@UIowaNeuro Notes

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This week I was honored to be asked to share some remarks at the Highly Prestigious Awards Investiture hosted by the Office of the Provost. As I thought about what to say, I kept coming back to three words: community, discovery, impact.

These types of awards are given to individuals—including neuroscientists **Nancy Andreasen, Kevin Campbell, Bruce Gantz, Kumar Narayanan, Jason Radley, Val Sheffield, Edwin Stone, and Michael Welsh**. But they don't happen in a vacuum.

All of us rely on the creative, collaborative community here at the University of Iowa to inspire and propel us to push the bounds of the known and to follow our passions where they lead. We can take greater risks because we know our community is here to hold us up if we stumble and to join together in celebration when we succeed. That community atmosphere fosters excellence, and we see it every day in the Iowa Neuroscience Institute.

INI labs all over this campus are pursuing revolutionary discoveries in fundamental neuroscience to translate an understanding of how the brain works into clinical treatments for disorders of the brain and nervous system. We follow in the tradition of Thomas Kuhn, who upended scientific thinking with his book The Structure of Scientific Revolutions. He outlines a scientific framework characterized by periods of "normal" science that gradually shift as anomalies accumulate until there is breaking point requiring a revolutionary shift in thinking. The term "paradigm shift" could be the center square on a Buzzword Bingo card, but when he first proposed it in 1962, he charted a new course for scientific discovery.

Last month, **Kumar Narayanan** and I shared some thoughts about failure in science. In many cases, failure propels us toward a new paradigm. In the INI, our resources enable us to take risks and challenge the status quo. Our task is not just to collect data using cutting edge equipment and techniques, but to use the data to generate new ideas that shake up science, establishing new paradigms.

When we receive awards and recognition, it's important not just to add pins to our lapel, but to use that new prestige and influence to try to bring about needed change in the world around us. Nobel Laureate Torsten Wiesel really brought that home for me when I was fortunate enough to be seated with him for dinner at my induction to the National Academy of Medicine. If his name is not familiar, his Nobel-winning work will be—he demonstrated in the late 1960s that the brain is not hard-wired from birth, but that experiences map and sculpt neuronal connections. Now in his mid-90s, his energy did not flag throughout the evening as he was still going strong at midnight. And yet, at 8 o'clock the next morning, he was there with his coffee at the meeting of the Committee on Human Rights of the National Academies. The discussion included live video from a bombed hospital in Ukraine—targeted with the accurate GPS data shared with the Russian military on a promise to protect these vital civilian locations.

Seeing him there reminded me of our responsibility to use our influence to improve the lives of our fellow citizens—in Iowa and around the world. The impact of our discoveries on the scientific community and the world at large will underscore the University of Iowa's reputation as an institution of higher education that has an international—and even galactic—reach.

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