

## CMMB IGERT and M-CNTC Annual Symposium Thursday, May 8, 2014

8:00 AM - 4:30 PM

Venue: Micro and Nanotechnology Laboratory

## **Agenda**

		Revised 5/13
8:00 – 9:00 AM	Continental Breakfast and Registration	MNTL Atrium
9:00 – 9:15 AM	Opening Remarks	1000 MNTL
	Rashid Bashir, Head, Department of Bioengineering	
9:15 – 9:30 AM	Evaluation Report	
	Lizanne DeStefano, I-STEM Education Initiative	
	Ayesha Tillman, I-STEM Education Initiative	
Session Chair	Lizanne DeStefano, I-STEM Education Initiative	
9:30 – 10:30 AM	CMMB IGERT Research Highlights	
	Presentations to include 1 minute comments/overview by	
	adviser, followed by a 8 minute trainee presentation, and	1 2 minutes for Q&A
	Uptake of SiO₂ Nanoparticles and Mechanobiolo	ogy on the
	Cerebrovascular Endothelium	
	Kevin Kim and Carlos Dostal	
	Stem Cell Membrane Engineering: Approach for	Modulating
	Cell-Biomaterial Interactions	
	Gregory Underhill and Nidhanjali Bansal	
	Fluorescent Carbon Nanoparticles from Molasse	es for Cancer
	Theranostics	
	Rohit Bhargava and Shaneen Braswell	
	Quantification of Microcirculatory Flow	
	Brad Sutton and Alexander Cerjanic	
	Identification of Non-coding RNAs Involved in H	uman Embryonic
	Stem Cell Fate Determination	

Fei Wang and Mahdieh Jadaliha

10:30 – 10:45 AM	Group Photo and Break	MNTL Atrium
Session Chair	Jimmy Hsia, Mechanical Science and Engineering	
10:45 – 11:30 AM	CMMB IGERT Research Highlights, continued  Presentations to include 1 minute comments/overview by adviser, followed by a 8 minute trainee presentation, and 2	1000 MNTL
	Computational Design of a Hopping Biomechanical Jimmy Hsia and Daniel Perlitz	l Machine
	<b>3D Microfabrication of Biological Machines</b> Rashid Bashir and Ritu Raman	
	Mechanically-Selected Tumorigenic Cells in Pancre Ning Wang and Brittany Weida	atic Cancer
	Investigating Peptide Release from the Cells of the Ganglion upon Mechanical Stimulation Taher Saif and Emily Tillmaand	Dorsal Root
Career Panel Moderators	Alex Cerjanic, IGERT Trainee, Bioengineering Richard Graybill, M-CNTC Trainee, Chemistry Ritu Raman, IGERT Trainee, Mechanical Science and Engineering	
11:30 AM – 1:00 PM	<ul> <li>Lunch Career Panel</li> <li>Laura Frerichs, Director of the University of Illinois Research Park</li> <li>William Schuh, CMIO at Carle Foundation Hospital</li> <li>Dustin Starkey, University Site Manager at Abbott Nutrition</li> <li>Harry Radousky, Staff Scientist, Lawrence Livermore National Laboratory</li> </ul>	MNTL Atrium and 1000 MNT
Afternoon Session Chair	Taher Saif, Mechanical Science and Engineering	
1:00 – 1:45 PM	M-CNTC Research Highlights  Presentations to include 1 minute comments/overview by adviser, followed by a 8 minute trainee presentation, and 2	1000 MNTL
	"Shake-n-Incubate": Flow-Mediated Stem Cell Labe Superparamagnetic Iron Oxide Nanoparticle Cluste Hyunjoon Kong and Nick Clay	_
	Polyelectrolyte-wrapped surface-enhanced Raman nanoparticles Rohit Bhargava and Brent DeVetter	scattering
	Forming of Janus Particle by Adsorption and Phase Jimmy Hsia and Donghai Gai	Separation
	Gold Nanorods in the Extracellular Matrix and thei Cancer Cell Migration Hyunjoon Kong and Elissa Grzincic	r Effect on

1:45 – 2:00 PM	Break	MNTL Atrium	
2:00 – 2:40 PM	M-CNTC Research Highlights, continued	1000 MNTL	
	Presentations to include 1 minute comments/overview by		
	adviser, followed by a 8 minute trainee presentation, and 2 minutes for Q&A		
	Microreactors for Synthesis of Molecular Imaging I	Probes	
	Paul Kenis and Joseph Whittenberg		
	<b>Development of drug-polyester nanoconjugates for cancer therapy</b> Jianjun Cheng and Qian Yin		
	Facile and efficient preparation of anisotropic DNA	functionalized	
	gold nanoparticles and their regioselective assemb Yi Lu and Li Huey Tan	-	
2:40 – 4:00 PM	gold nanoparticles and their regioselective assemb	-	
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2:40 – 4:00 PM	gold nanoparticles and their regioselective assemb Yi Lu and Li Huey Tan  Poster Session and Reception	MNTL Atriums	
2:40 – 4:00 PM 4:00 – 4:30 PM	gold nanoparticles and their regioselective assemb Yi Lu and Li Huey Tan  Poster Session and Reception Currently funded trainees are required to present a poster	MNTL Atriums	
	gold nanoparticles and their regioselective assemb Yi Lu and Li Huey Tan  Poster Session and Reception Currently funded trainees are required to present a poster and previous trainees are invited to present a poster.	MNTL Atriums 1 <sup>st</sup> and 2 <sup>nd</sup> Floors	
	gold nanoparticles and their regioselective assemb Yi Lu and Li Huey Tan  Poster Session and Reception Currently funded trainees are required to present a poster and previous trainees are invited to present a poster.  Closing Session	MNTL Atriums 1 <sup>st</sup> and 2 <sup>nd</sup> Floors	

## **Annual Symposium Sponsored by:**

- o <u>NSF Integrative Graduate Education and Research Traineeship (IGERT) on Cellular and Molecular Mechanics</u> and BioNanotechnology (CMMB)
- o NIH/NCI Midwest Cancer Nanotechnology Training Center (M-CNTC)
- o Department of Bioengineering
- o Center for Nanoscale Science and Technology (CNST)
- o Department of Bioengineering
- Micro and Nanotechnology Laboratory (MNTL)

