

Gaining Evolutionary Insights for Human Health

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TRANSFORMATIVE RESEARCH

Erik Andersen's lab is interested in populations of individuals and how they are naturally different from one another. Why is it that humans are so similar genetically, but we look different, act differently, have different disease propensities, respond to drugs differently, and so on? His lab studies genetic differences in *Caenorhabditis elegans* and relates them back to other populations to answer questions about evolution.

The roundworm's small size allows Andersen's lab to grow millions of animals within a few weeks. His data was in such high demand that in 2015 he began the *C. elegans* Natural Diversity Resource, an open source repository of all wild *C. elegans* strains, and invites people from around the globe to send samples to his lab.

INTERACTION WITH CLP

In 2018, Andersen moved his lab to Silverman Hall to more fully integrate with other labs that relate to his research interests. For example, a key area of focus is to better understand the genetic mechanisms that cause the parasitic worms that infect people and livestock to become resistant to the drugs designed to kill them. Andersen says proximity to other CLP researchers whose transdisciplinary work compliments his own is what excites him the most about the move. Direct collaboration with other CLP labs enables cross pollination of ideas that can lead to new breakthroughs in human health and treatments for disease.

"I'm a firm believer in having people nearby who are able to share ideas in an informal way."

A lot of ideas and projects grow organically from small conversations and that is what I'm excited about— being with CLP chemists and engineers in that way."

- Erik Andersen

