Postdoc in Systems and Synthetic Biology of Photosynthetic Organisms Princeton University, Princeton, NJ, USA

Photosynthetic organisms, our planet's greatest chemists, form the foundations for human health by providing us with food, fuel, materials and drugs. Yet, our understanding of these organisms is in its infancy. The Jonikas laboratory aims to enable advances in sustainability by developing transformative tools and resources for photosynthetic organisms.

Our laboratory is spearheading efforts to place genes of photosynthetic eukaryotes into pathways on a genome-wide scale using high-throughput genetics, high-throughput protein localization and identification of protein-protein interactions. We are also advancing our understanding of the pyrenoid, a mysterious phase-separated organelle that mediates approximately one-third of global CO2 fixation. With our collaborators, we seek to engineer a pyrenoid into higher plants to enhance crop yields.

The successful candidate will join a highly interactive group, with strengths in cell biology, genetics, molecular biology and computational biology. The P.I. is dedicated to providing laboratory members with a nurturing training environment. Our laboratory has a strong track record of launching past postdoctoral scholars onto independent positions in academia and industry.

Experience with one or more of the following is a plus: Chlamydomonas, yeast or higher plants; photosynthesis; molecular biology; large-scale cloning; high-throughput genetics; microscopy; mass spectrometry proteomics; cryoelectron microscopy; or NanoSIMS.

More information about the laboratory can be found here: <u>https://jonikaslab.princeton.edu</u>.

Informal inquiries are welcome: email mjonikas@princeton.edu.

Please see the full advertisement and application form here: <u>https://www.princeton.edu/acad-positions/position/12582</u>.

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