Research Productivity and Agenda
ULM Research-Overview

Improve human condition through innovation and knowledge creation

- Detection/treatment of cancer (breast, liver, prostate), Alzheimer’s Disease, diabetes, hypertension
- Improvement in agricultural productivity and food safety
- Preservation of a quality environment
Girish Shah
Mary E. and Darrell L. Calhoun Endowed Chair of Pharmacology

- Focus: Role of calcitonin in the progression of prostate cancer
- Commercial opportunity: Improved prostate cancer test, cancer treatment pharmaceuticals
- Funding agencies: NIH/NCI, Louisiana Board of Regents
- Related intellectual property: US patents-3 lead inventor, 1 other
Paul W. Sylvester
B. J. Robison/Pfizer Endowed Professor of Pharmacology

- Focus: Efficacy of tocotrienols as treatment for women’s breast cancer
- Commercial opportunity: Tocotrienols as a nutraceutical for women’s breast health
- Funding agencies: First Tech International Limited, Louisiana Cancer Foundation
- Related intellectual property: US patents-1 lead inventor, 1 other
School of Pharmacy - Cancer

- **Khalid El Sayed**, Professor of Medicinal and Natural Products Chemistry
  - Focus: Olive oil and tobacco compounds for treatment of cancer and Alzheimer’s disease
  - Commercial opportunity: Nutraceuticals sales
  - Funding agencies: NIH/NCI; Cultural and Educational Bureaus of Egypt, Saudi Arabia, and Libya; LBRN; Philip Morris USA; Inspire Pharmaceuticals, Neuroscience Research Program, Universidad Central del Caribe, Puerto Rico
  - Related intellectual property: US patents-2 lead inventor, 3 other, 3 pending

- **Young-Yu Liu**, Associate Professor of Pharmacology
  - Focus: Gene-based therapy to overcome drug-resistance and improve cancer treatment
  - Commercial opportunity: Cancer treatment pharmaceuticals
  - Funding agencies: NIH/NCI, NIH/NRRC, Mizutani Foundation, LA BoR
  - Related intellectual property: One patent pending
School of Pharmacy-Cancer

- **Sami Nazzal**, Associate Professor of Pharmaceutics
  - Focus: Pharmaceutical manufacturing processes and technologies for dosage forms and drug delivery systems
  - Commercial opportunity: Reduced expense and time to deliver drug products to market
  - Funding agencies: NSF, CIMA LABS Inc., Xenoport, LA BoR
  - Related intellectual property: US patents-2 lead inventor, 2 other, 2 pending

- **Seetharama Jois**, Associate Professor of Medicinal Chemistry
  - Focus: New therapeutic strategies for human diseases, including beast cancer
  - Commercial opportunity: Cancer treatment pharmaceuticals
  - Funding agencies: Children's Brain Tumor Foundation, LBRN, LA
  - Related intellectual property: US patent-1 lead inventor
Basic Pharmaceutical Sciences-2012
National Perspective
Other Research w/ Commercial Potential

- **Kevin Baer**, Waste Management Endowed Professor of Toxicology
  - Focus: Aquatic systems response to environmental stress
  - Commercial opportunity: Improvements in the use of fertilizers to reduce runoff concentrations
  - Funding agencies: USDA, US EPA, LA DEQ, LA BoR

- **Dinesh Babu**, Assistant Professor of Toxicology
  - Focus: Food safety toxicology
  - Commercial opportunity: Extension of food shelf-life

- **Sean Chenoweth**, Associate Professor of Geography
  - Focus: Precision agricultural application of remote sensing from unmanned aircraft systems
  - Commercial opportunity: Technology transfer of methods once commercial use of UAS's is allowed
  - Funding agencies: National Geospatial-Intelligence Agency, NSF, American Geographical Society, LA BoR

- **Joydeep Bhattacharjee**, Assistant Professor of Biology
  - Focus: Carbon sequestration and forest restoration
  - Commercial opportunity: Forest management
  - Funding: LA BoR, LA DWF
One day meeting of select ULM School of Pharmacy and LSU AgCenter faculty

Creation of joint initiative to seed research
  - Involve at least one partner from each institution
  - Has potential for commercialization

Funding of five projects for total of $100,000

Nearing end of first round of projects but already have one discovery disclosure
ULM Research Agenda

1. Expanded work in biomedical and healthcare issues
   - Advancement of current IP to commercialization
   - Increased IP production in selected areas
   - Greater involvement in clinical research

2. Expanded work in agriculture and food safety
   - Funding for the Precision Agriculture Center
   - Funding for food safety laboratory

3. Continuation of current research efforts

4. Increase cross-disciplinary projects to address today’s complex problems