




FAU Institutional Repository

This paper was submitted by the author to Digital Collections@FAU

<http://purl.fcla.edu/fau/fauir>



**Department of Computer &
Electrical Engineering and
Computer Science**

The Entrepreneurial Department



Quick Academic Facts

- ~1,100 students (College ~2,200)
- ~230 graduate students (College ~350)
- ~60 Ph.D. students
- 38 faculty
- Boca, Port St. Lucie + Jupiter

Academic Programs

- Undergraduate
 - Computer Engineering
 - Electrical Engineering
 - Computer Science
 - Information Engineering Technology
- Graduate
 - Computer Engineering (MS & PhD)
 - Electrical Engineering (MS & PhD)
 - Computer Science (MS & PhD)
 - Information Technology and Management (MS)
 - Bioengineering (MS)

Special Programs and Projects

- Weekend Master Program in CS
- International Programs (Nirma, LACCEI)
- NSF PIRE Program
- Industry Seminars (Motorola, Citrix, Pace Micro)
- NSF Industry/University Cooperative Research Center (NEW!)
- Online and Distance Learning Programs

New Trend: The Entrepreneurial University

- Industry trends: research funding drastically reduced – chances for universities
- Universities can only effectively become incubators of entrepreneurship and innovation if they themselves practice entrepreneurship
- This “re-conceptualization” involves non-traditional, often radical university arrangements

FAU (CEECS) Strategy

- At College level: Innovation Leadership Program
- NSF Industry/University Cooperative Research Center (I/UCRC)
- Collaboration with R&D Park at FAU
- Industry Advisory Board
- Embedding companies in the Department (Department is an incubator!)

Industry/University Cooperative Research Center

- From NSF page: “The I/UCRC program develops long-term partnerships among industry, academe, and government”
- “Through *innovative education* of talented graduate and undergraduate students, the I/UCRCs are providing the next generation of scientists and engineers with a broad, industrially oriented perspective on engineering research and practice”.
- Currently there are approximately 50 I/UCRCs
- <http://www.nsf.gov/eng/iip/iucrc/>

Information, Communication, and Computing, 9 Centers in USA (+3 planned)

Center for Autonomic Computing (CAC)

University of Florida, University of Arizona, Rutgers University

Center for Identification Technology Research (CITeR)

West Virginia University, University of Arizona

Center for Information Protection (CIP)

Iowa State University, University of California - Davis - Planned

Center for Advanced Knowledge Enablement

Florida International University, Florida Atlantic University

Center for Embedded Systems - Planned

Arizona State University, University of California - Irvine, Southern Illinois University - Carbondale, Southern Methodist University, University of North Texas, University of Texas - Dallas, State University of New York - Stony Brook, University of Texas - San Antonio

Center for Experimental Research in Computer Systems (CERCS)

Georgia Institute of Technology, Ohio State University

Center for Hybrid Multicore Productivity Research

University of Maryland - Baltimore County, Georgia Tech, University of California - San Diego

I/UCRC for Intelligent Storage - Planned

University of Minnesota, University of California Santa Cruz

High-Performance Reconfigurable Computing (CHREC)

University of Florida, The George Washington University, Virginia Tech University, Brigham Young University

Center for Software for Ultra Large Systems - Planned

University of Virginia, Michigan State University, Vanderbilt University, University of South Dakota

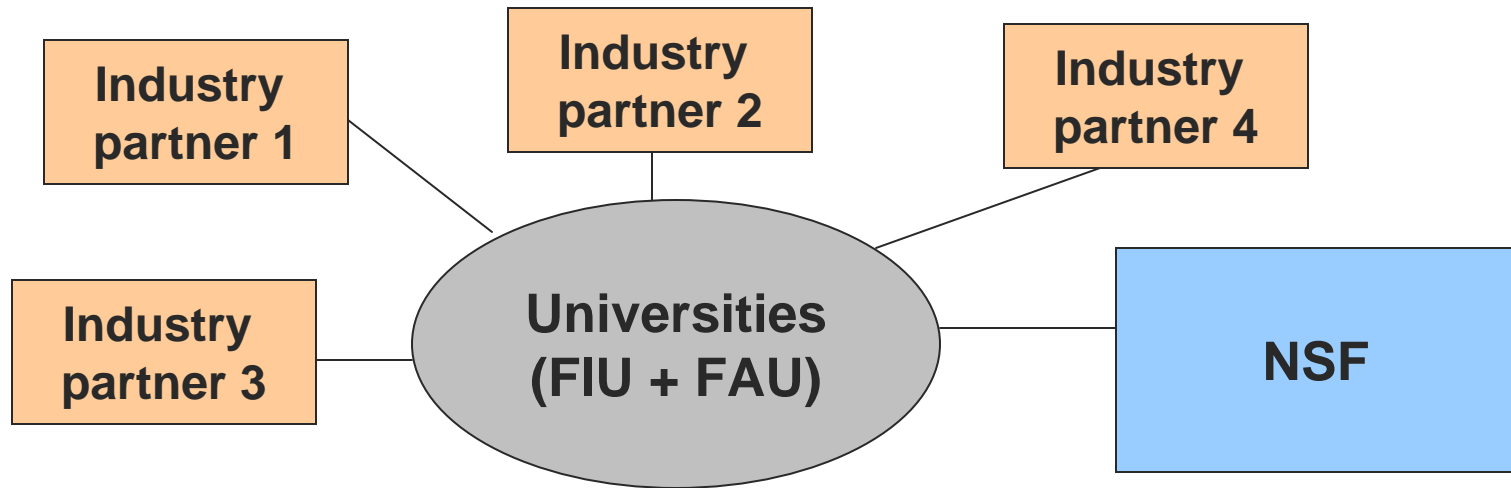
Wireless Internet Center for Advanced Technology (WICAT)

Polytechnic University, University of Virginia, Auburn University, Virginia Polytechnic Institute and State University.

Advanced Space Technologies Research and Engineering Center (ASTREC)

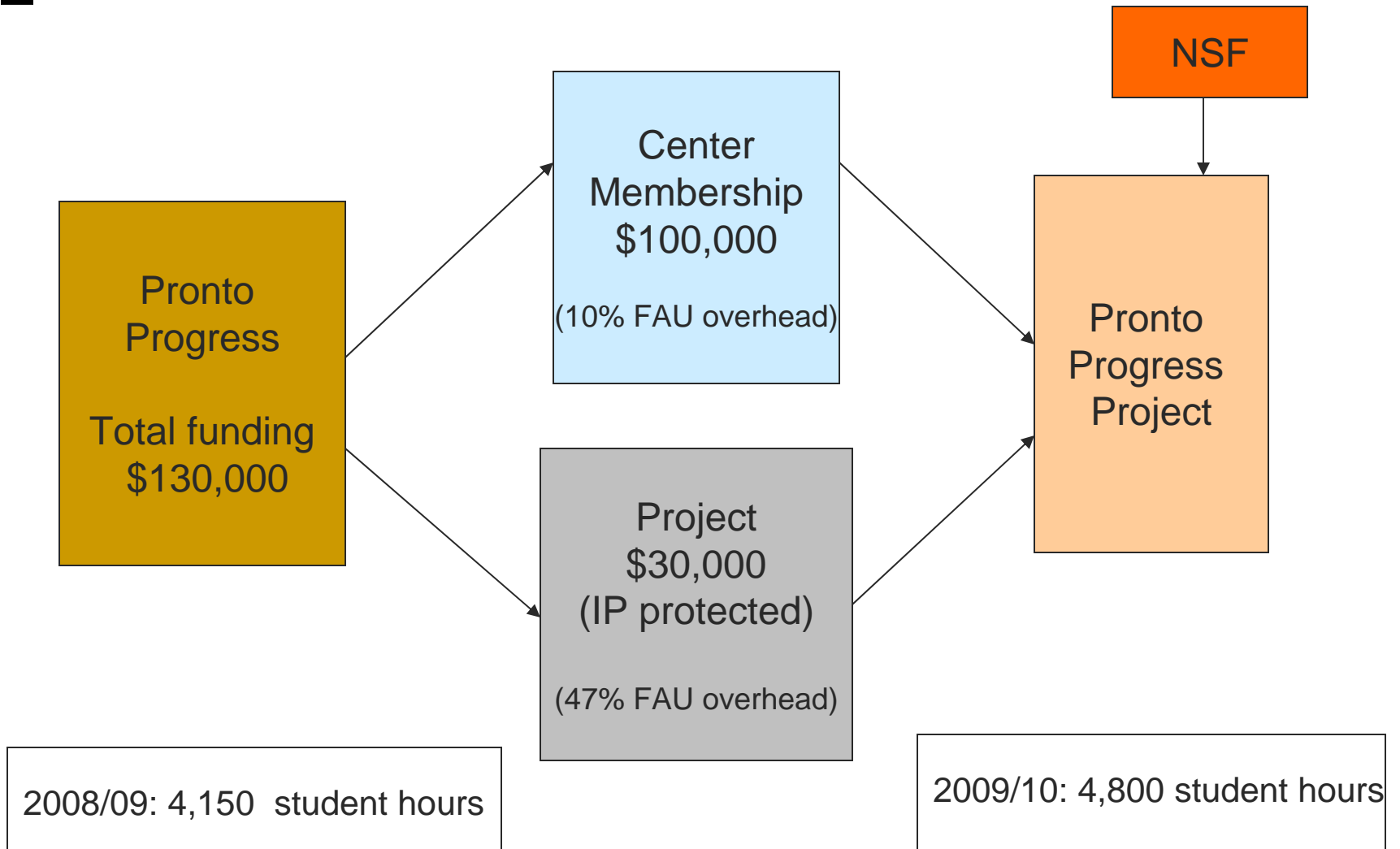
University of Florida and North Carolina State University

Model of the I/UCRC

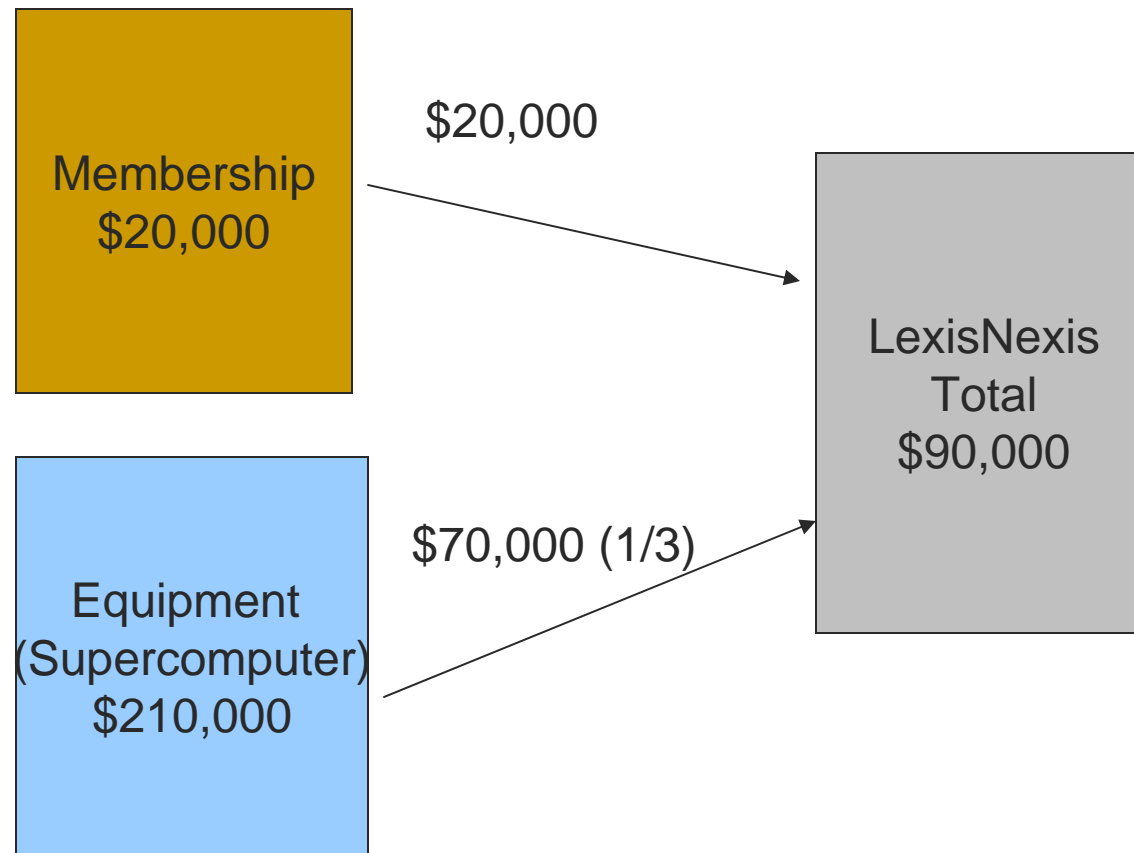


- Industry partners pay the memberships (\$5K to \$50K+++ per year)
- NSF sponsors the Center (\$60K to \$200K per university per year)
- Industry Advisory Board selects the research projects
- Industry members select the products for commercialization – no royalties
- Expectations: \$750K from NSF + \$7.5M from Industry (5years)
- Similar to MIT Media Lab model

I/UCRC Center – Example ProntoProgress



I/UCRC Center – Example LexisNexis

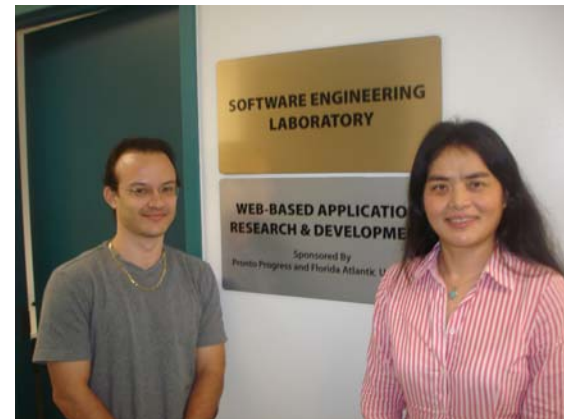


Current and Potential I/UCRC Members

- LexisNexis
- Pronto Progress
- Real Networks
- Motorola
- Jansyl Industries
- Vivaja Technologies
- Ingenious Software
- Partner Community

Joint University/Industry Labs

- **Creating joint university-industry labs**
- **“Incubator as part of the Department”**
- **Examples: Pronto Progress Developing Web services for customers**
- **Motorola: Developing tools and techniques for mobile applications**
- **Several companies interested to join this model**



Sponsored Research

