

In the Lab

Below is the first in a new series, In the Lab, in which a Dana Alliance member is asked about daily life in the laboratory and outside interests.

Peter Kalivas, Ph.D., is a professor and co-chair of the [Department of Neuroscience at the Medical University of South Carolina](#). His [lab](#) studies how cellular and subcellular components work together at a system level to optimize for productive behavioral adaptation.

What motivates you each day on your way to the lab?

We almost always have an exciting project developing through a postdoc or graduate student that seems to have the potential to change how we look at a circuit involvement or the role of a signaling molecule. Of course, most end up being more incremental discoveries, but the possibilities have kept me motivated since I was a graduate student.

What is your favorite piece of lab equipment?

My first love was neuroanatomy, so microscopes of any kind are my favorite.

What is your favorite “brain snack”?

Discussing research over a beer.

After a long day in the lab, what is your guilty pleasure?

Actually, the guilty pleasure comes from leaving the lab early and setting out on a bike ride or run.



If you could have lunch with any scientist, alive or deceased, who would it be and why?

I'd say Galileo or Darwin, more for sociological than scientific reasons. I am fascinated with how we set up rigid institutions that ignore scientific evidence as long as possible. Both of these scientists were and in some ways still are at the epicenter of the disconnect between belief and empirical observation that permeates our culture.

What encouraging words would you give to young people considering a career in neuroscience?

In neuroscience, it is still possible to conduct scientific exploration as a personal art form. We know so little about how the brain creates its primary product, thought, that all well-reasoned ideas remain possible, and with a little data they can

get funded and tested. From pharma to academia we now recognize how vast the neuroscience landscape is and what a large and creative workforce we will need over many decades to develop a competent theory of mind that can cure neuropsychiatric diseases.

I've read somewhere that you like to travel to exotic places. Is there anything about your travel that has had an impact on your research, or vice versa?

In addition to the clarity that comes after doing something completely different for a couple weeks, I think the main traveling insight impacting my research is to frequently observe that no matter how technologically impoverished, there are curious people striving for creative adaptation to their culture/ecosystem. This has shaped my lab's vision.