts into words, or music, or sculpture, enables us to connect with our loved ones and to see things from a new perspective.

The INI is committed to creating opportunities to integrate the creative arts into how we think about the brain and the discoveries we are pursuing. Watch for details of our Fall 2023 collaboration with Fredrick Ullén, a Swedish concert pianist and neuroscientist who studies music and the brain.

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