

# **OFFICE OF THE VICE PRESIDENT FOR RESEARCH**

## **ANNUAL REPORT**

**JULY 1, 2001 TO JUNE 30, 2002**

**BRENT C. MILLER, PH.D. VICE PRESIDENT FOR RESEARCH**

### **INTRODUCTION**

The goal of the Vice President for Research (VPR) Office is to continue building quality research by aggressively recruiting and supporting excellent researchers, and by creating an environment in which they can achieve their full potential. Quality research is fostered partly through improving campus research infrastructure to serve researchers, but more importantly through building multidisciplinary research programs and partnerships, both on and off campus, thereby enhancing the university's capacity for excellence in research.

Core campus constituencies of the VPR are faculty, students, and unit administrators. Because deans, center directors, and department heads are most concerned with their respective units, the VPR must take a broader, campus wide perspective.

To advance university research, the VPR must be engaged with external constituencies, including local and state elected officials, as well as federal and industry funding partners. The VPR also needs to be actively engaged in professional networks and with societies that have as their mission the advancement of research. The VPR chairs the University Research Council, which consists of deans and major center directors, and which includes student and faculty representatives. The USU Research Council advises the VPR, providing a forum for considering major research issues. With the help of the Research Council, the VPR developed the following mission statement:

It is the mission of the VPR to provide an environment that facilitates and stimulates university related research, scholarship and creative activities by:

- Providing leadership to identify and pursue promising research opportunities.
- Providing resources to help recruit and retain outstanding faculty and student scholars.
- Improving research support services so that they become highly responsive and efficient.
- Fostering a culture of academic research integrity that discloses and manages conflicts-of-interest and conflicts-of-commitment, and which is consistent with federal regulations.
- Identifying, protecting, and where appropriate, commercializing intellectual properties for the benefit of author/inventors, the university, and society.

## ANNUAL REPORT

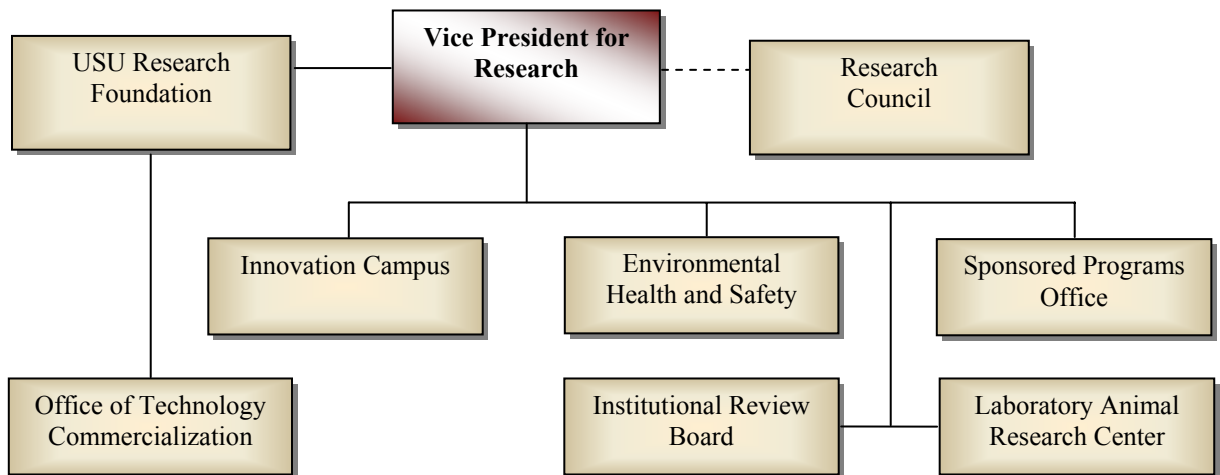
This annual report to the Faculty Senate covers the major activities of the VPR and the Research Council from July 1, 2001 through June 30, 2002. It provides a summary of all units for which the VPR has responsibility. This report is organized in four parts:

1. Overview of VPR and Related Units
  - A. Service Units
    - 1) Sponsored Programs Office
    - 2) Environmental Health and Safety Office
    - 3) Institutional Review Board
    - 4) Laboratory Animal Research Center
  - B. Strategic Units
    - 1) Innovation Campus
    - 2) Office of Technology Commercialization
2. Research Council Membership and Functions
3. Use of Facilities and Administration (F&A) Funds at USU, FY2001-2002
4. Current and Future Research Issues at USU

### 1. OVERVIEW OF VPR AND RELATED UNITS

The VPR is responsible for the units shown in the following diagram. The USU Research Foundation is a wholly owned subsidiary of the University, a major organization with large-scale research programs, most notably the Space Dynamics Laboratory (SDL). A cooperative working relationship with the Research Foundation is essential for accomplishing the research mission of the University.

The other units shown in the diagram can be conceptualized in two groups, as strategic or mission oriented units (on the left) and as research service units (on the right).



## **1. A. SERVICE UNITS**

### **1) Sponsored Programs Office (SPO)**

The SPO at Utah State University supports researchers as they propose, submit and administer externally sponsored research projects on and off campus. The nature of daily tasks puts SPO in contact with every college, department, research center, and administrative unit at USU. The goals of efficiency, accountability and responsiveness are central to the administration of sponsored research. SPO personnel assist researchers with access to various agencies, necessary forms and detailed information to initiate proposals and coordinate the award of a contract or grant with the Principal Investigator (PI) and USU Controller's Office. A continuous system has operated in SPO providing both paper forms in their Old Main office and electronic forms on the USU SPO Web pages. The interdependent nature of contracting demands accountability between PI, College Dean, Department Head, Research Center Director, Controller's Office and VPR. SPO personnel review the proposal and award content to safeguard the researcher and the university units in their contractual obligations. The office supports walk-in access and the Web site provides forms, agreement templates, sample wording, links to funding sources and sponsor forms, and contact information. Promptness is essential. The office interacts directly with the sponsors to facilitate and negotiate on behalf of the researcher and USU.

SPO representatives present training to individual researchers and departments. They also foster research at the university as they assist researchers with the successful completion of forms, interpretation of contract and proposal terms and conditions, tracking pending proposals, notification of receipt of award, obtaining financial accounts and attending to the contractual details of agreements with sponsors. They also attend contractual meetings and negotiations with PIs. Coordination with accounting personnel in the Controller's office is essential. Their interaction with research administration flows through the Vice President for Research with whom they plan, report, and respond to research administration needs and requirements.

SPO provides monthly reports to the VPR regarding the status of research at Utah State University. Appendix A provides a summary of Sponsored Program Awards FY1998 through FY2002 at Utah State University. Appendix B compares awards by month and type of award for FY2001 and FY2002. Current reports do not include state appropriations and student scholarships. Appendix C provides a summary of Sponsored Program Awards by Awarding Agency FY1998 through FY2002 and Appendix D provides a summary of Sponsored Program Awards by Research Center FY1998 through FY2002.

Dennis Paffrath became the Director of the Sponsored Programs Office on November 18, 2002.

### **2) Environmental Health and Safety Office (EHS)**

The EHS is a service organization that provides expertise and guidance for compliance with federal, state, and local safety and health regulations as well as current professional practices and guidelines. Its goal is to prevent injuries, illnesses, and environmental damage through the recognition, evaluation, and control of potential hazards arising from university activities. This is accomplished through services that ensure a safe and healthy environment for all students, faculty, and staff at USU and the surrounding community. Services include assisting the

university in compliance with regulations and training university personnel and students in appropriate safety measures. General areas of focus include biological, radiological, occupational, and chemical health and safety.

The office interacts with many governmental regulators in the course of normal business, including: Environmental Protection Agency (EPA), State of Utah-Department of Environmental Quality (DEQ), Division of Radiation Control (DRC), Occupational Safety and Health Administration (OSHA), Centers for Disease Control (CDC), and the National Institutes of Health (NIH). Many of these entities perform routine and unannounced inspections, require written programs, documented training, permits, and numerous reports of differing types that the EH&S Office completes for the university.

Responsibilities of the EHS program cross many traditional aspects of the campus community. Major accomplishments for FY2002 included:

- Transported, managed and disposed of approximately 85,200 lbs. of hazardous waste and approximately 4,900 lbs. of radiation waste. Recycled 9,950 lbs. of hazardous materials.
- Provided safety training to approximately 1,500 faculty, staff and students in 25 courses.
- Developed and implemented comprehensive hazardous materials emergency response plan.
- Implemented DuPont STOP hazard recognition and prevention program.
- Developed new employee safety orientation video.

Eric Hansen became the Director of EHS on October 1, 2002.

### **3) Institutional Review Board (IRB)**

The IRB is charged with protecting the rights and welfare of human research participants. All research involving human participants, including unfunded research, must be reviewed in accordance with the Code of Federal Regulations. USU has a Federal Wide Assurance with the National Institutes of Health that commits USU to comply with federal regulations governing human participants in research, and is required for Department of Health and Human Services funded research. This Assurance is renewed every five years.

The IRB consists of volunteer members with diverse experience, to provide adequate and comprehensive review of research activities. Regulations require that an IRB have at least one scientist, one nonscientist, and one member not affiliated with the institution; terms are three years unless members volunteer to extend.

USU board members are: Eddy Berry – Sociology, Social Work and Anthropology, Chair; Dr. Russell Hirst – Internal Medicine, Vice Chair and Community Representative; Layne Coppock – Department of Environment & Society; Roy Goodey – nonscientist; Stuart Howell – community representative; Gretchen Gimpel – Department of Psychology; Ron Munger – Department of Nutrition and Food Science; Thorana Nelson – Department of Family and Human Development; Tim Slocum – Department of Special Education & Rehabilitation; Julie Gast – Department of Health, Physical Education and Recreation; and True Rubal – IRB Administrator.

The IRB meets monthly to review protocol applications requiring regulatory approval. Certain research protocols do not require full board review and can be classified as “Exempt” or “Expedite.” All three kinds of review follow criteria provided in the federal regulations. All on-going research projects are reviewed yearly; however, if there is more than a minimal risk, the continuation research reviews are more frequent.

The IRB office documents compliance with federal regulations by maintaining a database of all research protocols submitted and of actions taken by the board. Written policies and procedures established by the board and congruent with federal guidelines have been instituted to address procedures such as yearly continuing review, reporting of adverse events, changes in research methods and objectives, and researchers’ conflict of interest. An IRB Handbook is located on the VP for Research web page at [www.usu.edu/vpr/policies/irb](http://www.usu.edu/vpr/policies/irb)

The IRB Administrator is actively involved in implementing revised federal procedures, updating USU procedures, and helping to coordinate ethics-in-research training for researchers and IRB members.

Appendix E illustrates IRB activity by the number of research applications by types of review categories from 1998-2002.

#### **4) Laboratory Animal Research Center (LARC)**

The LARC is an Association for Assessment and Accreditation of Laboratory Animal Care (AALAC) International accredited, Public Health Service (PHS) assured, and United States Department of Agriculture registered animal research center. The primary mission of the LARC is to support university animal research, testing, and teaching by providing resources for animal procurement, housing, husbandry and care, health care and disposal. Space is also provided for researchers to conduct long-term research. The LARC staff is also a resource for expert information on the use of live animals in research and teaching.

The permanent salaried LARC staff consists of the following: A part-time director (S. Allen, USU faculty member) who is a Utah licensed and USDA accredited veterinarian and an affiliate of the American Association of Laboratory Animal Practitioners; a full-time supervisor (K. Udy) who is a certified Registered Laboratory Animal Technologist; a full-time secretary (A. Cheney) and a part-time animal caretaker (L. Potter). There are also part-time students employed who work in the washroom and provide basic animal care. In exceptional cases, researchers provide part (such as breeding) or all of their own animal care. Our approach to staffing has been that as workload changes part-time student work hours go up or down. The full-time supervisor (Udy) and secretary (Cheney) are shared with the Institutional Animal Care and Use Committee (IACUC).

Major accomplishments for FY2002 included:

- Maintained AAALAC International Accreditation, PHS Assurance and USDA Registration.
- Completed remodel of Room 146 into a BSL-3 laboratory to house the research work of Dr. Walther Ellis of the USU National Center for Design of Molecular Function. Support functions including autoclaving, gown-up and decontamination areas were also remodeled.
- Security systems were upgraded by the installation of 24 hour per day video monitoring and installing a palm recognition system for personnel on the security entrance.

## **1.B. STRATEGIC UNITS**

### **1) Utah State University Innovation Campus**

The USU Innovation Campus master building plan is underway. Measures that have been identified for improvement include securing highly respected anchor tenants and increasing acreage from 38 acres to 150 acres through land acquisitions. In addition to SDL's Calibration and Optics Laboratory (dedicated November, 2002), two more buildings are on the drawing board for the Innovation Campus. A Biomolecular building and an Administration building are scheduled to begin construction in the spring of 2003, which will add an additional 65,000 square feet to the Innovation Campus.

The Utah State University Innovation Campus is committed to developing an effective working environment for state of the art technology enterprises, research institutes, and laboratories. Its "campus style" business environment facilitates collaboration and alliances among tenants, faculty, students, business, industry, and government to foster world-class technology clusters. Within these clusters, partnerships are formed to build long-term economic benefits for the University and the State of Utah.

The Utah State University Innovation Campus is home of the new Smart Site Building, that officially opened in February, 2002. Smart Sites, one of seven statewide, support Governor Leavitt's Utah Technology Alliance that provides an environment for state of the art training, outsourcing services, employment opportunities, high-capacity/high-speed telecommunications bandwidth, and internships for students. The SDL Calibration and Optics Laboratory and the Smart Sites provide exposure for the Innovation Campus on a national level with business, industry, and government entities.

### **2) Office of Technology Management and Commercialization (OTMC)**

The OTMC complements the research activities of USU and promotes the University's outreach by developing and commercializing technologies for public use and benefit, potentially providing additional income to the University and its partners.

A Memorandum of Understanding was signed between USU and USU Research Foundation that conveyed management responsibility for the OTMC effective January 14, 2002. This action was based on a recommendation from a task group appointed by the Vice President for Research. The Research Council unanimously endorsed the recommendation on November 29, 2001. A new Director, Steve Kubisen, was hired in April, 2002.

The charts in Appendix F reflect major technology management indicators for the fiscal year ending June 2002. As noted, the number of YTD disclosures in the current year (39) is higher compared to the year before (38). USU's patenting activity increased by 40%; and there were 82 technologies licensed through June 2001 versus 76 licensed through June 2002. Licensing and royalty revenues were lower at the end of June this year (\$280,381) compared to the year before (\$304,186).

## **2. RESEARCH COUNCIL MEMBERSHIP AND FUNCTIONS**

The Research Council provides advice and recommendations to the Vice President for Research. Additionally, members of the Council provide direct and important channels of communication between researchers and those who make decisions affecting research at USU. Members of the Research Council are college deans or their representatives, and selected center/lab directors as specified by the code of policies and procedures. Appendix G is a current membership list of the University Research Council. This group meets about once a month to discuss and make recommendations on research issues.

Major issues addressed by the Research Council in FY2002 included:

- |                |   |
|----------------|---|
| September 2001 | Intellectual Property Policy revisions were made, with the change on royalty distribution being advantageous to inventors. Significant progress was made regarding the USURF Cooperative Agreement. A draft proposal was created for an INRA collaborative doctoral program in subsurface science. A task force was organized to make recommendations regarding a formal proposal submitted by USURF to manage OTMC.  |
| October 2001   | The Genomics Center Task Force reported about various issues including possible funding and operating models. Two committees were formed for an INRA graduate program, with a goal of seeing the program in operation by fall 2002. Various updates regarding the Research Park were given including a name change to Innovation Campus and meetings in Germany to explore potential opportunities. In order to maximize F & A cost recovery, an outside consulting firm was hired to perform componentization of buildings. President Hall and Charles Watt signed a cooperative agreement between the University and the Research Foundation. |

- November 2002                      The OTMC task force recommended that USURF manage the OTMC. After two dissenting votes and further discussion, the decision was unanimous in the affirmative. A rough draft of the VPR compact plan was distributed. Over \$8M of F & A remains unspent in hundreds of accounts across campus. Following poor attendance at a general research forum, it was decided to change the focus to department and center visits.
- February 2002                      Following a recommendation that the USURF manage the OTMC, an MOU was written to clarify how various aspects of the agreement would be carried out. The Facilities committee drafted a master list that identified needed research equipment and facilities campus-wide. The Compact Plan was considered excellent by President Hall, but additional features are needed such as sections on Federal Relations and Innovation Campus. Showcasing Undergraduate Research was changed from a one-day to a one-month event. The implications of a federal regulation, ITAR (International Traffic and Arms Regulation), regarding the agreement between USU and USURF were discussed.
- April 2002                          The Genomic Center Task Force endorsed the idea of a genomic center at USU. The committee also suggested a more formal task force be created to carry on the initiative and to more specifically address pressing issues. A proposal for a revision on Royalty Policy was put on hold pending further information. Upon discovering that no mission statement exists for the VPR, a request was made to have one developed. Various issues involving INRA were discussed.
- May 2002                          Preparations were discussed involving the visit of 8 NIH representatives to perform a proactive compliance site visit (not an audit) at USU. Chairs of committees made plans to meet on May 15 for further preparation. Russ Price reported on his attendance at a Conflict of Interest (COI) conference and a committee was formed to prepare a draft of the revised policy. Changes in budget issues and F & A collections were addressed and modified. The Research Facilities Committee reported that the \$19M Research Revenue Bond would be used for the three USURF buildings as originally envisioned.
- June 2002                          Revised CURI guidelines were discussed. SDL's Research and Development program was reviewed. Research Council agreed to increase Research Graduate Student Fellowships to \$15,000 beginning FY2004. A presentation concerning Innovation Campus developments and Smart Sites was made. The ad hoc Conflict of



Interest committee is reviewing current USU policy and will bring its recommendations before the Council.

During the past year, the VPR and Research Council also identified specific operational priorities that have served to focus and guide efforts in the VPR office. These strategic priorities highlight areas of concerted attention.

1. Strengthen and develop major research clusters and initiatives.
2. Develop Office of Technology Commercialization into a strong service unit for inventors and a revenue generating enterprise for USU.
3. Shift Research Park toward Innovation Campus emphasizing partnerships.
4. Increase indirect cost recovery.
5. Create credible reports of research related activities

### **3. USE OF FACILITIES AND ADMINISTRATION FUNDS AT USU, FY2000-2001**

Appendix H is a report compiled by the Controllers Office that summarizes the amount of F&A generated in FY2001-02 by department; 30% returned to the cost center; and allocations of 70% held centrally in the VPR.

The graph in Appendix I compare F&A revenues generated by, and allocations from all VPR sources to USU colleges.

### **4. CURRENT AND FUTURE RESEARCH ISSUES AT USU**

Listed below are selected 2001-2002 initiatives undertaken in the Vice President for Research Office.

1) Improve Reporting of USU Research Activity at USU. The VPR, in cooperation with the Controllers Office, have developed reports that reflect total research expenditures at USU utilizing NSF definitions. This will facilitate comparison of USU and peer institutions. The pie chart in Appendix J summarizes total research expenditures for scientific and engineering research expenditures and nonscientific and engineering research expenditures for FY2002. Appendix K is a graph that illustrates research expenditures from federal and nonfederal sponsors for the past five years. FY2002 was the first year that nonscientific and engineering research expenditures data was available; it is included in the graph.

2) Strengthen the Biomolecular Systems Research Cluster. USU's existing strengths in agriculture, engineering, science, natural resources, and biotechnology need to be integrated with vigorous new activities in genomics/proteomics to synergize and advance USU research in these areas. In September, Bart Weimer was appointed Interim Director of the Biotechnology and Genomics Research Center, and in October Daryll Dewald was appointed Associate Director for Research.

3) Increase Research Activities for Undergraduate Students. The VPR provides support for undergraduate research grants through Undergraduate Research and Creative Opportunities (URCO) with a similar program under development for minority students. The VPR supports Posters on the Hill for undergraduate students to present research at the State Capital (22 students) and Washington, D.C (2 students). The VPR also provided support for undergraduate students (6) to participate at the National Conference for Undergraduate Research.

4) Build the Sponsored Programs Office (SPO) to Upgrade Services. The Contract/Grants Office title was change to Sponsored Programs Office to reflect the expanded vision for this office. Two professional contract specialist positions were added to bolster support to USU's departments and colleges. Additionally, a search was begun in April 2002 for a new Director. Dennis Paffrath was selected as the new director of SPO; he began November 18.

5) Build partnerships with regional research institutions. USU can more effectively grow research programs by forming partnerships that help leverage expertise and resources. USU's relative isolation and lack of state support are problems that can be helped, to some extent, by collaborating with partners who provide complimentary strengths and larger scale funding opportunities. The Inland Northwest Research Alliance, Pacific Northwest National Labs and Technology to Market are specifically identified groups with which USU should form stronger partnerships. Ron Sims was appointed as USU's INRA Campus Coordinator; and Brent Miller and Daryll Dewald are exploring connections with PNNL.

6) Increase Recovery of Facilities and Administrative (F&A) Costs. F&A recovery is an important resource to USU's research program. The negotiation environment under the cognizance of the federal Office of Naval Research requires a much more rigorous process for establishing F&A rates than was previously developed when the National Institute for Health was the cognizant agency for USU. Further development of the F&A cost study and rate proposal processes will yield a more complete recovery of the total F&A costs expended in support of sponsored programs at USU. In addition to improving the F&A cost study and rate proposal processes, USU will employ other strategies to provide a more complete return of F&A costs.

7) Distribution and Use of Facilities and Administration (F&A Funds) are critically important to support USU research. The recovery and distribution of F&A funds must be an integral part of the research future of USU. The university has discretion in the expenditure of F&A funds but their intent is to be a means of maintaining a competitive edge for USU in scientific research. The primary purpose of returning F&A funds to faculty members is to assist them in securing additional external research funding and provide the support needed by research faculty and other faculty generating scholarly works.

The judicious use of these funds can ensure continuation of quality research programs through maintaining cutting edge facilities and support to successful principal investigators and program directors. Wise distribution of F&A funds from the Vice President for Research will lead to a stronger, comprehensive university and to higher quality teaching and graduate education programs. All F&A funds invested in faculty, departments and colleges will be made with the expectation of a solid return on investment. A subcommittee of the Research Council, chaired

by Scott Hinton, has studied F&A recovery and distribution during the fall and will make recommendations to the Research Council in December.

8) Continue support of the New Faculty Research Grant and Community/University Research Initiative Programs to provide research opportunities to new faculty and to continue fostering research projects that are important to Utah and its communities.

9) Improve Federal Relations Process. The VPR has strengthened USU's presence in Washington, D.C. by meeting monthly with our governmental representatives, funding agencies, and alumni in the Washington, D.C. area. Additionally, the VPR has developed a systematic process of coordinating congressional requests. Requests will be discussed and prioritized here on campus in an effort to increase our chances of obtaining earmarks and increase their amounts.

10) Improve Marketing Process. Research is being marketed by an intern who coordinates and develops press releases about our research faculty. A VPR Dashboard was also developed to compare research performance indicators. (Appendix L) The VPR office also is working to create an impact statement of USU research, showing that research is a good investment for its various constituents, including the university community, Cache Valley, and Utah. A report, "Research Matters" will document the benefits of research, both economic and academic. In conjunction with "Research Matters", a DVD will showcase the value of research at Utah State University.

APPENDIX A

SPONSORED PROGRAM CONTRACT/GRANT AWARDS  
BY COLLEGE<sup>1</sup>

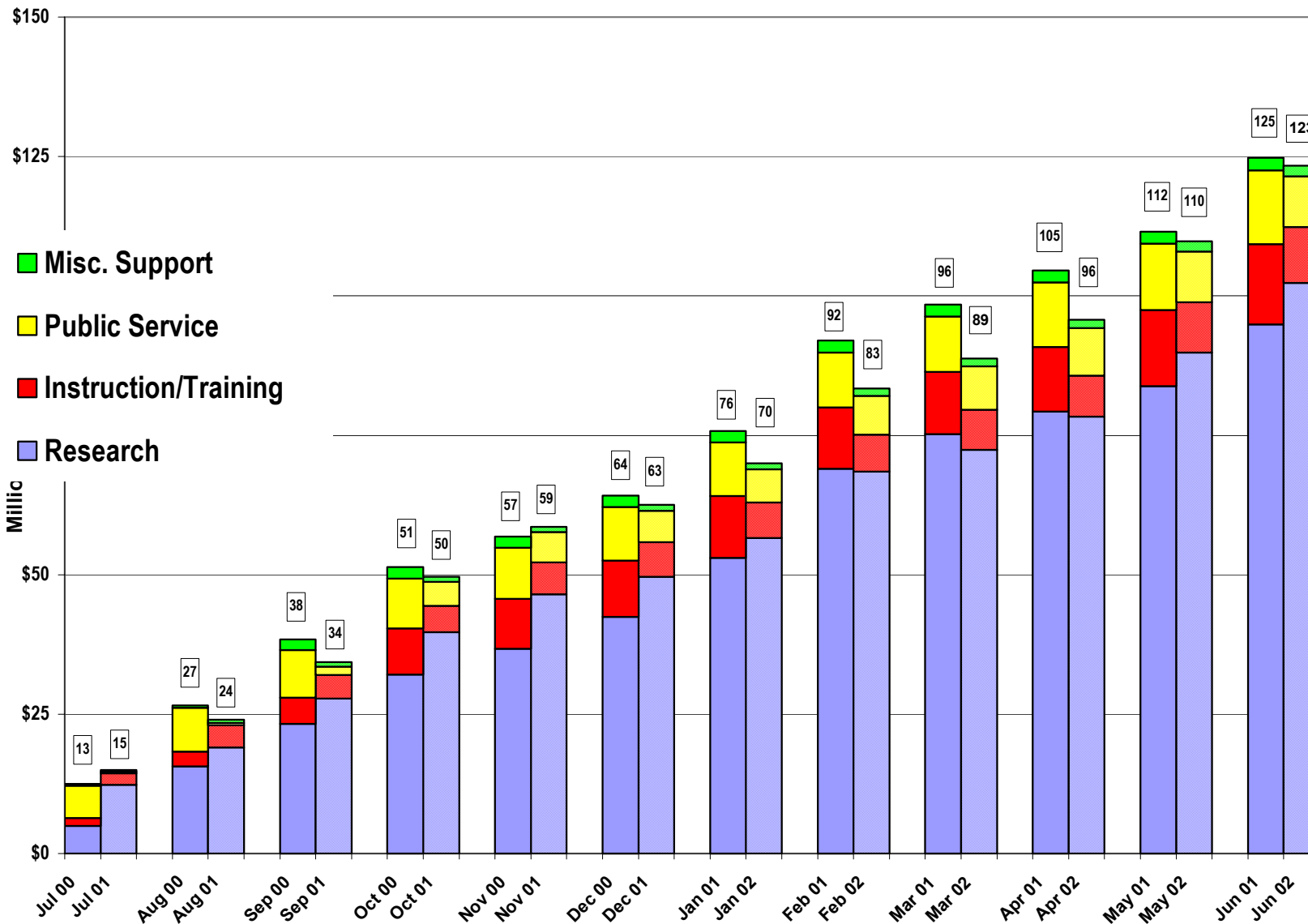
	<b>1997-98</b>	<b>1998-99</b>	<b>1999-00</b>	<b>2000-01</b>	<b>2001-02</b>
Agriculture	10,477,457	22,665,862	26,422,729	34,914,108	29,550,795
Business	957,326	542,348	1,089,813	592,957	1,548,946
Education	14,516,586	16,678,868	16,770,441	18,454,329	17,049,144
Engineering	51,591,511	42,476,188	57,649,644	62,138,968	46,574,786
Family Life	4,395,418	5,991,602	6,117,590	5,954,646	5,699,388
HASS	360,674	921,216	846,020	482,943	518,329
Natural Res.	8,776,017	7,504,784	7,411,299	10,340,870	11,045,630
Science	7,381,763	7,959,141	7,811,723	9,605,426	11,011,637
Other	11,237,348	24,495,608	20,298,524	26,352,552	4,580,296
Jointly Admin. Programs <sup>2</sup>	(2,762,693)	(4,144,981)	(3,614,917)	(4,010,391)	(4,274,292)
<b>TOTAL</b>	<b>106,931,407</b>	<b>125,090,635</b>	<b>140,802,866</b>	<b>\$164,826,408</b>	<b>\$123,304,657<sup>3</sup></b>

<sup>1</sup> College awards include centers most closely aligned with that college. (See Appendix D for Center totals.)

<sup>2</sup> Award totals for jointly administered programs are reflected in the totals of both colleges involved with these programs. The amount in the jointly administered programs category is an accounting function designed to eliminate double counting of awards.

<sup>3</sup> Beginning in July 2001, scholarships, fellowships, and state appropriations for research are not included in total awards figure.

## Utah State University Sponsored Program Awards FY 2001, FY 2002



APPENDIX C

**SPONSORED PROGRAM CONTRACT/GRANT AWARDS  
BY FEDERAL SPONSORING AGENCY (IN DOLLARS)**

	<b>FY97-98</b>	<b>FY98-99</b>	<b>FY99-00</b>	<b>FY00-01</b>	<b>FY01-02</b>
Department of Agriculture	6,412,452	5,983,764	6,707,558	9,186,883	13,230,864
Department of Defense	25,052,286	24,269,457	25,219,117	35,826,126	24,813,442
Department of Education	14,540,602	20,754,246	17,670,996	23,051,008	7,218,705
Department of Health and Human Services	5,928,222	6,616,663	8,323,618	9,464,566	11,777,999
Department of the Interior	2,288,929	2,193,711	2,163,742	4,293,360	2,313,308
Department of State	-	-	-	2,901,385	118,000
Environmental Protection Agency	767,318	512,079	150,000	1,620,279	221,165
National Aeronautics & Space Administration	14,150,731	9,525,668	4,136,181	8,677,958	17,160,138
National Science Foundation	3,037,952	4,666,874	3,505,830	3,625,487	5,505,662
State Agencies & Others <sup>1</sup>	<u>34,752,916</u>	<u>50,568,174</u>	<u>72,925,824</u>	<u>66,179,358</u>	<u>40,945,374</u>
<b>TOTAL</b>	<u><u>\$106,931,407</u></u>	<u><u>\$125,090,635</u></u>	<u><u>\$140,802,866</u></u>	<u><u>\$164,826,409</u></u>	<u><u>\$123,304,657<sup>2</sup></u></u>

<sup>1</sup>This number is a composite of international banks, state agencies, other federal agencies, local agencies, private industry, and others.

<sup>2</sup>Beginning in July 2001, scholarships, fellowships, and state appropriations for research are not included in total awards figure.

APPENDIX D

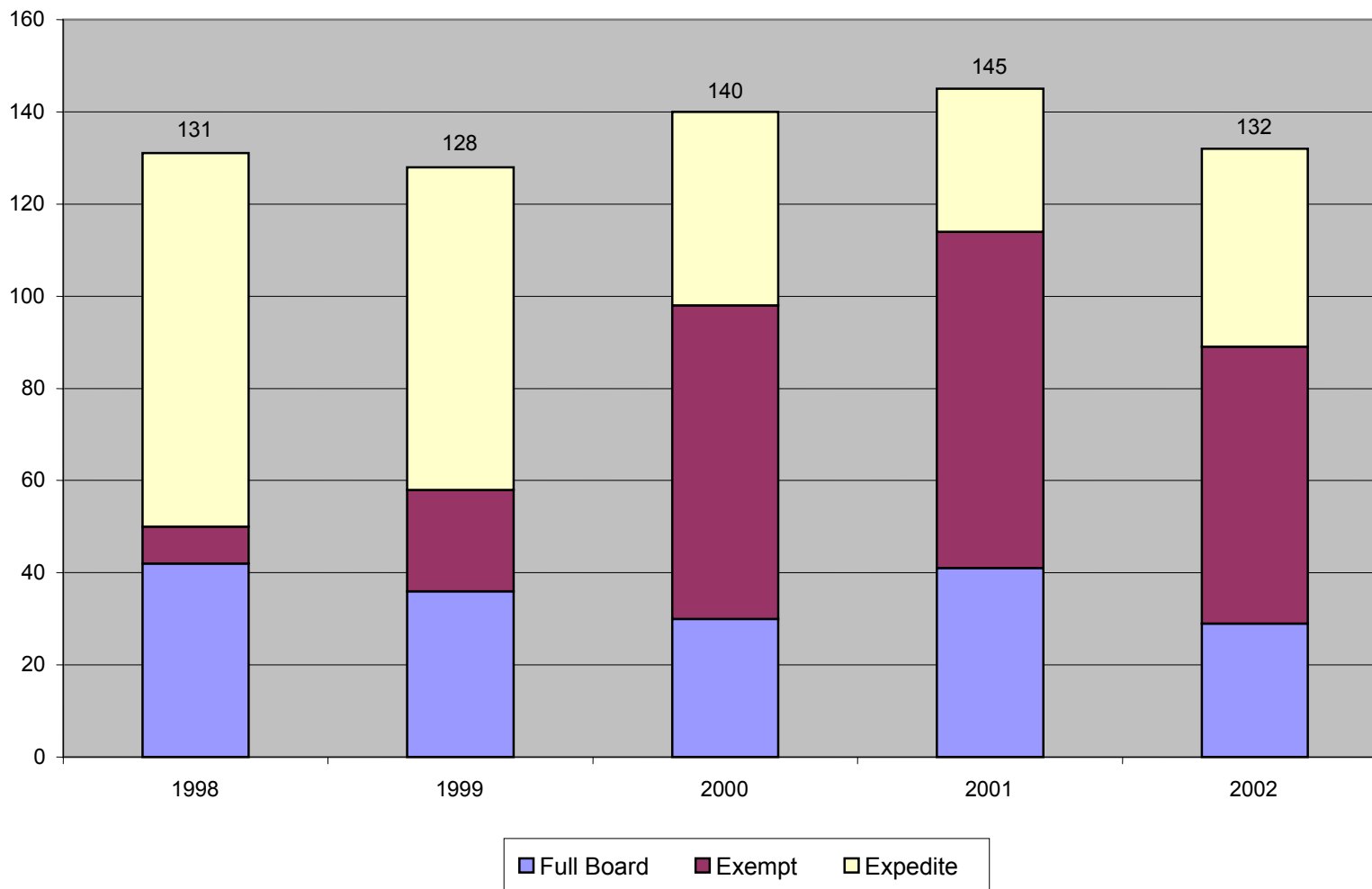
UTAH STATE UNIVERSITY  
SPONSORED PROGRAMS OFFICE

AWARDS BY RESEARCH CENTER  
FY 1997-98 TO FY 2001-02

RESEARCH CENTER	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02
Ag. Experiment Station	\$10,946,748.00	\$21,992,017.00	\$24,589,158.00	\$27,476,982.25	\$14,903,294.19
Biotech. Center	\$346,147.00	\$200,829.00	\$222,821.00	\$86,719.24	\$330,631.00
CASS	\$1,291,898.00	\$1,631,627.00	\$1,399,997.00	\$1,475,352.00	\$1,918,084.33
CPD	\$8,473,047.00	\$10,757,101.00	\$10,165,109.00	\$12,147,879.61	\$9,113,732.95
Center for Space Eng. (Beginning FY2002, USURF reassigned reporting centers)	\$179,704.00	\$216,764.00	\$235,466.00	\$115,643.44	\$54,468,720.79
Cooperative Extension	\$1,890,376.00	\$6,022,864.00	\$7,503,883.00	\$7,212,896.83	\$4,930,560.34
Ecology	\$1,551,007.00	\$3,586,842.00	\$2,672,462.00	\$3,824,961.00	\$2,850,886.00
Eng. Experiment Station	\$2,914,657.00	\$363,473.00	\$4,581,571.00	\$10,817,261.10	\$1,409,387.01
International Programs	\$296,200.00	\$123,000.00	\$364,475.00	\$0.00	\$0.00
Provost	\$0.00	\$0.00	\$0.00	\$0.00	\$68,247.14
Univ. Research & Training	\$37,258,963.00	\$43,197,562.00	\$39,597,968.00	\$45,700,859.61	\$29,206,789.85
USU Research Foundation	\$38,729,936.00	\$33,513,674.00	\$41,356,205.00	\$49,533,821.60	\$21,811.28
Remote Sensing	\$0.00	\$368,823.00	\$978,141.00	\$1,685,865.75	\$524,426.90
Utah Water Research Lab.	\$3,052,724.00	\$3,181,260.00	\$7,135,611.00	\$4,748,166.33	\$3,558,084.99
<b>Total USU</b>	<b>\$106,931,407.00</b>	<b>\$125,155,836.00</b>	<b>\$140,802,867.00</b>	<b>\$164,826,408.76</b>	<b>\$123,304,656.77</b>

APPENDIX E

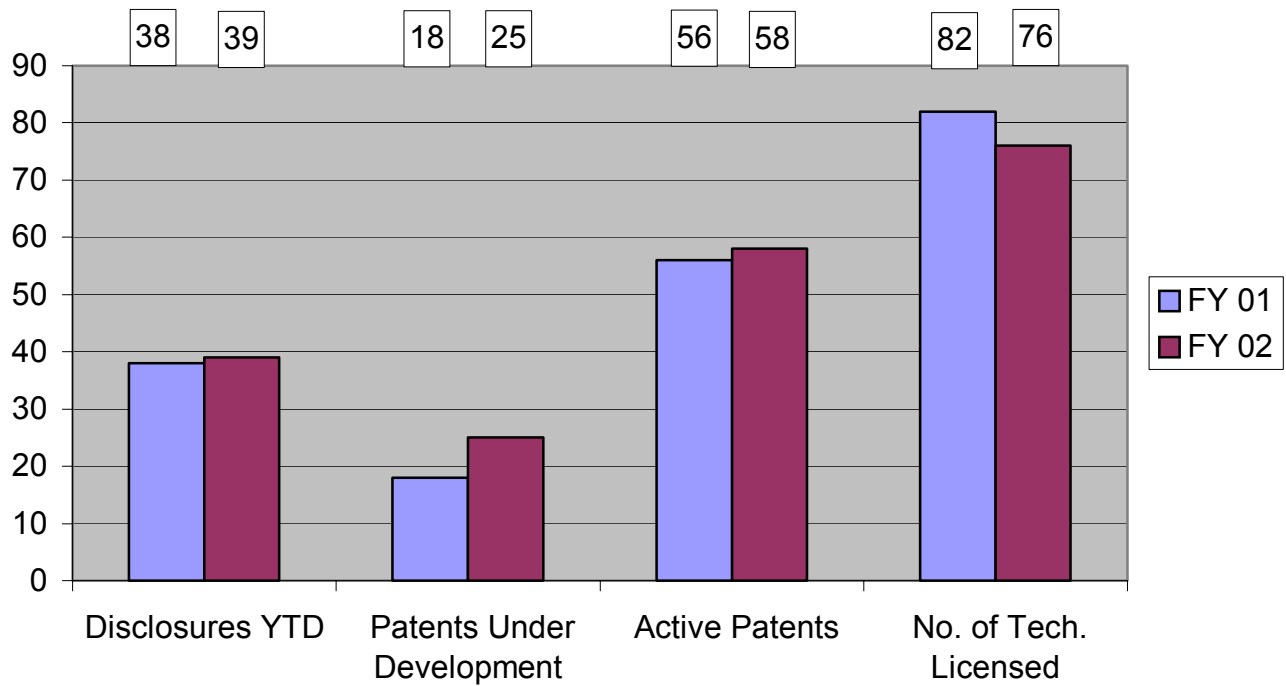
**Institutional Review Board (IRB)  
Research Projects Approved by Category and Total**



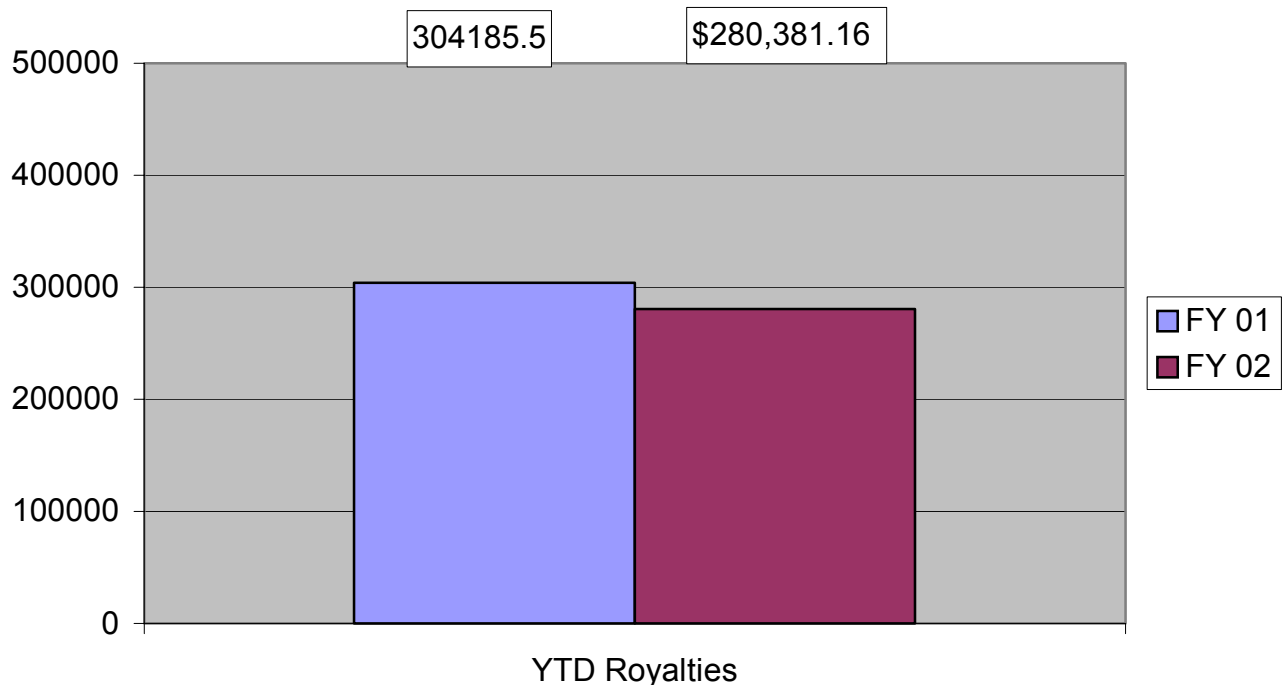


APPENDIX F

**USU Technology Management Indicators  
as of June 30, 2002**



**USU Licensing Income  
as of June 30, 2002**



## APPENDIX G

### UNIVERSITY RESEARCH COUNCIL Membership (2002-2003)

		<u>EXT</u>	<u>UMC</u>
Brent C. Miller	Vice President for Research, Chairman	1180	1450
Stan Albrecht	Executive Vice President and Provost	1167	1435
Frank E. Busby	College of Natural Resources	2445	5200
Martyn Caldwell	Ecology Center	2555	5205
Noelle Cockett	College of Agriculture	2215	4800
Don Fiesinger	College of Science	2478	4400
Steve Hansen	Space Dynamics Laboratory	4501	9700
Scott Hinton	College of Engineering	2775	4100
M. K. Jeppesen	Associate Vice President for Research	1199	1450
Gary Kiger	College of Humanities, Arts & Social Sci.	1200	0700
Joyce Kinhead	Vice Provost for Undergraduate Studies And Research	1706	1435
Thomas Kent	School of Graduate Studies	1191	0900
David G. Norton	USU Research Foundation	4568	9710
H. Paul Rasmussen	Agricultural Experiment Station	2207	4810
Sarah Rule	Center for Persons with D	6800	1987
Ronald C. Sims	Utah Water Research Laboratory	3157	8200
David B. Stephens	College of Business	2273	3500
Carol Strong	College of Education	1469	2800
Bart Weimer	Biotechnology Center	3356	8700
Dennis Welker	Faculty Senate	3552	5305
Barbara A. White	Information and Learning Resources	2645	3000

#### Students

Jeffrey Leek	Science Senator	7441	0105
Robert Franckowiak	Graduate Student Senator	6142	0105
Erika Ensign	Academic V.P.	1726	0105

## APPENDIX H

**Utah State University**  
**Analysis of Facilities and Administrative Costs Generated and Allocated**  
**July 1, 2001 through June 30, 2002**

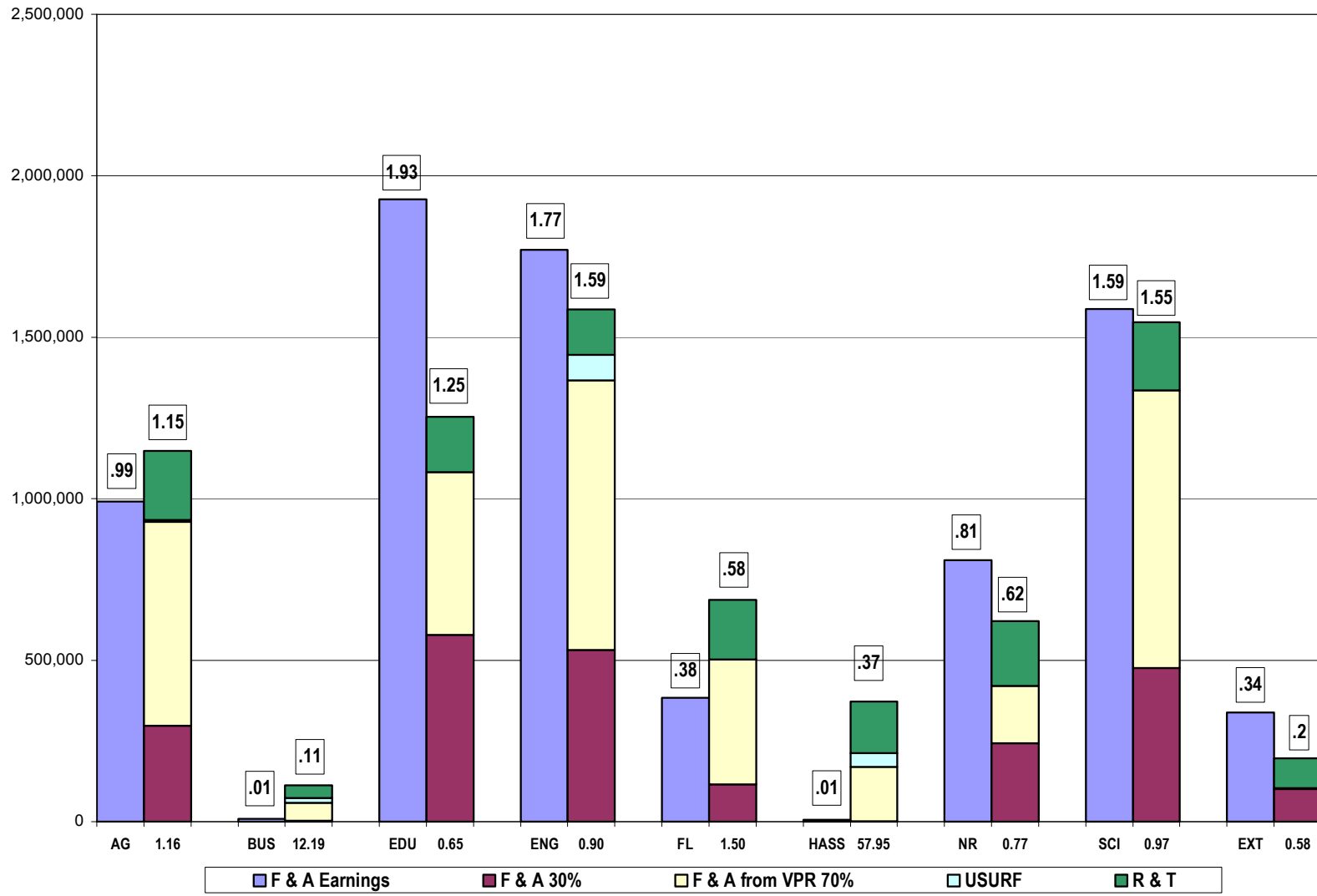
<b>College or Other Unit</b>	<b>F&amp;A Generated</b>	<b>Budget Allocations From 30% Return</b>	<b>Budget Allocations From 70% Centrally Held</b>	<b>Total Budget Allocations</b>
College of Agriculture				\$0.00
Agricultural Experiment Station	\$979,904.57	\$293,971.37	\$20,000.00	313,971.37
Animal, Dairy, & Veterinary Sciences			44,452.00	44,452.00
Biotechnology	11,221.22	3,366.37	10,000.00	13,366.37
Plants, Soils, & Biometeorology			263,083.00	263,083.00
Total College of Agriculture	991,125.79	297,337.74	337,535.00	634,872.74
College of Business			8,000.00	8,000.00
Business Administration			11,843.00	11,843.00
Business Information Systems			8,152.00	8,152.00
Economics	9,221.94	2,766.58	67,133.00	69,899.58
Management & Human Resources			5,025.00	5,025.00
Total College of Business	9,221.94	2,766.58	100,153.00	102,919.58
College of Education			15,200.00	15,200.00
Dean's Office - Education			20,780.39	20,780.39
Center for Persons with Disabilities	1,170,915.57	351,274.67	118,930.86	470,205.53
Communicative Disorders	472,400.23	141,720.07	188,714.89	330,434.96
Elementary Education			9,050.00	9,050.00
Health, Physical Education & Recreation	691.40	207.42	20,600.00	20,807.42
Instructional Technology	135,889.20	40,766.76	8,400.00	49,166.76
Psychology	73,672.09	22,101.63	77,071.00	99,172.63
School of the Future	-1358.08	-407.42		-407.42
Secondary Education	7,048.05	2,114.42		2,114.42
Special Education & Rehabilitation	68,081.80	20,424.54	47,819.08	68,243.62
Total College of Education	1,927,340.26	578,202.09	506,566.22	1,084,768.31
College of Engineering				0.00
Dean's Office - Engineering			150,000.00	150,000.00
Biological & Irrigation Engineering	16,979.30	5,093.79	66,950.00	72,043.79
Center for Space Engineering	50,113.60	15,034.08		15,034.08
Civil & Environmental Engineering	44,493.47	13,348.04	5,000.00	18,348.04
Electrical & Computer Engineering	100,532.28	30,159.68	93,898.00	124,057.68
Engineering Experiment Station	761,994.89	228,598.47	50,000.00	278,598.47
Industrial Technology & Education			30,414.00	30,414.00
Mechanical & Aerospace Engineering			97,474.00	97,474.00
Utah Water Research Laboratory	796,817.17	239,045.15	230,050.00	469,095.15
Total College of Engineering	1,770,930.71	531,279.21	723,786.00	1,255,065.21
College of Family Life			35,000.00	35,000.00
Center for Epidemiologic Studies	338,794.77	101,638.43	105,594.00	207,232.43
Family & Human Development	37,878.98	11,363.69	20,000.00	31,363.69
Human Environments	7,414.45	2,224.34	61,794.00	64,018.34
Nutrition & Food Science			44,928.00	44,928.00

<b>College or Other Unit</b>	<b>F&amp;A Generated</b>	<b>Budget Allocations From 30% Return</b>	<b>Budget Allocations From 70% Centrally Held</b>	<b>Total Budget Allocations</b>
Total College of Family Life	384,088.20	115,226.46	267,316.00	382,542.46
College of HASS			24,000.00	24,000.00
Dean's Office - HASS	1,961.35	588.40		588.40
Art			9,595.00	9,595.00
Communication			16,602.39	16,602.39
English	63.60	19.08	28,063.86	28,082.94
History			26,571.00	26,571.00
LAEP	230.30	69.09	25,066.00	25,135.09
Languages & Philosophy	1,285.48	385.64	16,608.00	16,993.64
Music			15,141.00	15,141.00
Political Science			11,887.00	11,887.00
Sociology, Social Work, & Anthropology	2,876.01	862.80	20,012.00	20,874.80
Total College of HASS	6,416.74	1,925.01	193,546.25	195,471.26
College of Natural Resources				0.00
Aquatic, Watershed, & Earth Resources			53,000.00	53,000.00
Ecology Center	440,252.88	132,075.86		132,075.86
Fisheries & Wildlife	135,763.64	40,729.09	67,277.00	108,006.09
Forest Resources	49,264.71	14,779.41		14,779.41
Geography & Earth Resources	40,336.08	12,100.82	20,000.00	32,100.82
Rangeland Resources	11,137.37	3,341.21	11,509.00	14,850.21
Remote Sensing/GIS Lab	133,230.29	39,969.09		39,969.09
Total College of Natural Resources	809,984.97	242,995.48	151,786.00	394,781.48
College of Science				0.00
Biology	302,760.97	90,828.29	150,817.00	241,645.29
CASS	319,815.06	95,944.52	30,298.00	126,242.52
Chemistry & Biochemistry	454,100.00	136,230.00	183,552.35	319,782.35
Computer Science	120,961.61	36,288.48	153,227.00	189,515.48
Geology	62,732.48	18,819.74		18,819.74
Mathematics & Statistics	189,365.97	56,809.79	24,699.00	81,508.79
Physics	138,567.15	41,570.14	241,873.00	283,443.14
Total College of Science	1,588,303.24	476,490.96	784,466.35	1,260,957.31
Vice President - University Extension				0.00
Cooperative Extension	338,076.29	101,422.89	2,800.00	104,222.89
Total Vice President - University Ext.	338,076.29	101,422.89	2,800.00	104,222.89
Learning Resources Program				0.00
Merrill Library			200,000.00	200,000.00
USU Library Acquisition			10,000.00	10,000.00
Total Learning Resources Program	0.00	0.00	210,000.00	210,000.00
Vice President - Student Admin. Services				0.00
Student Services	17,423.47	5,227.04		5,227.04
Total VP - Student Admin. Services	17,423.47	5,227.04	0.00	5,227.04
Utah State University Foundation				0.00
Space Dynamics Laboratory	8,452,180.94	-0.02	8,119,193.94	8,119,193.92

<b>College or Other Unit</b>	<b>F&amp;A Generated</b>	<b>Budget Allocations From 30% Return</b>	<b>Budget Allocations From 70% Centrally Held</b>	<b>Total Budget Allocations</b>
Technology Transfer			218,934.00	218,934.00
Total USU Foundation	8,452,180.94	-0.02	8,338,127.94	8,338,127.92
School of Graduate Studies	352.41	105.72	239,000.00	239,105.72
Total School of Graduate Studies	352.41	105.72	239,000.00	239,105.72
<b>Total Colleges and Non-Academic Units</b>	<b>16,295,444.96</b>	<b>2,352,979.16</b>	<b>11,855,082.76</b>	<b>14,208,061.92</b>
<b>Support of Infrastructure</b>				
Vice President - Research				0.00
Contract & Grant Office	636.27	190.88	473,878.00	474,068.88
Environmental Health & Safety			379,861.00	379,861.00
Innovation Campus			222,172.00	222,172.00
Washington Based Support			174,000.00	174,000.00
Total Vice President - Research	636.27	190.88	1,249,911.00	1,250,101.88
Administration - President				0.00
Scholarship Programs			190,000.00	190,000.00
Total Administration - President	0.00	0.00	190,000.00	190,000.00
Vice President - Administrative Affairs				
Accounting & Financial Reporting				0.00
Controller's Office			464,706.00	464,706.00
F & A Cost Study				0.00
Federal Single Audit				0.00
Personnel Office	1,205.76	361.73		361.73
Purchasing			22,246.00	22,246.00
Total Vice President - Administrative Affairs	1,205.76	361.73	486,952.00	487,313.73
<b>Total Support of Infrastructure</b>	<b>1,842.03</b>	<b>552.61</b>	<b>1,926,863.00</b>	<b>1,927,415.61</b>
<b>Provost's Office</b>			10,000.00	10,000.00
<b>Total Provost's Office</b>			<b>10,000.00</b>	<b>10,000.00</b>
<b>Variable Funding</b>				
Vice President - Research				0.00
Biotechnology Bond			757,000.00	757,000.00
Total Vice President - Research			757,000.00	757,000.00
<b>Total Variable</b>	<b>0.00</b>	<b>0.00</b>	<b>757,000.00</b>	<b>757,000.00</b>
<b>Totals</b>	<b>\$16,297,286.99</b>	<b>\$2,353,531.77</b>	<b>\$14,548,945.76</b>	<b>16,902,477.53</b>

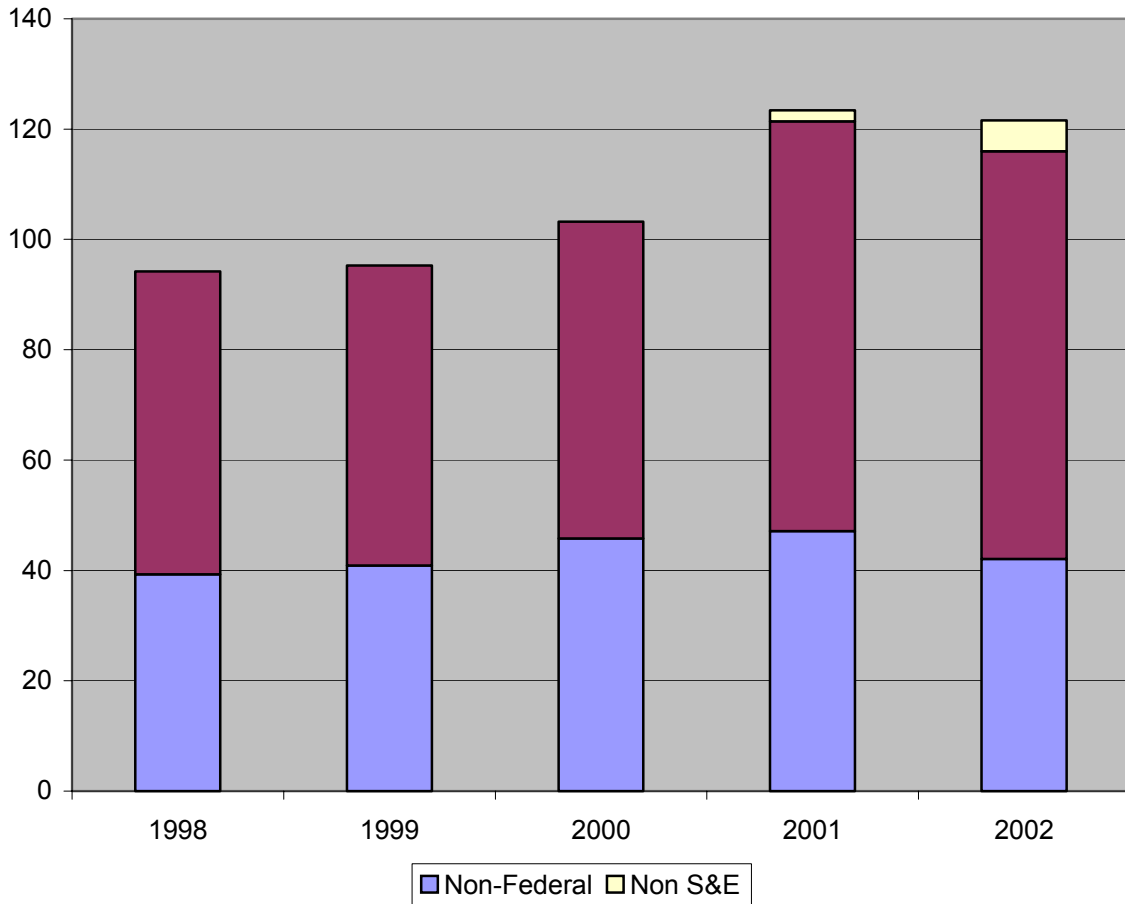
APPENDIX I

F & A Revenues Generated by, and Allocations to USU Colleges  
FY 2001-2002



APPENDIX J

### USU Scientific and Engineering Expenditures

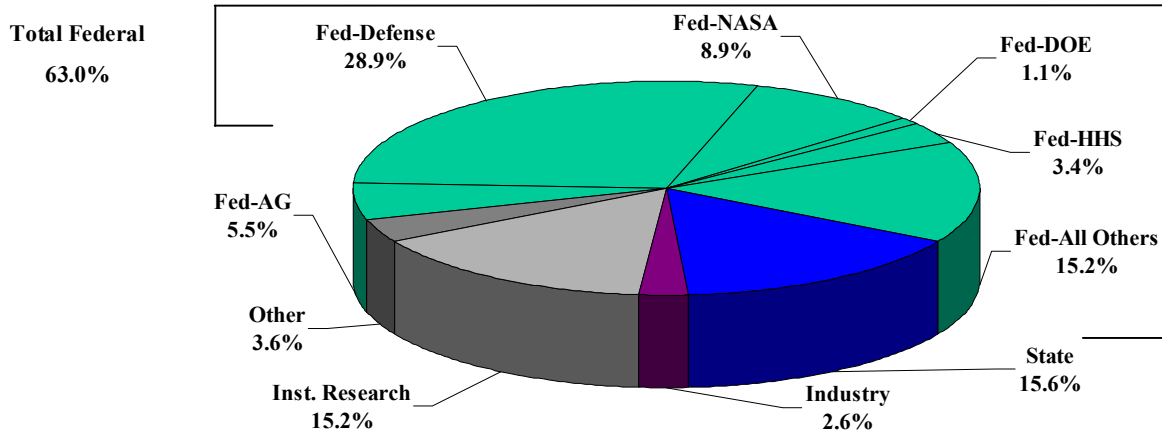


Millions of Dollars

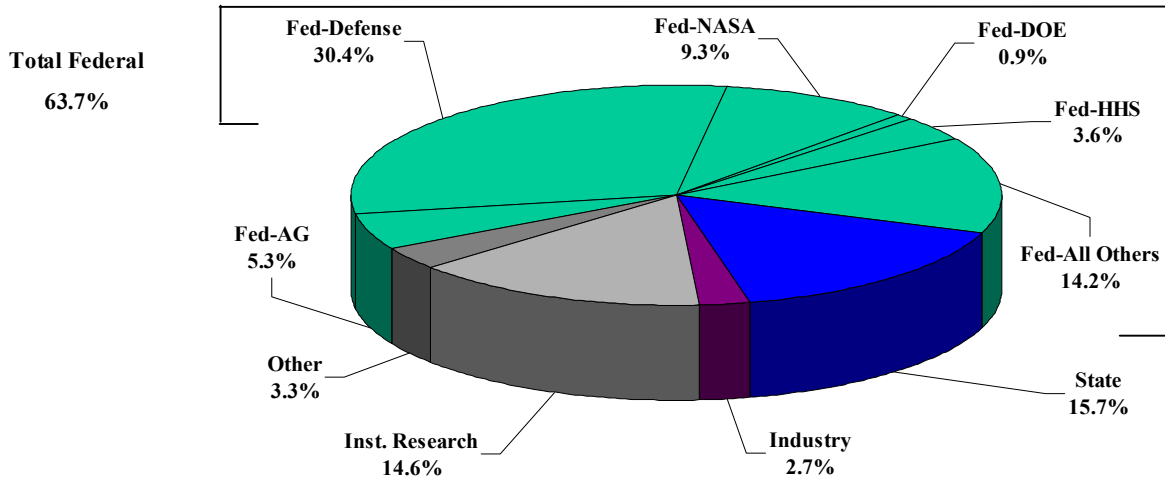
	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
Non-Federal	39.3	40.9	45.8	47.1	42.1
Federal	54.9	54.4	57.4	74.3	73.9
Total S&E	94.2	95.3	103.2	121.4	116.0
Non S&E				2.0	5.6
Total Research Exp.	94.2	95.3	103.2	123.4	121.6

# APPENDIX K

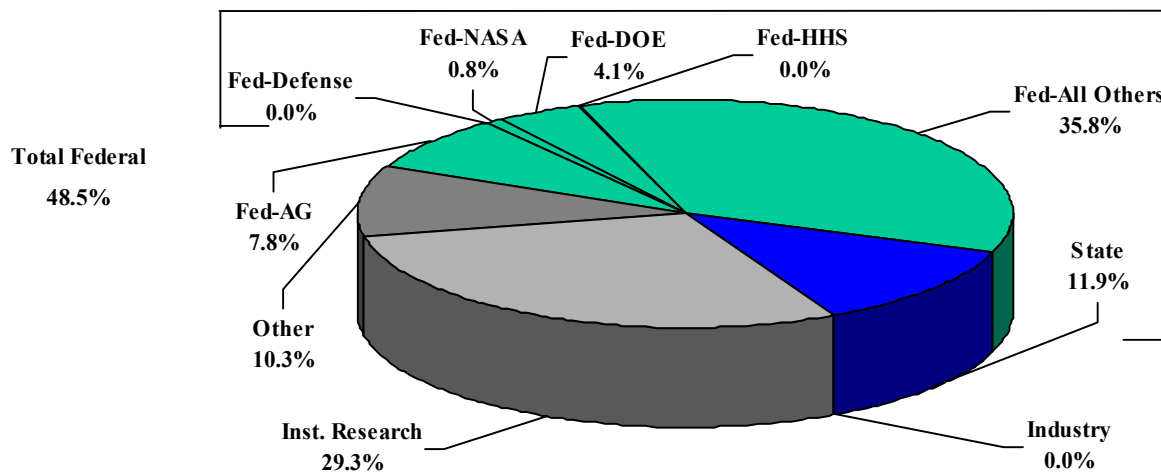
Sources Of Research Expenditures At USU, June 2002 YTD  
Fiscal Year 2002  
\$121,613,016



Sources Of Scientific and Engineering Research Expenditures At USU, June 2002 YTD  
Fiscal Year 2002  
\$115,966,527

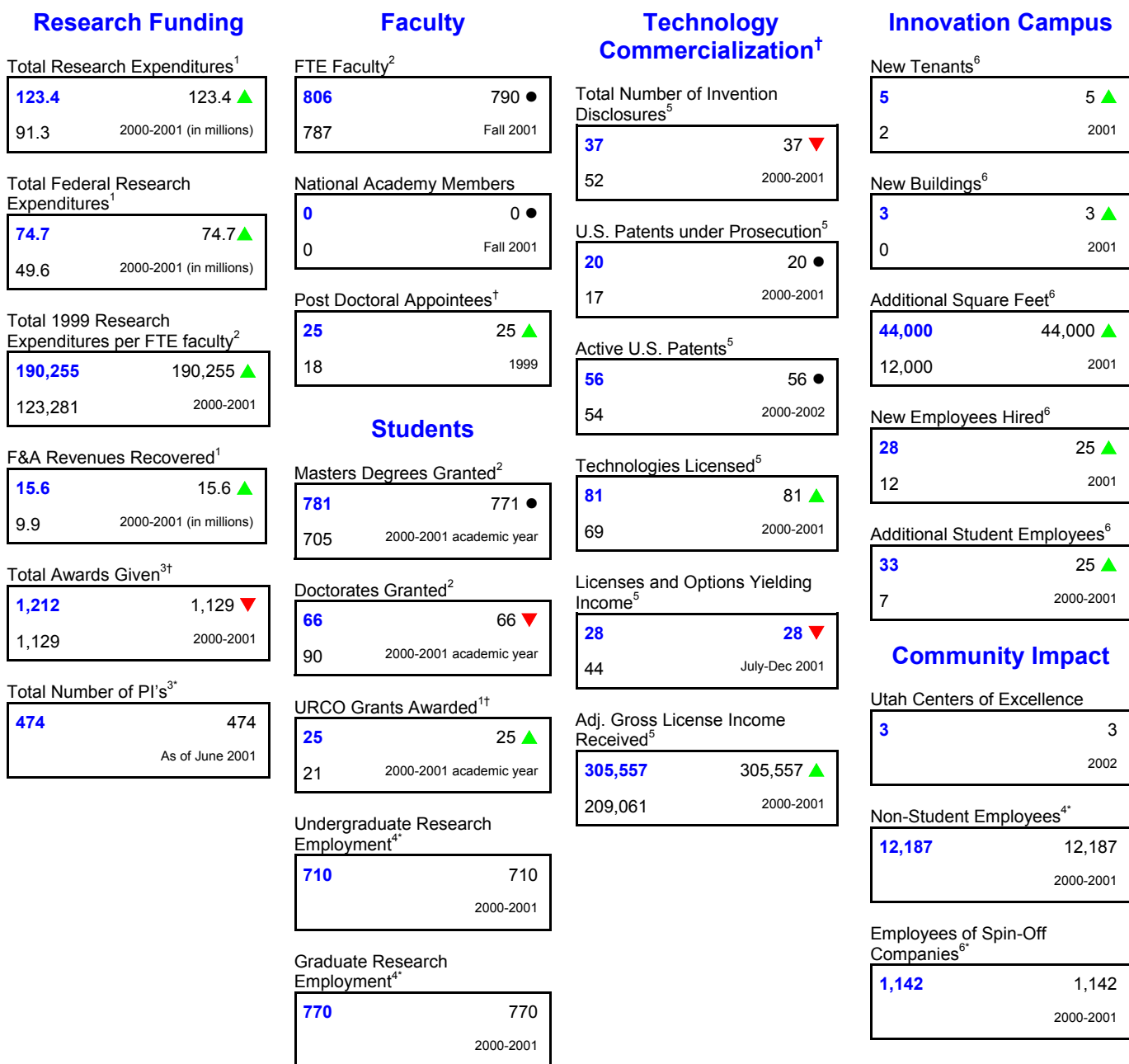


Sources Of Non-Scientific and Engineering Research Expenditures At USU, June 2002 YTD  
Fiscal Year 2002  
\$5,646,489





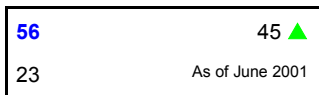
# USU RESEARCH PERFORMANCE DASHBOARD – JULY 2002



KEY:

Highest value for the past 5 years →

← Lowest value for the past 5 years



← Current value and trend

← Date of current value

Trend:

▲ Higher

▼ Lower

● No change

Green = Better

Red = Worse

Black = Neutral

<sup>1</sup> From the Vice President for Research Office

<sup>2</sup> From the Office of Planning and Analysis

<sup>3</sup> From the Sponsored Programs Office

<sup>4</sup> From the Payroll Office and USURF (includes only externally funded projects)

<sup>5</sup> From the Office of Technology Management and Commercialization

<sup>6</sup> From Innovation Campus

\* First year data were collected—No previous figures available

† Incomplete data set: less than five years of data used