



**8<sup>th</sup> Annual Amgen-Clorox  
Graduate Student Symposium**  
Friday, October 2, 2015



<b>9:00 AM</b>	<b>Registration and Breakfast</b>	<b>ESB Courtyard</b>
<b>9:30 AM</b>	<b>Welcome</b> Professor Rachel Segalman, UCSB Chemical Engineering Department Chair	<b>ESB 1001</b>
<b>9:45 AM</b>	<b>Session I: <i>Transport and Methods</i></b>	<b>ESB 1001</b>
	<b>Nikolai Petsev</b> <i>Dow Lecture:</i> Multiscale from molecular to continuum: a hybrid simulation method for multicomponent systems	
	<b>Peng Cheng</b> Probing the influence of flow-induced breakage on the rheology and flow of micellar solutions	
	<b>Alex Heilman</b> Design of a tip-enhanced Raman spectroscopy system with a novel total internal reflection illumination geometry	
<b>11:05 AM</b>	<b>Break</b>	<b>ESB Courtyard</b>
<b>11:20 AM</b>	<b>Session II: <i>Biomolecules and Biosurfaces</i></b>	<b>ESB 1001</b>
	<b>Nicole Schonenbach</b> Elucidating the functional and structural consequences of adenosine A2a receptor oligomerization	
	<b>Michael Zakrewsky</b> Ionic liquids as antimicrobials, solvents, and prodrugs for treating skin disease	
	<b>Michael Rapp</b> Adaptive and synergistic interactions of amino acids in underwater bio-adhesives	
<b>12:35 PM</b>	<b>Lunch</b>	<b>ESB Courtyard</b>
<b>1:35 PM</b>	<b>Poster Session</b>	<b>ESB Courtyard</b>
<b>2:35 PM</b>	<b>Session III: <i>Materials and Complex Fluids</i></b>	<b>ESB 1001</b>
	<b>Rahul Sangodkar</b> Saccharide-mediated hydration and crystallization of inorganic structural materials	
	<b>Juntae Kim</b> Understanding the dynamics and rheology of polymer-colloid mixtures using temperature-sensitive nanoemulsions	
	<b>Edward Toumayan</b> Understanding the relation between polymer brush properties and antifouling	
<b>3:50 PM</b>	<b>Break</b>	<b>ESB Courtyard</b>
<b>4:05 PM</b>	<b>Session IV: <i>Biomedical Systems</i></b>	<b>ESB 1001</b>
	<b>Joon Bok Lee</b> <i>Air Products Lecture:</i> Process dynamics, modeling, and control for the development of an artificial pancreas	
	<b>Lauren Huyett</b> <i>Schlinger Lecture:</i> Impact of sensing and actuation characteristics on artificial pancreas design	
<b>5:05 PM</b>	<b>Conclusion</b> Lauren Huyett, Symposium Co-Organizer	<b>ESB 1001</b>
<b>5:30 PM</b>	<b>Reception Dinner and Award Ceremony</b> Industry guests, faculty and presenters are all welcome	<b>Mosher Alumni House</b>
<b>8:30 PM</b>	<b>End of Reception Dinner and Award Ceremony</b>	