

**SEIGA YANAGISAWA**  
**Postdoctoral Fellow**

Biodesign Center for Mechanisms of Evolution  
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**Education and  
Degrees**

Ph.D., Arizona State University, Molecular/Cellular Biology, December 2023  
B.S., Arizona State University, Molecular Biosciences and Biotechnology, May 2015

**Research**

Postdoctoral Fellowship

Navish Wadhwa lab, Arizona State University, 2023 - present

Graduate research

Wayne Frasch lab, Arizona State University, 2017-2023

Lab Technician research

Karlett Parra lab, University of New Mexico, July-August 2017  
Attometrics, LLC, 2015-2017

Undergraduate research

Wayne Frasch lab, Arizona State University, 2012-2015  
SOLUR Undergraduate Research Program, Arizona State University, Spring 2013-Spring 2014

**Certificate**

Training

Training for Online Bio TAs, 2018

**Publications**

Frasch, W.D. Bukhari, Z.A. and Yanagisawa, S. 2022. F<sub>1</sub>F<sub>0</sub> ATP synthase molecular motor mechanisms. *Front Microbiol.* **13**, 965620.

Yanagisawa, S. and Frasch, W.D. 2021. pH-dependent 11° F<sub>1</sub>F<sub>0</sub> ATP synthase sub-steps reveal insight into the F<sub>0</sub> torque generating mechanism. *eLife.* 10:e70016.

Sielaff, H., Yanagisawa, S., Frasch, W.D., Junge, W., and Börsch, M. 2019. Structural Asymmetry and Kinetic Limping of Single Rotary F-ATP Synthases. *Molecules.* **24**, 504.

Yanagisawa, S. and Frasch, W.D. 2017. Protonation Dependent Stepped Rotation of the F-type ATP synthase c-Ring Observed by Single-Molecule Measurements. *J. Biol. Chem.* **292**, 17093-17100.

**Presentations**

2023 – BII Journal Club presentation  
2022 – ASU Mechanisms of Cellular Evolution Symposium, Tempe, AZ  
2022 – MCB colloquium presentation  
2021 – BII Journal Club presentation  
2021 – MCB colloquium presentation

2019 – Gordon Research Conference Bioenergetics poster preview presentation  
2019 – MCB colloquium presentation  
2018 – MCB colloquium presentation  
2014 – SOLUR poster presentation

**Mentoring**

Research Lab Mentoring

Jonathan Pham, undergraduate student, 2023-present  
Kyle Lauritzen, undergraduate student, 2020-2022  
Zain Bukhari, M.S. student, 2016-2018  
Tanima Mallik, Ph.D. student, 2014-2015  
Cameron Zatz-Krecker, undergraduate student, 2014

Assistant TA Mentoring

Abigail Pezelj, General Biology Lab, Fall 2018  
Leah Drucker, General Biology Lab, Fall 2018  
Christian Massad, General Biology Lab, Spring 2018

**TAship**

Arizona State University

**BIO 282** Conceptual Approach to Biology for Majors II lab, Spring 2019, Fall 2019, Spring 2020  
**BIO 340** Online General Genetics, Summer 2018, Summer 2020  
**BIO 182** General Biology II, Summer 2019  
**BIO 181** General Biology lab, Fall 2017, Spring 2018, Fall 2018

**Volunteering**

Arizona State University Biodesign Institute COVID-19 test kit preparation – March – April 2020  
Arizona State University COVID-19 Face shield production – March – April 2020

**Undergraduate  
Awards and  
Scholarships**

Obama scholarship, 2011-2015  
New American University Scholar – Dean’s Award, 2011-2015  
Y.F. Wu Scholarship, 2011