

University of Central Florida

RESEARCH & COMMERCIALIZATION

Fiscal Year 2010 Annual Report



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Dr. M.J. Soileau

COOKIN' WITH M.J.

Celebrating a Record Year

IN 2010, the Office of Research and Commercialization at UCF celebrated a major accomplishment— UCF researchers accrued \$1.05 billion in research-related funding since 2000.

In those 11 years, our researchers increased funding, were ranked four times on national top 10 lists for the strength of our patents, and built—with the help of our community partners—a nationally recognized entrepreneurship ecosystem that has resulted in more than 1,600 jobs and a \$200 million annual economic impact. UCF has also celebrated 11 classes of millionaires, researchers who have attracted \$1 million or more in funding in a fiscal year. UCF's millionaires have collectively received \$507 million in funding since 2000.

We achieved these milestones by aligning our key areas of research with our region's and our state's economy. Over the years, we have developed some of the nation's strongest concentrations in lasers and optics, simulation and training, computer science, alternative energy, biomedical science, nanoscience and materials, among other areas.

A significant part of the growth is due to efforts to commercialize the research conducted at UCF. Our associate vice president for research and founder of the UCF Business Incubation Program, Dr. Tom O'Neal, is largely responsible for

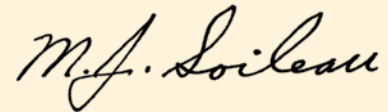
these efforts that lead to the formation of Central Florida companies and jobs, as well as national recognition for the strength of our research.

UCF generated a 268 percent increase in annual funding since 2000 and a record \$133.3 million in funding in 2010 from outside sponsors. Last year also produced the largest-ever class of millionaires, 41 researchers, and a record \$75.8 million in federal funding.

The Florida Solar Energy Center received the highest funding of all UCF units with \$21.2 million, largely as a result of a \$10 million program geared toward equipping schools with energy-efficient roofs and the administration of a separate training program for using solar energy in southern states. The College of Engineering and Computer Science received the second-highest funding amount at UCF with \$16.7 million and the Institute for Simulation and Training followed with \$15.3 million.

In 2005, when UCF first crossed the \$100 million mark for research funding, we started what has become a tradition—rewarding our winning research team with bottles of "MJ's Special Blend" hot sauce. It's a tradition that appeals to my Cajun upbringing but also speaks to UCF's red hot research potential. If you haven't tasted it, stop by my office and grab a bottle. And for the decade ahead: *Laissez les bon temps roulez!*

Cheers!

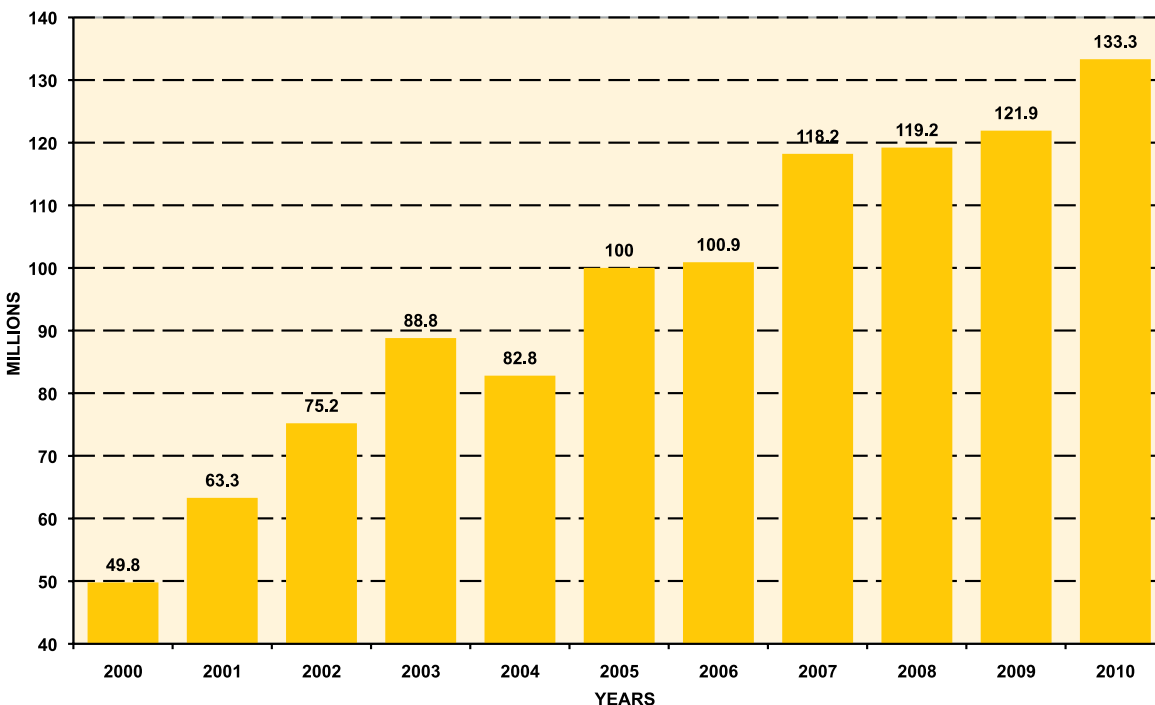


M.J. Soileau
Vice President for Research
& Commercialization



A Strong Decade— AN EVEN STRONGER YEAR

11-YEAR UCF RESEARCH FUNDING HISTORY, 2000-2010



UCF RECENTLY CELEBRATED its research accomplishments at a fitting location—the Stadium Club at UCF’s Bright House Networks Stadium. And there’s a lot to celebrate.

After a decade of consistent funding increases, UCF researchers received a record \$133.3 million from outside sponsors in 2010—an increase of nine percent from FY 2009. Even more impressive, researchers were awarded a cumulative \$1.05 billion in funding since FY 2000.

“While we talk every year about the significance of research funding on the local and state economy, it became dramatically apparent this year, when we crossed the billion dollar mark in funding during an 11-year period, that we really had something to celebrate,” said M.J. Soileau, UCF’s vice president for Research and Commercialization.

At the event, the football-themed music (including the “Zombie Nation” soundtrack made popular at UCF Knights football games), appearances by UCF Athletics Director Keith Tribble and Knightro (the UCF mascot), and the listing of the funding on the scoreboard got more than 200 attendees excited about the milestones the university has reached throughout the last 11 years. Following another long-standing tradition, everyone was given a bottle of “MJ’s Special Blend” hot sauce in appreciation of their efforts.



10 Patents IN GOOD COMPANY

2010 Rankings Affirm Quality and Quantity of UCF Patents

FOR THE FOURTH TIME in the last three years, the power of patents earned by UCF researchers has been ranked among the 10 strongest in the nation. The rankings underscore the effectiveness of UCF's strategy. These accomplishments include:

- Ranked third by the IEEE, the world's largest professional association for the advancement of technology—a rise from eighth in 2008 and seventh in 2009
- Ranked eighth on the Patent Board's Patent Scorecard, joining MIT and the California Institute of Technology
- Tied for fourth for the industry impact of its patents, despite its lower number of patents—a sign that UCF discoveries are strong



2010 IEEE TOP TEN*

| RANK | COMPANY/ORGANIZATION |
|----------|---|
| 1 | University of Texas (System) |
| 2 | University of California (System) |
| 3 | University of Central Florida |
| 4 | Iowa State University of Science and Technology |
| 5 | University of Washington |
| 6 | State University of New York (System) |
| 7 | Tufts University |
| 8 | University of Wisconsin |
| 9 | Northwestern University |
| 10 | Virginia Polytechnic Institute and State University |

**IEEE Spectrum, March 2010*

2010 PATENT SCORECARD™ TOP TEN†

| RANK | COMPANY/ORGANIZATION |
|----------|---------------------------------------|
| 1 | Massachusetts Institute of Technology |
| 2 | University of California (System) |
| 3 | University of Texas (System) |
| 4 | Stanford University |
| 5 | California Institute of Technology |
| 6 | Columbia University |
| 7 | University of Wisconsin |
| 8 | University of Central Florida |
| 9 | University of Illinois |
| 10 | University of Southern California |

† Intellectual Property Today, September 2010

Office of Research & Commercialization

UPSTARTS

THROUGH OUR WORK TO SUPPORT local new and second-stage businesses, we've impacted the local economy and helped create jobs. Some examples of our successful clients and graduates include:

Biomedical/Health:

AOI Medical
BioScriptRX
Biowoman
Cognoscenti Health Institute
Cold Plasma Technologies, Inc.
E.L.V.S
GeoMotion
Hometown Health TV, LLC
MyDocHub
NFB Research Labs
SeaQuarius, LLC
Speckodyne Corp.
Therigy

Digital Media:

Golden Brothers Studios
Immersyve
Knockout Digital Media
The Imagination Shop, Inc.

Education/Training Technology:

21st Century Learning Solutions
Allogy Interactive
Learn To Learn
Powerful Education Technologies
Revelation ITS
Robie Learning Center
Sydspeak Inc.
The Safety Doctor
The Soccer Shot

Engineering Products/Services:

Acudyn
APECOR
BDG Construction
Bishop Construction Group, Inc.
Brothers MFG
Electrodynamics Associates
Encap Systems, Inc.
Eginity
Fredco Miltech
Grayman Construction
Management Services
Mydea Technologies Corp.
NovaComm
NR Electronics, LLC
psiloQuest
Rini Technologies
UniKey Technologies Inc.
Yallaly Company
ZTEC Instruments

Environmental and Energy Products/Services:

Going Green Savings
Green Coupon Calendar
GreenPath Energy Solutions
Green Solar Solutions, LLC
nSolGel
Pristine Biodiesel
Team Energy
Theowag North America
ZFI Engineering and Construction

IT/Web-based Products/Services:

360 Software Inc
Abamis IT Solutions
AceApplication
Advanced Technologies, Inc.
Alinean
Axena
BioTraits
Camalogy
Clear Village
Cognition Telematics
Compendium Software
Craneware Limited
Datanautix
Enterprise Systems Associates
EPIC Engineering and Consulting
eprentise
ERP Consulting Exchange
Global-ENC
H2 IT Solutions
iBackOffice
Innovative Software Products
Kick Generation
Nabla Corporation
Nallatech LTD
NetLander
Now Marketplace, Inc.
Piromas, LLC
Premiere Resource Systems
Primal Innovation
Radius E-Magazine
Red Anchor IT
Red Lambda
RipplePoint
Sabalcore
Snapt
Software Design Technologies
Tech Solutions, Inc.
Tentara Digital Studios
WOLFPAC Technologies

Materials Products/Services:

Nano Discovery
NanoSpective
nScript

Optics/Lasers:

AppliCote Associates, LLC
Applied Photonics
bdDisplays
H.N. Burns Engineering
Optigrate
Optium
Orlando Photonics Laboratory Corp.
OSI Laser Scan
PICO Technologies
Raydiance
sdPhotonics

Professional Services:

Aquiline Group
Brand Advance LLC
Collegiate Staffing USA
Excel Recruiting
GiveJet
Great Southern Insurance Brokerage
Mr. Handyman
MyInnoVenture
RedEye Media
SimStaff Technical Services
Timothy Franz, P.A. Attorney-at-Law

Simulation/Modeling/Training:

Advanced Simulation Research (ASRI)
AVT Simulation
Commerical Training Solutions
DiSTI
ECS (Engineering & Computer Simulations)
Kinetic Analysis Corporation
Productivity Apex
StrongPoint Research

Telecommunications:

4PSA
Cohda Wireless
Spectrum Bridge
Technology Assurance Labs

Office of Research & Commercialization

MILLIONAIRES

THE UCF MILLIONAIRES LIST was started in 2000 to celebrate the accomplishments of UCF's researchers, mirroring the kind of support universities provide their sports teams. This year marks the 10th edition, which recognizes researchers in areas ranging from education to simulation to photonics.

The sole requirement for entry into the exclusive order is externally sponsored research funding of \$1 million or more during a given fiscal year.

| | |
|--------------------------|---|
| Stephen Barkaszi | Florida Solar Energy Center |
| Kevin Belfield | College of Sciences |
| Clint Bowers | College of Sciences |
| Janis Cannon-Bowers | Institute for Simulation and Training |
| Eunice Choi | Small Business Development Center |
| David Click | Florida Solar Energy Center |
| Alexander Cole | College of Medicine |
| Lee Cross | College of Education |
| Andrew Daire | College of Education |
| Philip Fairey | Florida Solar Energy Center |
| Cristina Fernandez-Valle | College of Medicine |
| Scott Hagen | College of Engineering and Computer Science |
| Lynn Hansen | Student Development and Enrollment Services |
| James Hickman | NanoScience Technology Center |
| Mary Huggins | Florida Solar Energy Center |
| Jayanta Kapat | College of Engineering and Computer Science |
| Naim Kapucu | College of Health and Public Affairs |
| Pappachan Kolattukudy | College of Medicine |
| Mary Little | College of Education |
| Tammie McClellan | Institute for Simulation and Training |
| Denise Nicholson | Institute for Simulation and Training |
| William Nye | College of Health and Public Affairs |
| Brian Plamondon | Institute for Simulation and Training |
| Robert Reedy | Florida Solar Energy Center |
| Martin Richardson | College of Optics and Photonics |
| Elisabet Rustrom | College of Business Administration |
| Eduardo Salas | Institute for Simulation and Training |
| Susan Schleith | Florida Solar Energy Center |
| Winston Schoenfeld | College of Optics and Photonics |
| Jeanette Schreiber | College of Medicine |
| Sudipta Seal | NanoScience Technology Center |
| John Selter | College of Engineering and Computer Science |
| Mubarak Shah | College of Engineering and Computer Science |
| Don Shirey | Florida Solar Energy Center |
| Ernest Smart | Institute for Simulation and Training |
| Marshall Tappen | College of Engineering and Computer Science |
| Eric Van Stryland | College of Optics and Photonics |
| Jose Vazquez Perez | Administration and Finance |
| Lori Walters | Institute for Simulation and Training |
| William Yerkes | Institute for Simulation and Training |
| William Young | Florida Solar Energy Center |



Fiscal Year 2010 Funding

Total Funding

| | |
|----------|---------------|
| Industry | \$ 33,975,089 |
| State | \$ 23,491,479 |
| Federal | \$ 75,771,465 |

11-Year Federal Funding

| Year | Federal Award |
|------|---------------|
| 2000 | \$ 20,242,396 |
| 2001 | \$ 28,812,159 |
| 2002 | \$ 40,395,896 |
| 2003 | \$ 47,380,459 |
| 2004 | \$ 40,692,263 |
| 2005 | \$ 43,769,439 |
| 2006 | \$ 47,010,550 |
| 2007 | \$ 57,062,596 |
| 2008 | \$ 57,313,368 |
| 2009 | \$ 60,200,812 |
| 2010 | \$ 75,771,465 |

Fiscal Year 2010 Research Awards by Academic Unit

| College | Amount |
|--|----------------------|
| 1 Florida Solar Energy Center | \$ 21,158,322 |
| 2 College of Engineering and Computer Science | \$ 16,686,725 |
| 3 Institute for Simulation and Training | \$ 15,329,261 |
| 4 College of Sciences | \$ 13,754,313 |
| 5 Burnett School of Biomedical Sciences | \$ 10,329,680 |
| 6 College of Optics and Photonics | \$ 10,133,132 |
| 7 College of Medicine | \$ 8,210,145 |
| 8 College of Education | \$ 7,942,311 |
| 9 Administration and Other | \$ 7,187,630 |
| 10 Student Development and Enrollment Services | \$ 6,477,847 |
| 11 College of Health and Public Affairs | \$ 4,444,127 |
| 12 College of Business Administration | \$ 3,193,602 |
| 13 NanoScience Technology Center | \$ 2,789,125 |
| 14 Advanced Materials Processing and Analysis Center | \$ 2,762,349 |
| 15 College of Arts and Humanities | \$ 1,344,273 |
| 16 College of Nursing | \$ 1,221,507 |
| 17 Rosen College of Hospitality Management | \$ 318,814 |
| TOTAL | \$133,283,165 |

11-Year Proposals/Submissions

| Year | Total Award | Total Submission |
|------|----------------|------------------|
| 2000 | \$ 49,752,450 | \$ 160,778,410 |
| 2001 | \$ 63,261,855 | \$ 257,557,414 |
| 2002 | \$ 75,209,415 | \$ 332,358,529 |
| 2003 | \$ 88,828,913 | \$ 398,440,003 |
| 2004 | \$ 82,864,107 | \$ 450,971,246 |
| 2005 | \$ 99,995,506 | \$ 352,616,338 |
| 2006 | \$ 100,855,364 | \$ 502,203,008 |
| 2007 | \$ 118,216,069 | \$ 1,011,340,993 |
| 2008 | \$ 119,193,453 | \$ 655,748,598 |
| 2009 | \$ 121,911,236 | \$ 569,968,662 |
| 2010 | \$ 133,283,165 | \$ 857,962,524 |

UNIVERSITY OF CENTRAL FLORIDA
UCF OFFICE OF RESEARCH
& COMMERCIALIZATION
12201 RESEARCH PARKWAY
SUITE 501
ORLANDO, FL 32826
.....
research.ucf.edu



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