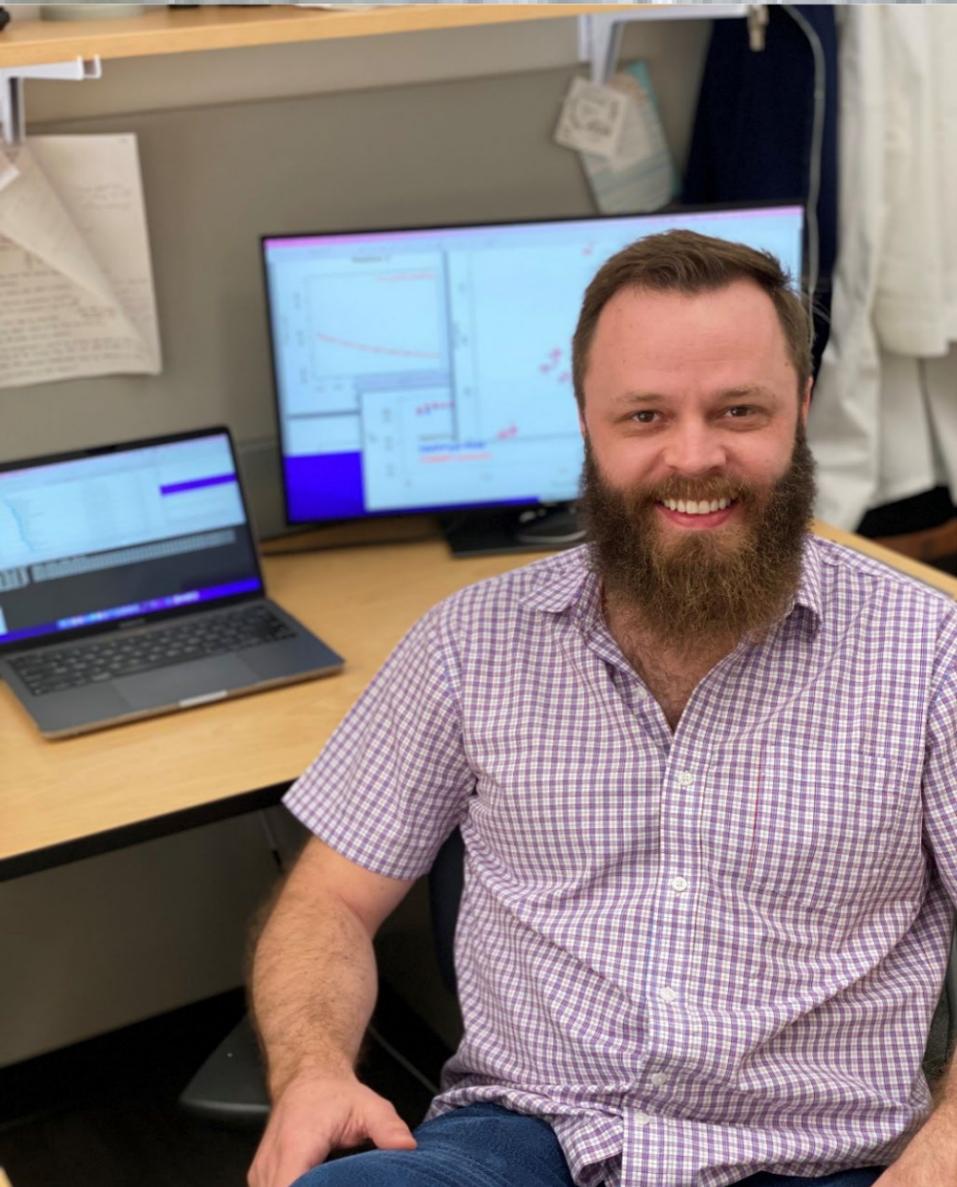


# GRADUATE STUDENT SPOTLIGHT



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## TELL US ABOUT YOUR CURRENT RESEARCH

My research involves using a multidimensional NMR fitting method we developed to characterize a de novo designed miniprotein. The size and stability of such designs makes them excellent candidates for protein drugs with potential advantages over antibody-based therapies if neither their structure nor function are affected by increased temperatures which may occur during transit. Transiently elevating the temperature shifts our model miniprotein toward an alternate lowly-populated and kinetically-trapped conformational state. We also observe a range of dynamics at different sites on the protein as it is heated. These findings are consistent with hydrogen exchange experiments and simulated unfolding. As miniproteins progress from the lab into the clinic, engineering away such deleterious conformational states will be an important challenge for protein design.

## TELL US ABOUT YOURSELF

I grew up locally on the shoreline in Clinton. After high school, I spent a few years starting several businesses, mainly to fund extended backpacking trips throughout Europe, before becoming certain that I wanted to pursue academia. That led me to Southern Connecticut State University where I received a BS in biochemistry followed by a MS in chemistry. These days I enjoy balancing my time spent on research with staying active outside the lab mainly on the tennis court in warmer months and skiing as much as I can when the snow is around. And beer. Beer helps, too.

## WHAT BOOK DO YOU RECOMMEND AND WHY?

"The Ingenious Gentleman Don Quixote of La Mancha" because learning is a byproduct of making mistakes.

## WHAT WAS YOUR MOST MEMORABLE WESLEYAN EXPERIENCE?

Passing qualifiers.

## WHAT SUPERPOWER WOULD YOU LIKE TO HAVE?

Teleportation.