

# Bioengineering

Session **P**

Room: 228 Baxter

---

1:00 - 1:20 PM	<b>Sarah E. Marzen</b> <i>Amgen Scholar</i>	Another Look at the Two-State System: Testing a New Theory of Non-Equilibrium Statistical Mechanics	Rob B. Phillips <i>Professor of Applied Physics and Mechanical Engineering</i> David D. Wu <i>Graduate Student in Bioengineering</i>
1:20 - 1:40 PM	<b>Pradeep Ramesh</b> <i>Rose Hills Foundation SURF Fellow</i>	Single Molecule Dynamics of Concerted HIV-I Integration ( <i>in vitro</i> ) Using Tethered Particle Motion	Rob B. Phillips <i>Professor of Applied Physics and Mechanical Engineering</i> Geoffrey A. Lovely <i>Graduate Student in Chemistry</i>
1:40 - 2:00 PM	<b>Dan Song</b>	A Census of Lac Repressor at the Single-Cell Level	Rob B. Phillips <i>Professor of Applied Physics and Mechanical Engineering</i> Hernan G. Garcia <i>Graduate Student in Physics</i>
2:00 - 2:20 PM	<b>Adam Z. Khan</b> <i>Caltech-University of Iceland Exchange</i>	Characterization of a Breast Cancer Progression Model With a Hereditary Component	Thorarinn Gudjonsson <i>Professor of Biology, University of Iceland</i>
2:20 - 2:30 PM	<b>BREAK</b>		
2:30 - 2:50 PM	<b>Eric M. Chin</b> <i>Richter Scholar</i>	An Optical System for Diagnosing and Monitoring Dermal Microvascular Health	Morteza Gharib <i>Hans W. Liepmann Professor of Aeronautics and Professor of Bioengineering</i> Danny Petrasek <i>Senior Research Fellow in Applied and Computational Mathematics and Bioengineering</i>
2:50 - 3:10 PM	<b>Shyam R. Srinivasan</b> <i>Toshi Kubota Aeronautics SURF Fellow</i>	Dynamic Edge Detection in Zebrafish Models of Cardiac Morphogenesis	Morteza Gharib <i>Hans W. Liepmann Professor of Aeronautics and Professor of Bioengineering</i> Derek G. Rinderknecht <i>Graduate Student in Bioengineering</i>

3:10 - 3:30 PM

**Amy T. Lam**  
*Richter Scholar*

Dynamic Microenvironments  
for the Study of Tissue  
Morphogenesis

Chin-Lin Guo  
*Assistant Professor of  
Bioengineering and Applied  
Physics*