

# CHEMICAL AND BIOMOLECULAR ENGINEERING UNDERGRADUATE RESEARCH POSTERS

04.24.2018

3:30 - 5:00

and

04.26.2018

1:00 - 2:30

E2, 114

Spring 2018

Showcasing research  
from the  
Burke, Burkey, Cho,  
Nieh, Pascal, Shor,  
Stuber, Wagstrom, and  
Willis groups



# Student Posters

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1. Jacob Chicano, "Nonlinear Model Predictive Control for Wastewater Treatment," Advisor: Dr. Stuber

2. Jikku Samuel, "Estimating Pollutant Deposition to Different North American Watersheds," Advisor: Dr. Wagstrom

3. Connor Dion, "Transport Modeling in the Tumor Microenvironment," Advisor: Dr. Stuber

4. Howard Craig, "Processing of Resistance Responses from Saturated Organic Vapors," Advisor: Dr. Willis

5. Tori Danis, Lauren Contenta, Daniel Wackelin, "Bacterial Expression and Purification of Engineered Tau," Advisor: Dr. Cho

6. Luke Kinard and Timothy Haddon, "Wet Nitrogen Deposition Monitoring," Advisor: Dr. Wagstrom

7. Sydney Wimberley, "Engineering Liquid Crystalline Phases for Cell Culture Materials," Advisor: Dr. Burke

8. Kealy Walters and Matthew Lewicki, "Modeling Air Pollution Exposure to Cyclists in Different Cities," Advisor: Dr. Wagstrom

9. Julie Fabrykiewicz and Elizabeth Sagers, "Modeling Ship Emissions," Advisor: Dr. Wagstrom

# Student Posters

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10. Amy McKinstry, "The Synthesis and Characterization of Liquid Crystalline Materials,"  
Advisor: Dr. Burke

11. Michael Schaefer and Christiana Nisco,  
"Mechanism Reduction in Atmospheric Chemistry,"  
Advisor: Dr. Wagstrom

12. Alexandra Oliveira, "Predictive Modeling of Multi-Component Chemical Vapor Sensors," Advisor: Dr. Willis

13. Kyle Terracciano, "Lab-Based Calibration of an Ozone Sensor/A Machine Learning Approach to Achieve Accurate Sensor Data," Advisor: Dr. Wagstrom

14. Jennifer Skoog and Kayla Sagan, "Split Nanobodies and Protein Complementation," Advisor: Dr. Cho

15. Clark Stan, "Visual Literacy in Engineering Education," Advisor: Dr. Pascal

16. Liam Evans, "Optimization of lipid / Gold NanoParticle / Fluorescence dye composition for high emission carriers," Advisor: Dr. Nieh

17. Brianna Mancuso, Brianna Markunas, Kevin Yang,  
"Designing a Community Air Quality Assessment Methodology," Advisor: Dr. Wagstrom

# Student Posters

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18. Albert Tulli IV, "Affect of Aging on Rheological Properties of Engineered Silk Hydrogels," Advisor: Dr. Burke

19. Maxwell Tracy, "Thermodynamic Modeling of Concentrated Electrolyte Solutions in Absorption Systems," Advisor: Dr. Stuber

20. Sricharan Kadimi, "ssDNA and Bicellar Nanodisc Complexes: A Template for siRNA Delivery Systems," Advisor: Dr. Nieh

21. Natalie Krebs, Evan Dennison, Juliette Nealon, "Design and Calibration of a Low Cost Gaseous Air Pollution Sensor Network," Advisor: Dr. Wagstrom

