“Industry Collaboration Showcase”

featuring

CMI co-funded faculty researchers and their industrial partners from:

Healthcare Hub, Vader Systems, POP Biotechnologies & Unifrax

AGENDA: Welcome Panel Discussion Q&A
WELCOME

Mark T. Swihart, PhD
Executive Director, CMI
UB CAT 2016-2017 RFP

University at Buffalo Center for Advanced Biomedical and Bioengineering Technology (CAT) Request for Proposals

- Info Session #2: Monday, February 22 | 4:30 p.m. at the CBLS
- Applications due by 5 p.m. EST on April 1, 2016
- For more information, visit: buffalo.edu/cbils/cat
UPCOMING CBLS EVENTS

March 24, 2016

Innovation Lecture Series: “How Industry Benefits from Collaborating with CBLS Core Facilities”
CBLS, 701 Ellicott Street

- Learn more about the CBLS’s world-class facilities in genomics, proteomics and supercomputing
- Featuring company representatives from Athenex, Rheonix and Sentient Science
- Poster presentation and networking to follow
- To register, visit cbls-cores.eventbrite.com
UPCOMING CBLS EVENTS

May 17 – May 25, 2016

Pre-Seed Workshop, Buffalo
CBLS, 701 Ellicott Street

- A forum for high-tech ideas with potential—bring an idea from concept to plan in just two days

- Looking for **Idea Champions and volunteers** for the 2016 workshop

- Contact Sandra Small, PhD at **sksmall@buffalo.edu** for more information
INTRODUCTION AND PANEL DISCUSSION

Mark T. Swihart, PhD
Executive Director, CMI
CMI Mission

CMI leverages UB’s cutting edge materials science and advanced manufacturing expertise to drive innovation and critical R&D activities that directly impact private sector growth in key areas including advanced manufacturing, life sciences, and energy.
CMI Overview

- One of 10 NYS Centers of Excellence state-wide
  - Designated in 2012 by NYS Legislature and Gov. Cuomo

- Partner university strengths with a thriving local industry sector to drive economic development through innovation
  - Technology-Based Economic Development
  - Engagement and outreach to the community

- Funds (ESDC/NYSTAR sponsored funding)
  - 12/13 - $200K operating funds
  - 13/14 - $500K operating funds
  - 14/15 - $872,333 operating funds
  - 15/16 - $1,000,000 operating funds
  - Annual reporting required – jobs are primary metric
CMI Overview

- **Who we are:** 11 core team members supporting a network of 75+ faculty engaged in promising innovation with broad applications

- **What we do:** facilitate industry access to UB faculty, world-class equipment, business support services, funding and incentive programs

- **How we do it:** engage entrepreneurial faculty, foster a culture of innovation, and deploy the skills of UB researchers, entrepreneurs and partners to address industry’s challenges and create jobs
Assessing Success

Since 2012, we have been driving innovation & economic development:

- Engaged with 200+ Industry Partners
- Assisted 47 Companies in securing UB CAT Funding
- Co-Funded 14 Faculty Projects with Industry
- Engaged 12 Industrial Advisory Board Members
- Collaborated with 13 UB Departments
- Enlisted the talents of 11 CMI Staff
- Collaborated with 18 Universities
- Leveraged the Expertise of 70+ UB Faculty Members
- Partnered with 9 Federal Agencies
- Supported 17 START-UP NY Companies
- Entered into 20 Non-Disclosure Agreements
- Provided 52 Companies Exposure at Bright Buffalo Niagara & Pre-Seed Workshop
- Supplied 25 Companies with Direct Workforce Development Assistance
CMI Co-Funded Industry Collaborations

• Process
  • Deans, Tech Transfer/Economic Development teams and the IAB submitted nominations
  • Faculty/Industry teams invited to submit 2-page proposals
  • proposals received and evaluated by CMI faculty and staff
• 2014-15 Projects
  • Six Projects in 2015 awarded at $25K each
  • February 1, 2014 to June 30, 2015
• 2015-16 Projects:
  • 4 projects funded at $40k each
  • Nov. 1, 2015 to June 30, 2016
2014-2015 CMI Co-Funded Projects

Uttam Singisetti, PhD

Gang Wu, PhD

Haiqing Lin, PhD

Eva Zurek, PhD

Paras N. Prasad, PhD

Keith Kahen, PhD

Nanotattoo
Featuring Dr. Enaame Farrell, MD
Founder and Vice President, Healthcare Hub

• Wholesale distributor of medical, dental and surgical supplies, equipment and pharmaceuticals

• Chong Cheng, Associate Professor (Principal Investigator) and Johannes Hachmann, Assistant Professor (co-PI), Department of Chemical and Biological Engineering

• Expanding to manufacturing of environmentally friendly medical products using degradable polymers
Featuring Scott Vader  
President, Vader Systems

- Creating the world’s first molten metal printer

- Chi Zhou, Assistant Professor, Department of Industrial and Systems Engineering (Principal Investigator)

- Optimization of technology to understand how different parameters will affect their system. Parameters include the process (melting, solidification), structure (metallic structure phases), properties (density, hardness) and performance (strength, yield).
Featuring Dr. Jonathan Lovell, Assistant Professor of Biomedical Engineering, University at Buffalo Principal Investigator, POP Biotechnologies

- Nanomedicine startup company developing next-gen drug delivery solutions

- Jonathan Smyth (Co-Founder)

- Using light targeted drug delivery to treat localized cancers
Featuring Dr. Marina Tsianou, Department of Chemical and Biological Engineering, University at Buffalo, The State University of New York

- Unifrax is a global leader in high-temperature, high performance specialty products

- Dr. Joseph A. Fernando, Global Director, Innovation & Business Development, Unifrax I LLC
  Ms. Jing Chen, Manager, Business Development, Unifrax I LLC

- Relate the water adsorption/reaction and degradation of ceramic fibers used in thermal insulation to the material composition, properties and structure
Thank you

Q&A