UL SYSTEM PRESENTATION
UNIVERSITY OF LOUISIANA AT LAFAYETTE

RAMESH KOLLRU
AUGUST 22, 2014
OUR STORY: IN NUMBERS & WORDS

- **NSF R&D Expenditures**: Rank 170
  - U. of Alabama: #204; Tulane: #110; FAU: #180

- **Carnegie Designation**
  - Clemson, Auburn and Baylor

- **“We are Committed to Research for a Reason”**
  - Strong culture of applying research to solving society’s complex problems;

- **Research is a Strategic Imperative (Strategic Plan: 2009-14)**
  - Supporting the research portfolio of our community of scholars
  - Preparing our students to thrive as global citizens
  - Creating an institution our stakeholders will highly regard
  - Fostering economic and community development
University of Louisiana at Lafayette

- “Research University with High Research Activity,” Carnegie Foundation for the Advancement of Teaching.

$73 million in Research & Development Funding

UL Lafayette is No. 10 in the US for university percentage of R&D expenditures funded by business.

In 2012, the University established the Nation’s ONLY Big Data Center: the NSF Center for Visual and Decision Informatics (CVDI).

Louisiana’s 1st NSF Center in history
University of Louisiana at Lafayette

5 Key Priority Areas

- Life Sciences
- Digital Media and Computing
- Energy incl. Clean Energy
- Coastal and Water Management
- Advanced Materials & Manufacturing

Public-Private Partnerships

- Big Pharma
- I/U CRC
- CLECO
- Gov. Tom Ridge
LIFE SCIENCES, HEALTHCARE & WELLNESS

- Regional Medical “Hub City”

- Competiveness:
  - Collaboration of UL with the Lafayette Healthcare Coalition
  - Living Lab for Health Innovation for the US

- R&D venues, labs and support:
  - New Iberia Research Center: Vaccinations for Mumps, Measles, Chicken Pox, Ebola, Aids and Hepatitis, HIV, Cancer
  - CBIT-DHH Strategic Partnership: $15M contract
  - CACS/CMPS, Picard Center

- Education:
  - CACS/Computer Science Curriculum
  - UL Nursing Curriculum

- Success Stories:
  - CajunCodeFest (6 startups); Living Lab
  - Apex Innovations; LaHaye Center

“Lafayette is **THE** place to be in the US, if you are an Innovator in Healthcare”
- Bryan Sivak, CTO, US Health and Human Services
Computing, Digital Media & Software

- Strong legacy of computing – Nation’s 1st ACM Student Chapter & 1st BS degree in CS in 1962
- R&D Venues, Labs and Support:
  - School of Computing & Informatics: CACS/CMPS
  - CBIT–Applied Research, Software Development
  - NSF CVDI (nation’s only Big Data NSF Center of Excellence)
    - Louisiana’s first-ever NSF Research Center in history
- Telecommunications:
  - LUS Fiber, Cox, AT&T, LONI
  - US Ignite Community
- Education:
  - Computer Science
  - Moving Image Arts Curricula
- Incubation and Location Incentives:
  - AcceleRagin
  - Opportunity Machine; Research Park
- Success Stories:
  - 4 NSF Career Awardees in CACS;
  - Pixel Magic to South Gent Studios

World’s largest Ad Competition:
American Advertising Federation
Produced over 30 films & Award-winning documentaries;
ENERGY & SUSTAINABILITY

- Wildcatter mentality – the Original Hub City; Central location between offshore and Haynesville

- Academic, R&D Assets:
  - Petroleum Engineering & Geology
    - 70 students to 350 undergrad students (2005-2012)
  - Imperial Barrel Award includes schools from the US, Middle East, Africa, Asia, Canada, and Latin America.
  - Energy Institute: Torrefaction Research Laboratory (one of only 2 university-based facilities in the US);
  - Marine Survival Training Center (MSTC)

- Research Capabilities:
  - Ultra-Deepwater Oil
  - Unconventional gas
  - Enhanced oil recovery

- Success Stories:
  - CLECO-UL Research Facility
  - Marine Survival Training Center
  - R3 Inc; BeauSoleil Project/The Event House
COASTAL & WATER MANAGEMENT

- America’s Energy Corridor

- Research Strengths:
  - Institute for Coastal Ecology and Engineering (ICEE)
  - Ecology Center
  - Center for Louisiana Inland Water Studies (CLIWS)
  - USGS National Wetland Research Center
  - NIMSAT Institute – Risk Assessment

- Educational Curricula:
  - Lafayette Middle School Environmental Sciences
  - Environmental, coastal, engineering, ecological & biology

- Success Stories:
  - Fenstermaker and Associates
  - TS Baker
  - ATC & Associates
  - C&C Technologies
  - Fugro Chance
**Advanced Materials & Manufacturing**

- **Education**
  - Center for Structural & Functional Materials
  - Mechanical Engineering & CACS – Autonomous Vehicles

- **Competencies & Strengths**
  - Infrastructure and logistics
  - Materials, Controls, CFD - Modeling, Design, Visualization, Safety, Business Process
  - Improved polymeric properties (patent)
  - Magnetized, nanoparticles development (patents)
  - Tracer Bullet technologies (patent)
  - Self-healing smart polymers

- **R&D Venues, Labs and Support**
  - Louisiana Accelerator Center
  - Microscopy Center
  - CajunBot, LITE
  - Oil Center Research Center

- **Existing Machine Shops**
  - Begnaud Manufacturing
## Innovation & Economic Development Data

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FUTURE OUTLOOK – VISION 2020

100/100/10 Plan

- Goal: 100 Ph.D.s per year (from current 52 students)
  - Strategies:
    - Strengthen investments into Ph.D. producers;
    - Promote undergraduate and graduate research

- Goal: $100M per year R&D expenditures (from current $69M)
  - Strategies:
    - Strengthen research programs in priority areas;
    - Support cluster hires;
    - Enhance faculty research participation (22% current rate);
    - New return of indirect policy;
    - Incentivize federal R&D expenditures;
    - Research Salary Incentive Program;
    - Enhance industry R&D funding

- Goal: Stimulate and support 10 spin-offs and startup companies
  - Strategies:
    - Enhance faculty and student entrepreneurship – new IP policy;
    - Establish the “Ragin Cajun Research Foundation”;
    - Enhance technology transfer, students internships and placement