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Professional experience

- 2025 – Present** Co-Founder and CTO
Pastor21 AI, Inc
- 2021-2025** Vice President of Bioinformatics
Palmona Pathogenomics, A Subsidiary of Avellino Lab
- 2016-2021** Data Scientist, Systems Biology Research Group
University of California, San Diego
- 2016-2020** Research Scientist & Scientific Consultant
Sinopia Biosciences - San Diego, CA
- 2010-2015** Graduate Student Researcher
University of California, San Diego
- 2008-2010** New Technology Associate
American Institute of Chemical Engineers - New York, NY

Education

- 2015** Ph.D., Chemical Engineering, University of California, San Diego
- 2012** M.S., Chemical Engineering, University of California, San Diego
- 2008** B.S.E., Chemical Engineering, Princeton University

Publications

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<https://doi.org/10.1038/s42003-024-06831-0>

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External Advisory Roles

2016-2021 Modelling Working Group Co-Chair for NIAID Systems Biology of Antimicrobial Resistance Consortium

Extramural Funding

1 U01 AI124316 Palsson (PI), Monk (Co-I) **04/01/2016 – 04/01/2021**
Systems Biology Approach to Redefine Susceptibility Testing and Treatment of MDR Pathogens in the Context of Host Immunity

1 R44 HL127843 Bordbar (PI), Monk (Co-I, Modelling Core) **04/01/2017-04/01/2020**
Improving safety and efficacy of platelet transfusion through systems biology

Honors & Awards

2015 Outstanding Graduate Student Award, UC San Diego

2013 National Science Foundation Fellow, East Asian and Pacific Summer Institute

