VIEW

been demonstrated by the sports drink, Gatorade™, and the glaucoma drug Trusopt™ — both of which were developed by UF faculty. When this happens through Florida-based companies (established or new start-up) there are additional significant economic benefits to the community and to the state. Three representative examples are described in this report.

Sustained and increased funding is critical to our ability to continue advanced research and scholarship that benefit society and play a key role in providing a graduate education second to none.

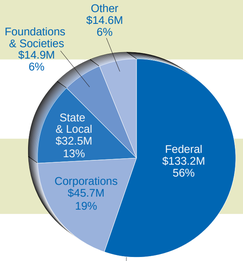
We are grateful to the numerous government, corporate and other sponsors who make our contributions possible.

And we congratulate our faculty, staff and graduate students for their accomplishments and their continuing commitment to excellence.

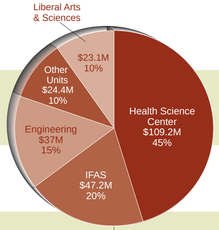
M. Jack Ohanian, Ph.D.
Interim Vice President and Dean
Office of Research, Technology
& Graduate Education

Summary of Sponsored Research Activity FY 1997-98

Proposals Submitted	3,674
Grant and Contract Dollars Requested	$446,125,598
Awards Received	4,554
New Awards Received	1,968
Continuations	2,586
Grant and Contract Dollars Awarded	$268,793,695
Gifts for Research	$11,000,000
Total Sponsored Research Funding	$279,793,695
Grant and Contract Direct Expenditures	$209,822,208
Indirect Costs Recovered	$30,678,430
Grant and Contract Dollars Expended	$240,900,000
Projects Active During the Fiscal Year	4,297
Faculty Receiving Awards	1,626
Sponsors	941



Research Expenditures by Sponsor Type*
FY 1997-1998



Research Expenditures by Major Academic Unit*
FY 1997-1998

* Includes research expenditures from UF, UF Research Foundation and UF Foundation accounts.

UNIVERSITY OF FLORIDA
Office of Research, Technology & Graduate Education
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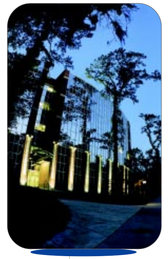
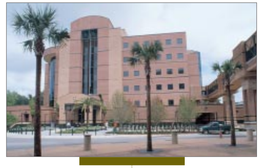
The University of Florida is a major, public, comprehensive, land-grant, research university. The state's oldest, largest and most comprehensive university, Florida is among the nation's most academically diverse public universities, with 21 colleges and schools and more than 100 research, service and education centers, bureaus and institutes.

A member of the prestigious Association of American Universities, Florida is ranked among the nation's leading research universities by the Carnegie Commission on Higher Education.

Florida has more than 4,000 distinguished faculty members who attracted $280 million in research and training grants in 1997-98.

More than 42,000 students attend classes on UF's 2,000-acre Gainesville campus.





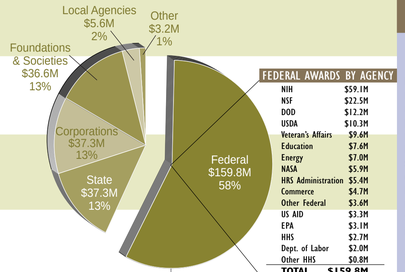
UNIVERSITY OF FLORIDA

1998

Office of Research, Technology & Graduate Education

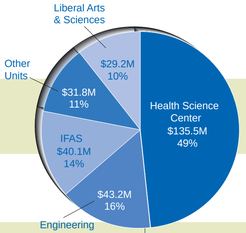
SPONSORED RESEARCH

ANNUAL REPORT



FEDERAL AWARDS BY AGENCY	
NIH	$59.1M
NSF	$22.5M
DOD	$12.2M
USDA	$10.3M
Veteran's Affairs	$9.6M
Education	$7.6M
Energy	$7.0M
NASA	$5.9M
HRS Administration	$5.4M
Commerce	$4.7M
Other Federal	$3.6M
US AID	$3.3M
EPA	$3.1M
HHS	$2.7M
Dept. of Labor	$2.0M
Other HHS	$0.8M
TOTAL	$159.8M

Research Awards by Sponsor Type*
FY 1997-1998



Research Awards by Major Academic Unit*
FY 1997-1998

* Includes research awards from UF, UF Research Foundation and UF Foundation accounts.

OVER

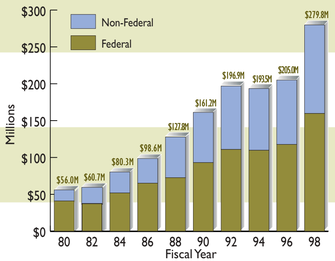
During 1997-98, the University of Florida's research enterprise reached a new record in sponsored awards — nearly $280 million, a 10 percent increase over the previous year. This milestone is even more noteworthy considering that the research budgets of our various federal and non-federal sponsors continue to be rather flat, if not declining. Our faculty continue to excel in a highly competitive national sponsored research environment, with projects ranging from single investigator efforts to major multi-investigator and cross-disciplinary activities.

Research and graduate education go hand in hand. The dynamic partnership between our faculty and their students generates creativity, excitement and innovation. It enables faculty mentors and their students to leverage talents, to enhance research and achieve goals faster — central in today's technology- and knowledge-driven society. This translates into nationally and internationally recognized scholarly accomplishments and produces University of Florida graduates well versed in the state-of-the-art in their respective discipline.

Of course the impact of our research enterprise is much broader; there also is a two-fold economic benefit. First, UF's annual research expenditures of $240 million support about 11,600 jobs. Second, this level of research activity translates into significant opportunities for technology transfer via the licensing of patentable inventions developed by faculty, staff and graduate students.

The University of Florida Research Foundation is the steward for the technology transfer process and through the Office of Technology Licensing handles all intellectual property matters at UF. Currently the foundation has assets of about $60 million and in 1997-98 generated $19.1 million in royalty and licensing income for the benefit of UF's research enterprise.

While the technology transfer process has a longer time horizon and is generally complex, the payoff can be very significant as has

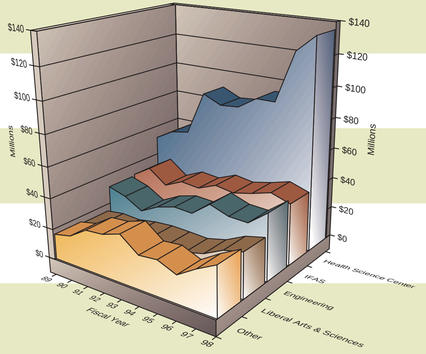


Sponsored Research Awards Federal/Nonfederal FY 1980-1998

Federal and non-federal research funding to the University of Florida has grown steadily since 1980. The university reached a milestone in 1995 when it passed $200 million in sponsored research awards for the first time. Between 1995 and 1998, federal funding grew by 27 percent and non-federal by 45 percent. This brought UF's total sponsored research awards to $279.8 million for the fiscal year ending June 30, 1998. Federal agencies accounted for a record $160 million of that total, led by $59 million from the National Institutes of Health (NIH), the university's largest federal sponsor.

Research Awards by Sponsor Type — FY 1989-1998

Federal research sponsorship at UF has nearly doubled over the last 10 years, from $84 million in FY 1988-89 to $160 million in 1997-98. In the last four years alone, federal awards have increased 46 percent, with an average 10.4 percent growth per year. This compares with a 53 percent increase in corporate research sponsorship during the same four-year period and a tripling of awards from foundations and non-profit organizations from $11.7 million in 1994 to $36.6 million in 1998. Between 1997 and 1998, federal awards increased 10.4 percent; foundation and non-profit awards increased 14 percent; and corporate awards increased19 percent. A slight decline in state agency awards was offset by a 77 percent increase in funding from local government and civic organizations, which grew from $3.1 million in 1997 to $5.6 million in 1998.



Research Awards by Major Academic Unit — FY 1989-1998

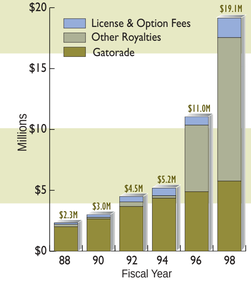
During the 10-year period between FY 1988-89 and 1997-98, sponsored research grew across all major academic units. The greatest growth was in the health sciences, which have more than doubled from $51.9 million in FY 1989 to $135.5 million in FY 1998. In just the last two years, awards for clinical trials in medical research increased 56 percent from $9.4 million in 1996 to $14.7 million in 1998. NIH, the primary sponsor in the health sciences, gave awards in FY 1998 totaling more than a million dollars each to six different units within the Health Science Center: medicine, molecular genetics and microbiology, neuroscience, pathology, veterinary medicine and dentistry. In 1998, most major academic units recorded all-time highs. The Health Science Center was up 9 percent over last year with $135.5 million in awards. Engineering was up 23 percent to $43.2 million and the College of Liberal Arts and Sciences was up 12 percent to $29.2 million. The Institute of Food and Agricultural Sciences (IFAS) stayed about level compared to last year.

Fiscal Year	Invention Disclosures Received	U.S. Patent Applications Filed	U.S. Patents Issued	Licenses Generating Royalties
1997/98	139	68	51	58
1996/97	103	101	47	61
1995/96	90	61	34	69
1994/95	84	100	24	64
1993/94	75	66	45	20
1992/93	90	41	45	46
1991/92	74	34	50	35
1990/91	105	45	40	18
1989/90	68	29	36	14
1988/89	94	71	25	15

Note: Data for patent applications filed and patents issued include new filings, continuations-in-part (CIP), continuations, divisionals, and reissues.

Patent and Licensing Activity — FY 1989-1998

The University of Florida has had an active program of patenting and licensing inventions for nearly two decades. The Office of Technology Licensing oversees patent applications for new technologies and negotiates licensing rights. During FY 1997-98, invention disclosures increased 35 percent to 139 and the number of U.S. patents issued rose 9 percent to 51. The university also holds an extensive portfolio of international patents.



Technology Transfer Income — FY 1988-1998

In FY 1997-98, University of Florida-based technologies brought in a record $19.1 million in royalty and licensing income. This is a 5.4 percent increase over the previous fiscal year. Of the $19.1 million, $10.5 million (55%) came from Trusopt™, a glaucoma drug licensed to Merck Pharmaceuticals, and $5.7 million (30%) came from Gatorade™. License fees, option payments and royalties from other technologies accounted for the other 15 percent. The most recent survey by the Association of University Technology Managers (AUTM) ranked UF seventh among all U.S. universities in licensing income.

Technology Transfer

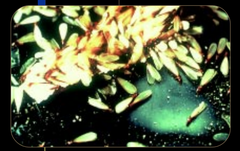
Examples.....

Termite Terminator

The University of Florida and DowElanco have developed an environmentally friendly termite control technology known as the Sentricon Colony Elimination System that monitors termite activity, then uses the insects' own behavior to destroy their subterranean colonies.

Nan-Yao Su, professor of entomology at UF's Institute of Food and Agricultural Sciences Research and Education Center in Fort Lauderdale, worked with DowElanco for more than five years to develop the concept of a termite colony system.

Monitoring tubes around the perimeter of a house alert pest control technicians if termites are present. When termites become active in wooden monitors in the station, technicians transfer them into a tube containing bait food with a powerful pesticide. The termites eat their way out of the tube in the station, return to their colony and direct their nestmates to the deadly bait.



Deciphering Drug Design

UF Graduate Research Professor Raymond Bergeron has spent more than two decades developing polyamine analogues, which have been proven effective in stopping the uncontrolled growth of cancer cells.

Polyamines are present in all human cells and they are essential to cell growth and proliferation. The polyamine analogues Bergeron has developed gain entry to the cell because of their similarity to natural polyamines. But once inside the cell, the analogues substitute themselves for the naturally occurring polyamines, but do not perform the functions required for cell growth and proliferation.

Cancer cells have higher concentrations of and rely more on polyamines than normal cells, so if their supply of polyamines is shut off, their uncontrolled growth can be stopped.

UF has licensed Bergeron's technology to Jacksonville-based SunPharm Corporation, which currently has more than a dozen potential products in various stages of research or development.

Bonding to Bone

Bioglass™, created by University of Florida materials scientist Larry Hench, is the only known man-made substance capable of forming a physiochemical bond with human bone and soft tissue.

Bioglass™ is a mainstay in the dental industry, where it is used to combat the bone loss inherent in extractions and periodontal disease.

USBiomaterials, the company to which UF has licensed the Bioglass™ rights, is aggressively pursuing even more applications for this amazing material. The company's current flagship product is PerioGlas™, a bone grafting product that accelerates the repair and regeneration of the alveolar bone lost to periodontal disease. The company also is developing a Bioglass™-based toothpaste for hypersensitive teeth.