

## GENUTH, Ph.D.

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Aging is a complex physiological process coordinated across tissues within an organism. Loss of protein homeostasis is a hallmark of aging, yet it is not understood why dysregulation in protein synthesis occurs, and if this dysregulation drives aging pathologies. Dr. Naomi Genuth will investigate these questions in <u>Dr. Andrew Dillin's lab</u> at the University of California, Berkeley. Dr. Genuth will use *C. elegans* to visualize protein synthesis patterns in vivo in different tissues during the aging process. Ultimately, Genuth aims to define the molecules that contribute to dysregulation of protein synthesis and see whether manipulation of these molecules can delay and/or prevent the aging process. Dr. Genuth's research will improve our understanding of changes in protein synthesis during aging at the molecular, cellular, and organismal levels, and may reveal new therapeutic strategies for aging pathologies.

As a Ph.D. student in <u>Dr. Maria Barna's lab</u> at Stanford University, Genuth investigated the role of translational regulation in gene expression. Specifically, she developed a <u>quantitative roadmap of how ribosome</u> <u>composition changes during human embryonic stem cell differentiation</u>. Dr. Genuth will now investigate protein synthesis during aging in Dr. Dillin's lab.

