

# Center for Biomedical Science and Engineering (CBSE) Research Symposium

Thursday, April 16<sup>th</sup>, 2015

McNutt Hall & Havener Center

## Symposium Agenda

12:00–1:30 p.m.	<b>Poster Set-up</b> Lower Atrium, Havener Center
1:30–1:55 p.m.	<b>Opening Address</b> Dr. Len Rahaman, Director, CBSE 204 McNutt Hall
2:00–3:00 p.m.	<b>Poster Presentations</b> Lower Atrium, Havener Center
3:00–3:30 p.m.	<b>Break – Refreshments</b> Lower Atrium, Havener Center
3:30–4:30 p.m.	<b>Poster Presentations</b> Lower Atrium, Havener Center
4:30–5:00	<b>Judges Conference</b> Selection of Best Graduate and Undergraduate Posters ( <u>Awards to be made at CBSE Meeting on May 7<sup>th</sup></u> )

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## Poster Presentations

### Undergraduate

Name	Faculty Advisor(s)	Department	Poster Title
Kelly Dunlap	Sutapa Barua	CBE	Engineering Nanoparticles for Drug Delivery
Mason Donnell	Sutapa Barua	CBE	Endotoxin Purification using Cationic Nanoparticles
<b>Corinna M. Edwards;</b> Hannah E. Frye	Adam Martin; Robert Aronstam	Bio Sci	Endoplasmic Reticulum Calcium Measurements Using Intracellular Fluorescent Dyes
Michael A. Steurer	Robert Aronstam; Adam Martin	Bio Sci	Constitutive Activity in Orphan G Protein Coupled Receptors
Dana Lawson	Robert Aronstam	Bio Sci	Modulation of Allosteric Regulation of Muscarinic Signaling by Chemical Modification of the Receptor
<b>L. Rosamond Hoyle;</b> Kwther Albasha; Grace Deitzler	Yue-Wern Huang	Bio Sci	Development of a chemically-induced breast cancer model in Sprague-Dawley rats
<b>Kent Lin;</b> Melissa Cambre	Yue-Wern Huang	Bio Sci	Nanoparticles aggravate atherosclerosis via scavenger receptor pathway
Anthony Bitar; Caleb Trecuzzi	Delbert Day; Len Rahaman	MSE; Bio Sci	Angiogenic Effects of Variant Lengths of Borate Glass Scaffolds Prepared via Robocasting

Rachel Connell; Elsie Greenwood; Ali Mohamadkhah	David Westenberg; Delbert Day	Bio Sci; MSE	Antibacterial Properties of Metal Doped Glass
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### Graduate

Name	Faculty Advisor(s)	Department	Poster Title
Altamash Fakki	Change-Soo Kim	ECE	Chemical quantification with ubiquitous optoelectronic devices
Levi Malott; Pratool Bharti; Nicholas Hilbert	Sriram Chellappan	Computer Sci	Detecting Self-Harming Activities with Wearable Devices
Avinash Kankipati	Xian Huang	MAE	An Ultra-sensitive Sensor Compliant to Eyelids
<b>Shaikat Galib;</b> Fahima Islam	Hyoung Koo Lee	Nuclear Eng	Automatic Detection of Lesions from Oral CT images
<b>Saikat Galib;</b> Fahima Islam; Muhammad Abir	Hyoung Koo Lee	Nuclear Eng	Automated Periodontal Cyst Detection in Dental Panorama Images
Ran Zhou	Cheng Wang	MAE	Micro-particle separation with acoustic microbubble enabled flow fractionation
Qingbo Yang; Sisi Chen; Xiaobei Zhang; Qi Zhang	Honglan Shi; Hai Xiao; Yinfa Ma	Chemistry	A Novel Fiber-Optic pH Nano-Probe Fabricated for Single Cell Monitoring
Casey Burton	V. Samaranyake; Honglan Shi; Yinfa Ma; (Keith	Chemistry	Evaluation of Urinary Xanthopterin and Isoxanthopterin in Patients with Breast Cancer

	Strassner); (Roger Holden)		
Humayun Shariff	Sutapa Barua	CBE	Engineering Fluorescent Nanoparticles for Early Cancer Detection
Larry M. Tolliver	Yue-Wern Huang	Bio Sci	Toxicological Effects of Fourth-Period Transition Metal Oxide Nanoparticles in A549 Cells
Hsiu-Jen Wang	Adam Martin; Yue-Wern Huang; Robert Aronstam	Bio Sci	Biphenol Inhibition of Calcium Entry in Response to Activation of Human M3 Muscarinic Receptors
Mohammad Islam	Dipak Barua	CBE	Multiscale model-based analysis of B lymphocyte response to pathogenic antigens
Wei Xiao	Len Rahaman	MSE	Biodegradable hydroxyapatite microspheres for growth factor delivery and bone regeneration
Wei Xiao	Len Rahaman; M. Asle Zaeem	MSE	Design, fabrication and testing of bioactive glass scaffolds for structural bone repair
Yinan Lin	Len Rahaman	MSE	Bone regeneration in osseous defects implanted with bioactive glass (13-93) scaffolds
<b>Sisi Chen;</b> Qingbo Yang; Katherine Brow; Kun Liu	Honglan Shi; Richard Brow; Yinfa Ma	Chemistry; MSE	In vitro characterization and bioactivity study of bioactive glass fibers

## Faculty

<b>Name</b>	<b>Co-authors</b>	<b>Department</b>	<b>Poster Title</b>
Len Rahaman		MSE	Copper-doped borate bioactive glass microfibers for healing skin wounds
Julie Semon		Bio Sci	Mesenchymal Stem / Progenitor Cells in the Treatment of a Mouse Model of Multiple Sclerosis
Robert Aronstam	Erica Shannon; Hsiu-Jen Wang; Adam Martin	Bio Sci	Activation of Camp-Dependent Signaling Pathways by Human Muscarinic Receptors
Adam Martin	Robert Aronstam	Bio Sci	S&T cDNA Resource Center: Human Signal Transduction Proteins and Cell Lines