



University at Buffalo

Department of Chemical  
and Biological Engineering

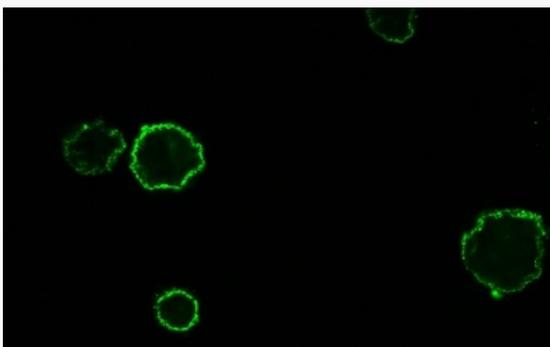
School of Engineering and Applied Sciences

## Breakthroughs



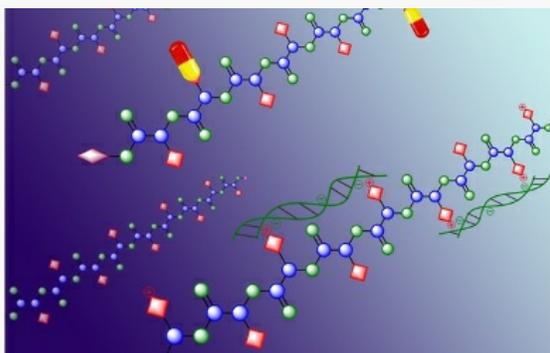
### **Germ on smartphone? UB CBE's Ed Furlani received a grant for light-based disinfection innovation**

Edward Furlani is working to deliver more effective and easier sanitization of mobile devices using UV light, which damages the DNA of microorganisms and renders them inactive.



### **Improving stem cell therapy for an array of cardiovascular diseases**

Sriram Neelamegham and students are identifying new technologies to target cellular therapeutics in a pre-clinical model of myocardial infarction.



### **Drug/gene delivery through functional polylactides**

The Chong Cheng group is synthesizing functional PLAs to study their applications in therapeutic drug delivery.

## New Additions



### **UB CBE adds new faculty**

Welcome Drs. Monica Lupion and David Courtemanche, who are joining the department to enhance undergraduate education, experiential learning and career development.

## Award Winning Faculty



Edward P. Furlani has been named a Fellow of the National Academy of Inventors



Blaine Pfeifer has been elected Fellow of the American Institute of Medical and Biological Engineering (AIMBE)



Natesh Parashurama has received the 2017 Margulis Award from the Radiological Society of North America

## Faces and Voices



### Duvall-Jackson's heart is elephantine

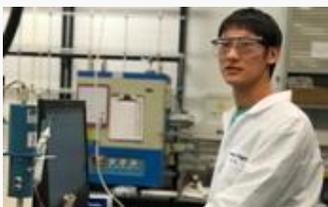
Four years ago, when Academic Secretary Lori DuVall-Jackson picked up the book *Behemoth: The History of the Elephant in America* by Ronald Tobias, she was already an elephant lover. She had no idea then, however, that she would become an elephant awareness ambassador, a world traveling conservation advocate, and an inspiration to her students.

## Student Accomplishments



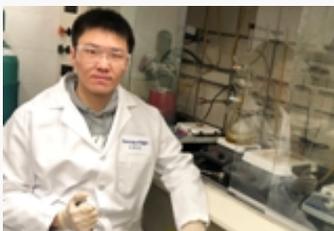
### PhD Graduate Lingxiang Zhu published in Energy and Environmental Science Journal

PhD student Lingxiang Zhu from the Haiqing Lin research group, has been focusing on the development of high-performance membranes for H<sub>2</sub> purification and CO<sub>2</sub> capture since 2014.



### PhD Student Hanguang Zhang published in the Journal of The American Chemical Society

CBE PhD candidate Hanguang Zhang's primary interest is in the development of cathode catalysts for proton exchange membrane fuel cells (PEMFCs), considered the most promising electrical power source for electrical vehicles. He is a member of the Gang Wu research group.



### **PhD student Yang Liu published in the Journal of The American Chemical Society**

Yang Liu, from the Mark Swihart lab, published a paper that showed for the first time that biconcave (red blood cell shaped) nanoplatelets can be produced via cation exchange reactions.

## **Alumni Spotlight**

### **Chemical engineering alumnus Akash Narani received the “35 under 35” award from AIChE**

Akash Narani (MS 2010), has been recognized for excellence in the field of bioengineering and significant contributions to the AIChE (American Institute of Chemical Engineers). Narani is a former student of Paschalis Alexandridis.

