



## Stephanie Bachas-Daunert

Postdoctoral Scholar, Infectious Diseases

### Bio

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#### HONORS AND AWARDS

- Stanford Postdoc JEDI (Justice, Equity, Diversity, and Inclusion) Champion Award, Stanford University (2022)
- Second Place Poster Prize, National Postdoctoral Association Annual Conference, National Postdoctoral Association (2022)
- Davidson Gwatkin Equity Measurement Prize, Metrics for Management (2021)
- Stanford VPGE Graduate Feminist Scholar Award, Stanford University Vice Provost for Graduate Education (2021)
- Stanford Bio-X (Bioengineering) Travel Award, Stanford Bio-X (Bioengineering) (2018)
- First Place Poster Prize, Bio-X (Bioengineering) Interdisciplinary Initiatives Program Symposium, Stanford First Bio-X (Bioengineering) (2017)
- American Society of Microbiology Robert D. Watkins Graduate Research Fellowship, American Society of Microbiology (2016 - 2019)
- NIH F31 Ruth L. Kirschstein Individual Predoctoral Diversity Fellowship, National Institutes of Health (NIH), National Institute of Environmental Health Sciences (NIEHS) (2013 - 2016)
- Rising Environmental Leaders Program, Stanford University Woods Institute for the Environment (2014 Cohort) (2013 - 2014)
- National Science Foundation Graduate Research Fellowship Program (NSF GRFP), National Science Foundation (2010 - 2013)
- Stanford University Engineering Dean's Doctoral 3D Diversity Fellowship, Stanford University School of Engineering (2010 - 2012)
- Princeton University Cum Laude and Departmental Honors Awards, Princeton University (2010)
- UCB Pharmaceuticals Crohn's Scholarship Award, UCB Pharmaceuticals (2007)
- Discover Card Tribute Award (Scholarship), Discover Card (2006)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Committee Member, Justice, Equity, Diversity, and Inclusion (JEDI) Committee of the Stanford University Postdoctoral Association (SURPAS) (2021 - present)
- Member, Society of Women Engineers (SWE), National Membership and Stanford University Chapter (2014 - present)
- Member, American Society for Engineering Education (ASEE) (2014 - present)
- Research Chair, Stanford University Chapter, American Society of Civil Engineers (ASCE) (2012 - 2016)
- Executive Board Member, American Society of Civil Engineers (ASCE), Princeton University Chapter (2009 - 2010)
- Treasurer, Society of Hispanic Professional Engineers (SHPE), Princeton University Chapter (2009 - 2010)
- Group Leader, Princeton University Engineering Projects in Community Service (EPICS) (2007 - 2009)

#### PROFESSIONAL EDUCATION

- Bachelor of Science, Princeton University , Civil & Environmental Engineer (2010)
- Doctor of Philosophy, Stanford University , CEE-PHD (2021)
- Master of Science, Stanford University , CEE-MS (2012)

- MSE, Stanford University , Civil and Environmental Engineering (2012)
- BSE, Princeton University , Civil and Environmental Engineering (2010)

## STANFORD ADVISORS

- David Relman, Postdoctoral Research Mentor

## Publications

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### PUBLICATIONS

- **CAPTURING MIDDLE SCHOOL STUDENTS' UNDERSTANDINGS OF DESIGN THINKING** *TAKING DESIGN THINKING TO SCHOOL: HOW THE TECHNOLOGY OF DESIGN CAN TRANSFORM TEACHERS, LEARNERS, AND CLASSROOMS*  
Goldman, S., Zielezinski, M. B., Veal, T., Bachas-Daunert, S., Kabayadondo, Z., Goldman, S., Kabayadondo, Z.  
2017: 76–93
- **Reconsidering Engineering in Middle School: Integrating Design Thinking and STEM Content**  
Goldman, S., Veal, T., Zielezinski, M., Bachas-Daunert, S., Kabayadondo, Z.  
2015
- **Dive In! An Integrated Design Thinking/STEM Curriculum**  
Goldman, S., Carroll, M., Zielezinski, M., Loh, A., Ng, E., Bachas-Daunert, S., ASEE  
AMER SOC ENGINEERING EDUCATION.2014
- **Biosensors: Design and Applications** *Encyclopedia of Agricultural, Food, and Biological Engineering*  
Bachas-Daunert, S., Dikici, E., Deo, S. K.  
CRC Press.2014; 2nd
- **Should genetically modified foods be abandoned on the basis of allergenicity?** *ANALYTICAL AND BIOANALYTICAL CHEMISTRY*  
Bachas-Daunert, S., Deo, S. K.  
2008; 392 (3): 341-346
- **Chemically tunable lensing of stimuli-responsive hydrogel microdomes** *ADVANCED MATERIALS*  
Ehrick, J. D., Stokes, S., Bachas-Daunert, S., Moschou, E. A., Deo, S. K., Bachas, L. G., Daunert, S.  
2007; 19 (22): 4024–+
- **POLY 251-Stimuli-responsive hydrogels based on hinge motion binding proteins as recognition elements**  
Ehrick, J. D., Bachas-Daunert, S., Stokes, S., Moschou, E. A., Deo, S. K., Bachas, L. G., Daunert, S.  
2006
- **Photoproteins and Instrumentation: Their Availability and Applications in Bioanalysis** *Photoproteins in Bioanalysis*  
Doleman, L. A., Bachas-Daunert, S., Davies, L. L., Deo, S. K., Daunert, S.  
Wiley-VCH.2006: 225-234

### PRESENTATIONS

- Better Ally: A Model for a Monthly Workshop Series To Improve Allyship Towards Marginalized Communities - National Postdoctoral Association Annual Conference (4/2022)
- Arsenic and the Human Gut Microbiome - American Society of Microbiology Annual Conference (ASM Microbe) (6/2020)
- Using EdTech in the Classroom: STEM Apps for Microbiology Education and Outreach - American Society of Microbiology Annual Conference (ASM Microbe) (6/2020)
- Leveraging Technology for Health Monitoring of Wastewater and Coastal Waters - American Society of Microbiology Annual Conference (ASM Microbe) (6/2019)
- ASM on the Local Level: Leveraging Student Chapters - American Society of Microbiology Annual Conference (ASM Microbe) (6/2019)
- PlayfulScience App Demo - American Society of Microbiology Annual Conference (ASM Microbe) community outreach at the San Francisco Public Library (June 2019)
- Arsenic and the Gut Microbiome - American Society of Microbiology Annual Conference (ASM Microbe) (6/2019)

- Arsenic and the Human Gut Microbiome - Stanford Bio-X Interdisciplinary Initiatives Poster Session
- Arsenic and the Human Gut Microbiome - Environmental Toxicants and the Microbiome (NIH-Funded Workshop) (7/2018)
- Arsenic and the Human Gut Microbiome: Biotransformations of Ecological and Toxicological Relevance - American Society of Microbiology Annual Conference (ASM Microbe) (6/2018)
- Arsenic and the Human Gut Microbiome: Biotransformations of Ecological and Toxicological Relevance - California Alliance for Graduate Education and the Professoriate Annual Retreat (3/2018)
- Arsenic Biotransformations by the Human Gut Microbiome - Stanford Microbiome Summit (10/2017)
- Arsenic and the Microbiome: Towards Microbiome-Centric Public Health Interventions - Stanford Bio-X (Bioengineering) Interdisciplinary Initiatives Program Symposium (8/2017)
- Arsenic and the Gut Microbiome: Biotransformations of Ecological and Toxicological Relevance - American Society of Microbiology Annual Conference (ASM Microbe) (6/2017)
- An Innovative Approach to K-12 STEM Outreach Through a University Course Incorporating Design Thinking, Mentorship, and Curriculum Design - American Society of Microbiology Annual Conference (ASM Microbe) (6/2017)
- Arsenic and the Gut Microbiome: Biotransformations of Ecological and Toxicological Relevance - California Alliance for Graduate Education and the Professoriate Annual Retreat (2/2017)
- Reconsidering Engineering in Middle School: Integrating Design Thinking and STEM Content - American Educational Research Association Annual Meeting (4/2015)
- Dive In! An Integrated Design Thinking/STEM Curriculum - American Society of Engineering Education Annual Conference (6/2014)
- Environmental Impact at Tarragona: A Detailed Review of Thermal Expansion on Roman Ruins in Coastal Spain - Princeton University (5/2010)
- Environmental Impact at Tarragona: A Detailed Review of Thermal Expansion and Salt Crystallization on Roman Ruins in Coastal Spain - Princeton University (1/2010)
- Non-Invasive Biosensors for the Management and Diagnosis of Crohn's Disease - Princeton University Health Research Symposium (4/2007)
- Stimuli-Responsive Hydrogels Based on Hinge Motion Binding Proteins as Recognition Elements - American Chemical Society Annual Meeting (9/10/2006)
- Quorum Sensing Biosensors for the Management and Diagnosis of Crohn's Disease - Intel International Science and Engineering Fair (5/2006)
- Stimuli-Responsive Protein Multimer Hydrogels for Sensing Applications - University of Kentucky Naff Symposium (4/2006)
- Stimuli-Responsive Hydrogels with Integrated Protein Recognition for Sensing Applications - Pacificchem Conference (12/15/2005 - 12/20/2005)
- Stimuli-Responsive Hydrogels Integrating Binding Protein Recognition Elements - American Institute for Chemical Engineers National Conference (10/31/2005)
- Whole Cell Biosensors for Quorum Sensing Molecules - University of Kentucky Naff Symposium (3/15/2005)