

OFFICE OF THE VICE PRESIDENT FOR RESEARCH

ANNUAL REPORT

JULY 1, 2004 TO JUNE 30, 2005

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

INTRODUCTION

The Vice President for Research (VPR) Office promotes quality research by creating an environment in which faculty and students can achieve their research objectives. 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.

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 that are highly responsive and efficient.
- Fostering a culture of academic research integrity that discloses and manages conflicts-of-interest and conflicts-of-commitment, and that is consistent with federal regulations.
- Identifying, protecting, and, where appropriate, commercializing intellectual properties for the benefit of authors/inventors, the university, and society.

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.

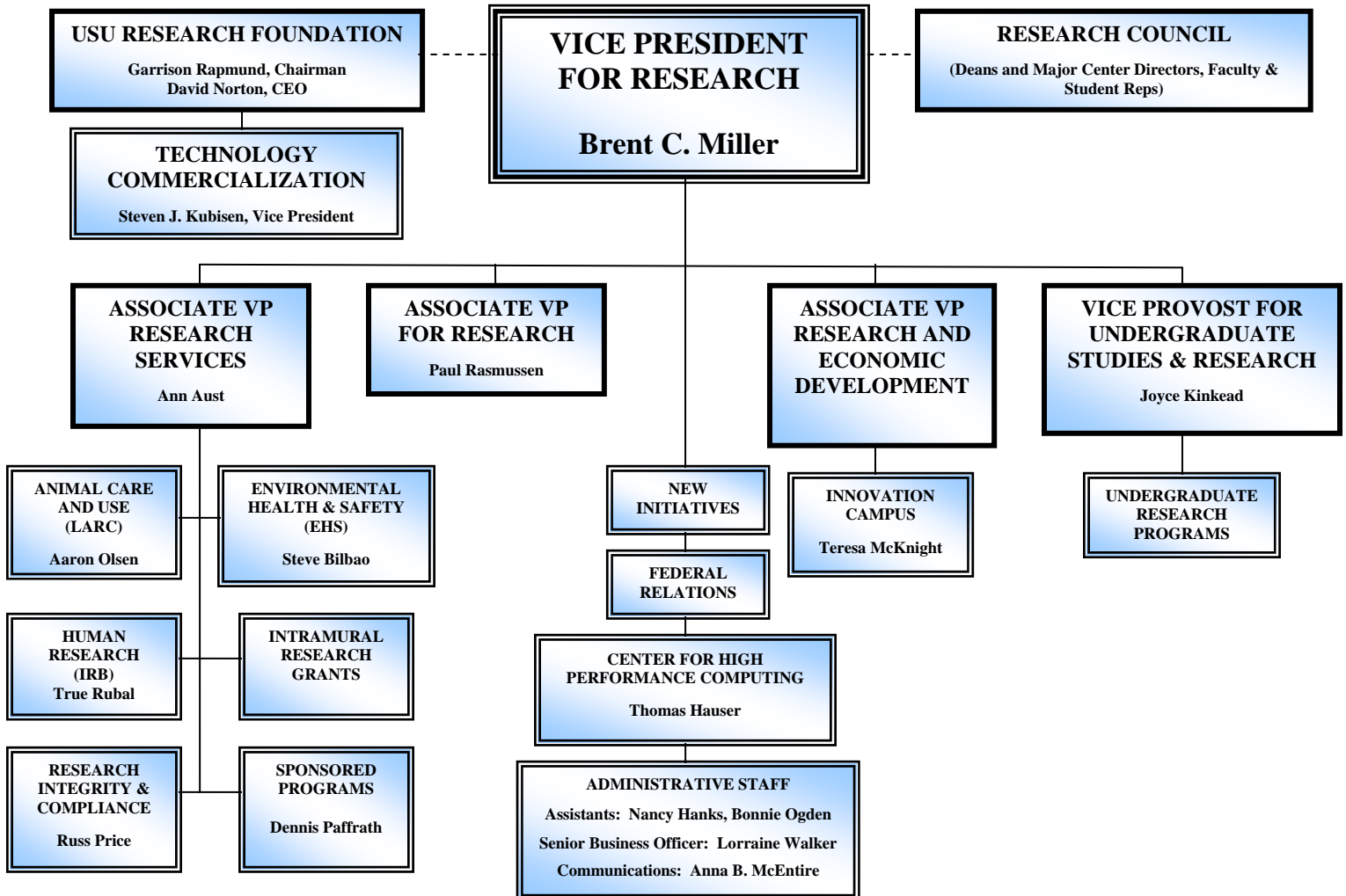
To advance university research, the VPR must be engaged with external constituencies, including local and state elected officials, as well as federal and industry funding partners. The VPR also needs to be actively engaged in professional networks and with societies that have as their mission the advancement of research. The VPR chairs the University Research Council, which consists of deans, major center directors, and student and faculty representatives.

ANNUAL REPORT

This annual report to the Faculty Senate covers the major activities of the VPR and the Research Council from July 1, 2004 through June 30, 2005. It is a summary of all units for which the VPR has responsibility. This report is organized in four parts:

1. Overview of the 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
 - 3) Center for High Performance Computing
2. Research Council Membership and Functions
3. Use of Facilities and Administration (F&A) Funds at USU, FY2004-2005
4. Current and Future Research Issues at USU

Utah State University Vice President for Research Organization



1. OVERVIEW OF VPR AND RELATED UNITS

The VPR is responsible for the units shown in the previous diagram. The USU Research Foundation (USURF) is a wholly owned subsidiary of the university. It is 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 USU Research Council advises the VPR, providing a forum for considering major research issues. The Office of Technology Commercialization and the Innovation Campus are strategic or mission-oriented units. The others are research service units.

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 role of this office puts SPO in contact with virtually 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. SPO provides 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 researchers and 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. The office interacts directly with sponsors to facilitate and negotiate on behalf of researchers and USU.

SPO representatives present training to individual researchers and departments. SPO also fosters research at the university by assisting researchers with successfully completing forms, interpreting contract and proposal terms and conditions, tracking pending proposals, providing notification of receipt of award, obtaining financial accounts and attending to the contractual details of agreements with sponsors. SPO representatives also attend contractual meetings and negotiations with PIs. Coordination with accounting personnel in the Controller's Office is essential.

SPO has organized its office to designate one contract administrator who is responsible for each college. This organizational structure allows faculty and staff to recognize their assigned SPO staff member, and SPO's familiarity with the researchers is also increased. The SPO is still working towards a team approach to contract administration in coordination with the Controller's Office. This team effort will aid PIs in the administration and accounting of awards. Each team includes a sponsored programs administrator and a sponsored programs accountant. This cooperative effort enhances the coordination of pre- and post-award function at USU.

SPO upgraded its Web site to enhance proposal development. The office is developing written sponsored programs policies and procedures to post on its Web site that will clarify USU processes and assist faculty and staff in the submission of proposals. SPO is also upgrading its Web site to include more user-friendly services for faculty and staff.

SPO provides monthly reports to the VPR regarding the status of research proposals and awards at Utah State University. Appendix A provides a summary of Sponsored Program Awards FY2001 through FY2005. Appendix B compares awards by month and type of award for FY2004 and FY2005. Appendix C provides a summary of Sponsored Program Awards by Awarding Agency FY2001 through FY2005, and Appendix D provides a summary of Sponsored Program Awards by Research Center FY2001 through FY2005. State appropriations and student scholarships have been removed from all reports of awards.

Note that awards in the Colleges of Agriculture, Engineering, and Science were much lower in FY2005 than FY2004, mostly because USURF awards were removed from colleges and shown separately for the first time in FY2005. Note also that total awards were about \$40 M lower in FY2005 than FY2004 (\$122 M vs. \$162 M). This is because of the cancellation of RAMOS, SDL's largest program.

2) Environmental Health and Safety Office (EH&S)

The EH&S Office 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 EH&S 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 and require written programs, documented training, permits, and numerous reports of differing types that the EH&S Office completes for the university.

Responsibilities of the EH&S program cross many traditional aspects of the campus community. In FY2005 EH&S accomplished the following:

- Transported, managed and disposed of approximately 80,627 lbs. of hazardous waste and approximately 3,160 lbs. of radiation waste. Recycled 44,606 lbs. of hazardous materials.

- Provided safety training to approximately 1,310 faculty, staff and students in 36 courses.
- Implemented the radioactive liquid waste volume reduction plan, resulting in cost savings by reducing the amount of waste (644 lbs.) shipped off-site for disposal.
- Expanded implementation of GIS Emergency Information Program in cooperation with Logan City Fire Department.

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 which 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 USU research activities. Regulations require that an IRB have at least one scientist, one nonscientist, and one member not affiliated with the institution; terms of service are three years and can be renewed.

IRB board members at USU are: Gretchen Gimpel – Department of Psychology; Thorana Nelson – Department of Family, Consumer, and Human Development; Richard Albiston – Prisoner Advocate; Dawn DeTienne – Department of Management and Human Resources; Julie Gast – Department of Health, Physical Education and Recreation; Reed Geertsen – Department of Sociology, Social Work and Anthropology; Stuart Howell – Community Representative; Ron Munger – Department of Nutrition and Food Sciences; Tim Slocum – Department of Special Education and Rehabilitation; Noreen Schvaneveldt – Department of Nutrition and Food Sciences; and True Rubal-Fox – 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 reviews 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 on the VPR Web site at www.usu.edu/vpr/policies/irb.

The IRB Administrator is actively involved in implementing revised federal procedures and updating USU procedures; providing continuing education for faculty, students, and board; and helping to coordinate ethics-in-research training for researchers and IRB members.

Appendix E illustrates the number of IRB research applications by types of review categories from 1999-2005.

4) Laboratory Animal Research Center (LARC)

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 short- and long-term research. The LARC staff is also a resource for expert information on the use of live animals in research and teaching. The LARC is an Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) International accredited, Public Health Service (PHS) assured, and a United States Department of Agriculture (USDA) registered animal research center.

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 is an affiliate of the American Association of Laboratory Animal Practitioners; a full-time supervisor (K. Udy) who is a certified Registered Laboratory Animal Technologist by the American Association of Laboratory Animal Science; a full-time secretary (C. Coombs), one full-time animal caretaker 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 or all of their own animal care. The full-time supervisor (Udy) and secretary (Coombs) have shared assignment with the Institutional Animal Care and Use Committee (IACUC).

Effective July 1, 2005, A. Olsen replaced S. Allen as Director of the LARC and Executive Secretary of the IACUC.

Major accomplishments for FY 2005:

- The USDA inspector cited no non-compliance items during the annual facility inspection.
- Services provided by the LARC increased 78% and included expanded service to new researchers in the ADVS and Psychology departments.
- All available animal space is occupied.
- Capital equipment and infrastructure were upgraded. Additional upgrades are being planned to accommodate additional work in the Antiviral program.

1.B. STRATEGIC UNITS

1) Utah State University Innovation Campus

The Utah State University Innovation Campus (IC) 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 technology

clusters that build long-term economic benefits for the University, Cache Valley, and the State of Utah.

Sasaki and Associates, an urban planning and design firm based in Boston, completed the IC's master plan in 2003. The master plan will be used to guide future development of the campus. One of the objectives in developing the master plan is to give attention to ways of conserving energy, resources, and implementing state-of-the-art measures for landscaping and architectural design.

The IC worked in partnership with the USU Research Foundation and the USU Administration to issue a bond for the construction of three buildings; SDL Calibration and Optical Research Lab, the USU Research Foundation Administration building and the USU Research Foundation Biomolecular Facility, totaling approximately 100,000 square feet of office and lab space. The Calibration and Optical Research Lab and the Administration building were completed in FY2005.

Programs to improve tenant relationships have been implemented (i.e. improved data and telephone services, participation in a corporate wellness program and acknowledgement as a campus business partner with I.D. cards for various discounts and participation in programs at Utah State University). The Logan City transit system makes stops between the USU main campus and the USU IC every 30 minutes. The establishment of an energy efficiency partnership program with Utah Power and Light was implemented. The IC completed development of a new logo, Web site, and a promotional DVD.

IC received a \$2.5 M grant from the U.S. Department of Commerce to build roads and infrastructure for the Grand Avenue. The Grand Avenue is highlighted in the IC master plan as the "central heart" of the IC, connecting the existing 38 acres to the land obtained directly to the east, expanding the IC to over 150 acres contiguous with Utah State University's main campus. A groundbreaking ceremony was held June 13, 2005, and a ribbon cutting to open Grand Avenue was held November 20, 2005.

2) Technology Commercialization Office (TCO)

The TCO complements the research activities of USU and promotes university outreach by developing and commercializing technologies for public use and benefit, potentially providing additional income to the University and its inventors.

In addition to its traditional role of patenting and licensing USU/USU Research Foundation technologies, TCO strives to extract the fair market value of intellectual property by using the best business practices for the benefit of the inventor, the university, the Research Foundation and the community. By effectively commercializing technology, TCO provides additional revenue to the University, its departments, faculty, and staff. TCO creates potential for local job creation through forming new businesses. All members of TCO's staff combine business experience with a strong science and technology understanding to better serve the interest of technologists, companies, and the organization. In FY2005 TCO accomplished the following:

- Increased License revenue to \$500,000
- Executed seven licenses
- Increased Invention Disclosures to 45
- Filed 17 patents – Nine of which were new technology
- Received three patents:
 - Induced Sludge Bed Anaerobic Reactor – Conly Hansen and Carl Hansen
 - Frequency Domain Relectometry System for Testing Wires and Cables Utilizing In-Situ Connectors, Passive Connectivity, Cable Fray Detection, and Live Wire Testing – Cynthia Furse (U of U)
 - Machine for Injecting Liquids (Formerly known as Combined UHT/Injection of Foods) Food Injector – Conly Hansen and Ed Watts

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 FY2005 included:

- | | |
|----------------|--|
| September 2004 | <p>Brent Miller described the USTAR Research Initiative that USU is undertaking in partnership with the University of Utah. This major research initiative proposes that the State invest several \$100 million at USU and U of U to strengthen research capacity in facilities, faculty and talent to develop Utah's economy.</p> <p>Utah Constitutional Amendment #2 and USU's support of holding equity in startup companies was explained.</p> |
| October 2004 | <p>Ann Aust was introduced as the new Associate Vice President for Research.</p> <p>A new process to review CURI proposals was introduced: A central review committee will evaluate two of the best proposals from each college. The committee will rank the proposals, and 10 percent of total F&A funds budgeted for CURI grants will be allocated to the centrally-ranked proposals. The balance of funds will be allocated based upon each college's share of F&A generated. The PI of each CURI grant funded will be required to submit an end-of-project report and a follow-up report after the third year.</p> |

High Performance Computing (HPC) is an area that the university should develop, and there will be upcoming presentations about how HPC could benefit university researchers.

December 2004

USU's USTAR Initiative proposal is being coordinated with the University of Utah's document. Business and industry leaders will bring the initiative forward and demonstrate how it will benefit wider areas across the state.

The Technology Commercialization Office gave two presentations on progress and metrics, and USU Bio-strategy Overview. The university has significantly increased the number of license agreements and amount of royalties received.

January 2005

Sponsored Programs discussed the federal government's policy regarding accounting for Co-PIs. This policy may impact USU's multidisciplinary proposals. Changes in the Sponsored Programs Office include: slight changes to the SPO1 Form and an updated Web site to provide funding opportunity resources for faculty.

Forty freshman fellows were selected for Fall 2004. The quality of the 200 Presidential scholars who submitted resumes has really been impressive, with an average ACT score of 30 and average GPA of 3.9. This program capitalizes on USU's reputation for hands-on learning, good research facilities, and faculty mentoring for undergraduates.

Several contracts that USU receives do not allow for USU to recover the full allowable F&A. These contracts are being revisited and re-negotiated.

Total research awards for the period of July 1, 2004 to December 31, 2004 are \$31,753,097 less than the previous year. Due to the Banner financial module, it is difficult to analyze which unit's awards have decreased; however, a large portion of the shortfall is attributable to USURF, which lost RAMOS, the university's largest project.

The USTAR Initiative was presented to the Higher Education Appropriations committee. The white paper shows an expected return on investment of \$5 in non-State funding for every \$1 of State funding. Cluster hires of outstanding researchers will be the first task for this initiative.

February 2005

The USTAR Initiative passed in the Utah Legislature (Senate Bill 192), allocating \$7.35 M to the U of U and USU to begin cluster hires and to prepare a detailed investment prospectus and funding plan.

Research Week at Utah State will be April 11-April 15. The events will expand this year to include an awards luncheon to feature the D. Wynne Thorne Research Award winner, college researchers of the year, new patent awardees, early career grant awardees, and Governor's Medal recipients.

April 2005

Response time for emergencies on campus is getting quicker because of EH&S work that has been underway for GIS mapping of campus. The mapping includes roads, electrical wiring, fire hydrants, all building rooms, as well as the labeling of chemicals in each building. This task has improved the safety of all on campus, as well as emergency response teams.

Human Participants Policy 308 has been written to reflect what the IRB is already doing, but which is also necessary for accreditation. The policy also is an assurance to the public, serves as a contact with our employees, and communicates with investigators.

In FY2006, USU will receive \$1.6 M for the USTAR Initiative, which will be used to recruit top senior researchers in the area of microbe biotechnology. A task force consisting of faculty researchers in a proposed area of emphasis will review and recommend potential candidates.

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 interdisciplinary research clusters and initiatives.
2. Increase indirect cost recovery.
3. Create credible reports of research related activities.
4. Develop Office of Technology Commercialization into a strong service unit for inventors and a revenue generating enterprise for USU.
5. Shift Innovation Campus culture toward a community environment, emphasizing partnerships.

3. USE OF FACILITIES AND ADMINISTRATION FUNDS AT USU, FY2004-2005

Facilities and Administrative (F&A) costs are the shared indirect or overhead costs of research. The federal government audits actual F&A costs and establishes a rate that the university seeks

to recover from sponsors. Recovered F&A funds are used to pay actual indirect costs of research and to stimulate and expand research opportunities.

Appendix H is a report compiled by the Controller's Office that summarizes the amount of F&A generated in FY2004-05 by department; 30% returned to the cost center; and allocations of the 70% held centrally in the VPR.

4. CURRENT AND FUTURE RESEARCH ISSUES AT USU

Listed below are selected 2004-2005 initiatives undertaken in the Vice President for Research Office.

1) USTAR Initiative. An economic impact statement was completed in FY2005 that confirmed the impact of research undertaken at Utah's two research universities on the state's economy. Members of the Utah business community have led an initiative that invests in Utah State University (USU) and University of Utah (UofU) research capacities. In FY2005, Senate Bill 192 passed. This bill provided funding to Utah State University (\$1.6 M) and to the University of Utah to build research capacity for economic development. The business community continues to pursue \$25 M of on-going funding for both universities.

2) Strengthen High Performance Computing at USU. A High Performance Computing (HPC) task force was appointed to study and make recommendations about what HPC resources would be most useful at USU. The committee's recommendations were:

- HPC will enhance research and education at all levels at USU.
- There is strong interest in the USU research community for using HPC.
- HPC will give USU more visibility and recognition as a research university, especially in the sciences and engineering, and will help USU reach its objective of contributing on a national and international scale.
- Strengthening supercomputing resources on campus will make some research proposals more competitive. USU is not qualified to compete for some research solicitations due to a lack of adequate supercomputing resources.
- HPC capability will further enhance the university's outreach and economic development objectives in the state of Utah.

A small center for HPC was established this summer with funding from an NSF Major Research Instrumentation (MRI) grant and the Research Office. A 256-processor cluster with three different networks was purchased. A part-time center director was hired (Thomas Hauser), effective July 1, 2005. A system administrator will be hired to support the efforts of the center.

3) Strengthen the National Center for Hearing Assessment and Management (NCHAM). Enabled NCHAM to recruit two senior scientists to come to USU. Adding these faculty significantly expands NCHAM's capability in securing extramurally-funded research related to identification of, and services for, children with permanent hearing loss.

4) Improve Reporting of Research Activity at USU. The VPR, in cooperation with the Controller's Office, has developed reports that reflect total research expenditures at USU utilizing NSF definitions. This will facilitate comparison of USU and peer institutions. Appendix I is a graph that illustrates research expenditures from federal and nonfederal sponsors for the past five years. The pie chart in Appendix J summarizes total research expenditures for scientific and engineering research expenditures and nonscientific and engineering research expenditures for FY2005. FY2004 was the first year that nonscientific and engineering research expenditures data were reported separately. (These appendices will be added to this annual report as the data becomes available.)

5) Increase Research Activities for Undergraduate Students. The VPR provides support for undergraduate research grants through Undergraduate Research and Creative Opportunities (33 grants in FY2005). The VPR supports Undergraduate Research Day at the State Capitol for undergraduate students (33) to present their research. The VPR also provided support for undergraduate students (5) to participate at the National Conference for Undergraduate Research in Lexington, Kentucky.

6) Build the Sponsored Programs Office (SPO) to Upgrade Services. Positive changes in the SPO were described in Section I of this report, including the addition of new contract administrators funded through a compact planning initiative.

7) Improve Federal Relations Process. The VPR has strengthened USU's presence in Washington, D.C. by meeting frequently with elected officials and agency representatives in the Washington, D.C. area. Additionally, the VPR has developed a systematic process of coordinating congressional requests. Requests are presented by the deans and prioritized by the President and Provost in an effort to increase USU's chances of obtaining congressionally-directed funding and increasing the amount received.

8) Improve Marketing of USU Research. Marketing specialist Anna McEntire was hired in 2003 to better tell USU's research story. A VPR Dashboard was also developed to compare research performance indicators. (Appendix L will be added when data becomes available.) The VPR is continuing to improve our impact statement of USU research, showing that research is a good investment for its various constituents, including the university community, Cache Valley, and Utah. "Research Matters," an annual report for the general public, has been prepared to document the benefits of research, both economic and academic.

9) Selected Other Research Issues of Concern. The following are selected research issues of concern: (1) Human Capital is a critical problem. (2) Some states are bonded to attract and retain faculty using better financial incentives. (3) Utah needs to better develop financial funding plans to build and fund facilities, including High Speed Computing capacity. (4) More money is needed to fund graduate students. (5) When grants and soft monies end abruptly, students need a safety net to finish research. (6) Security plans need to be based on a systematic review of all buildings on campus, what is housed, and what security needs would be.

APPENDIX A

SPONSORED PROGRAM CONTRACT/GRANT AWARDS
BY COLLEGE¹

	<u>2000-01</u>	<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-2005⁵</u>
Agriculture	34,914,108	29,550,795	31,975,714	33,815,417	13,561,798
Business	592,957	1,548,946	460,787	1,773,316	1,985,155
Education	18,454,329	17,049,144	23,069,479	25,047,073	25,789,744
Engineering	62,138,968	46,574,786	58,024,532	70,912,859	9,911,299
Family Life	5,954,646	5,699,388	-----	-----	-----
HASS	482,943	518,329	303,768	703,482	925,631
Natural Res.	10,340,870	11,045,630	8,297,174	8,024,624	9,786,361
Science	9,605,426	11,011,637	9,083,475	14,855,670	10,038,023
USURF	-----	-----	-----	-----	43,566,429
Other	26,352,552	4,580,296	6,135,901	8,107,176	7,222,649
Jointly Admin. Programs ²	<u>(4,010,391)</u>	<u>(4,274,292)</u>	<u>(880,088)</u>	<u>(882,436)</u>	<u>(660,217)</u>
TOTAL	<u>\$125,226,928</u>	<u>\$123,304,657³</u>	<u>\$136,470,739</u>	<u>\$162,357,181</u>	<u>\$122,126,872</u>

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

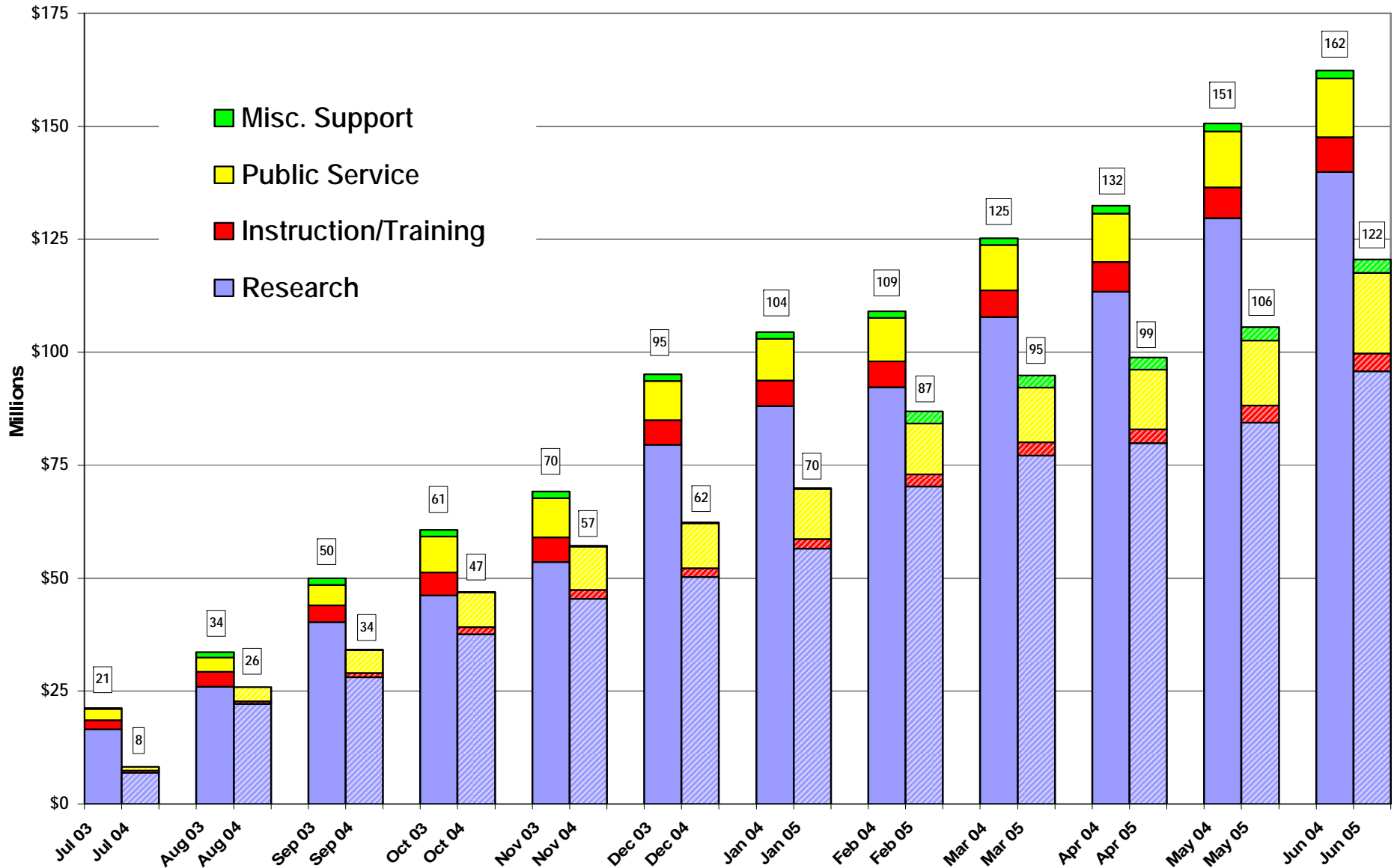
²Award totals for jointly administered programs are reflected in the totals of both colleges involved with these programs. The amount in the jointly administered programs category is an accounting function designed to eliminate double counting of awards.

³College of Family Life was disbanded in FY2002. College award figures reflect faculty award information shifted to different colleges.

⁴Figures adjusted to exclude scholarships, fellowships, and state appropriations for research.

⁵USURF/SDL awards were removed from College totals.

Utah State University Sponsored Program Awards FY 2004, FY 2005



**APPENDIX C
RESEARCH AWARDS
BY FEDERAL SPONSORING AGENCY (IN DOLLARS)**

	FY00-01	FY01-02	FY02-03	FY03-04	FY04-05
Department of Agriculture	8,681,220	13,230,864	8,921,597	11,501,852	14,844,728
Department of Defense	35,479,396	24,668,809	40,633,208	56,454,422	6,229,055
Department of Education	7,217,261	7,203,705	5,712,791	6,083,005	6,415,175
Department of Health and Human Services	8,410,599	12,160,887	11,086,906	13,327,011	9,568,985
Department of the Interior	3,046,466	2,313,308	3,248,809	2,949,134	3,754,104
Department of State	1,513,350	118,000	-	98,267	0
Environmental Protection Agency	1,620,279	182,465	1,060,190	294,821	643,766
National Aeronautics & Space Administration	8,621,203	17,182,036	22,249,464	24,749,979	24,977,824
National Science Foundation	3,472,475	5,505,032	4,513,242	4,510,344	8,761,253
State Agencies & Others ¹	<u>47,082,606</u>	<u>40,003,751</u>	<u>40,949,497</u>	<u>42,388,347</u>	<u>46,931,982</u>
TOTAL²	<u><u>\$125,144,855</u></u>	<u><u>\$122,568,857²</u></u>	<u><u>\$138,230,923</u></u>	<u><u>162,357,182</u></u>	<u><u>\$122,126,872</u></u>

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

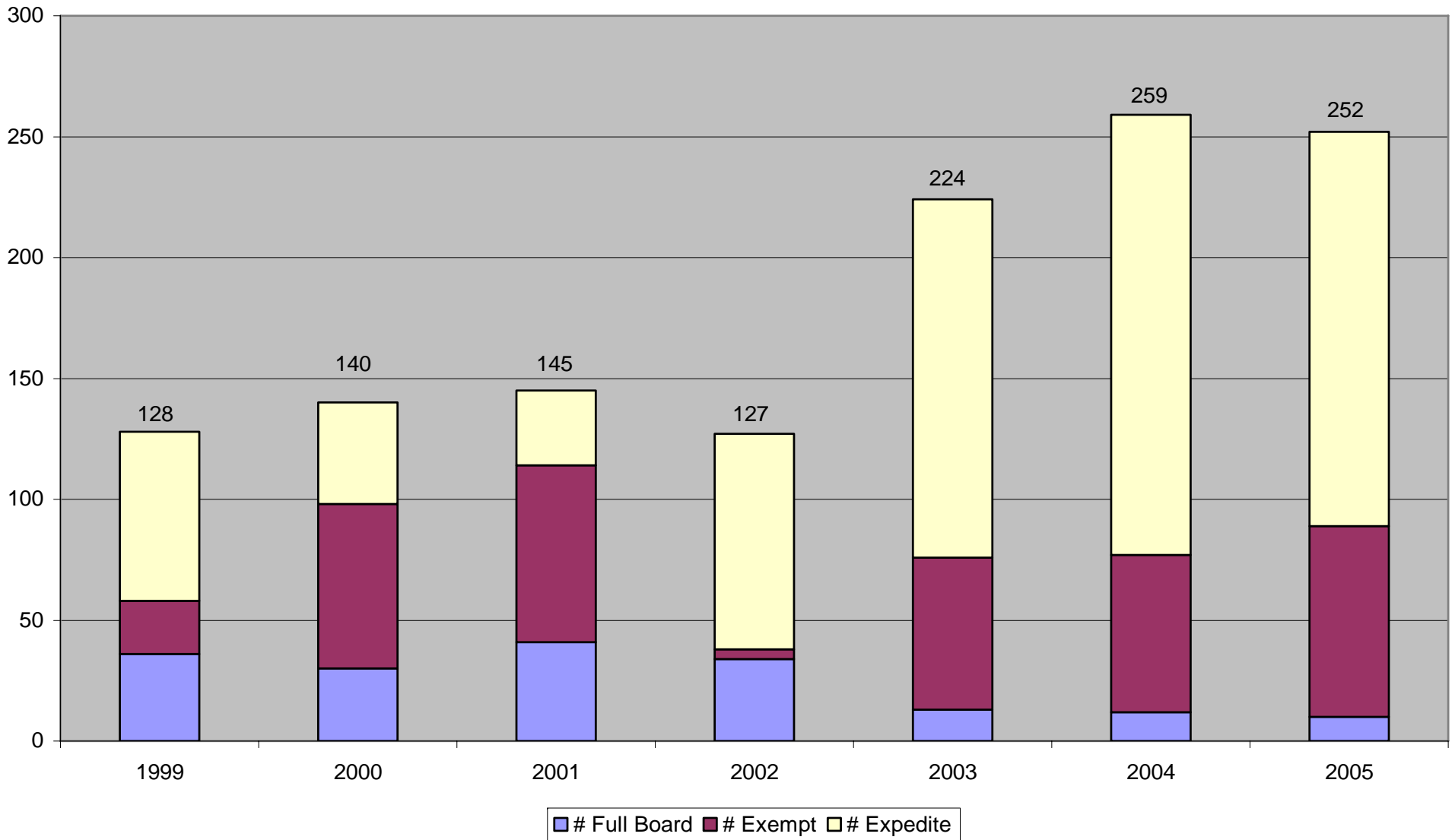
²Figures adjusted to exclude scholarships, fellowships, and state appropriations for research.

APPENDIX D

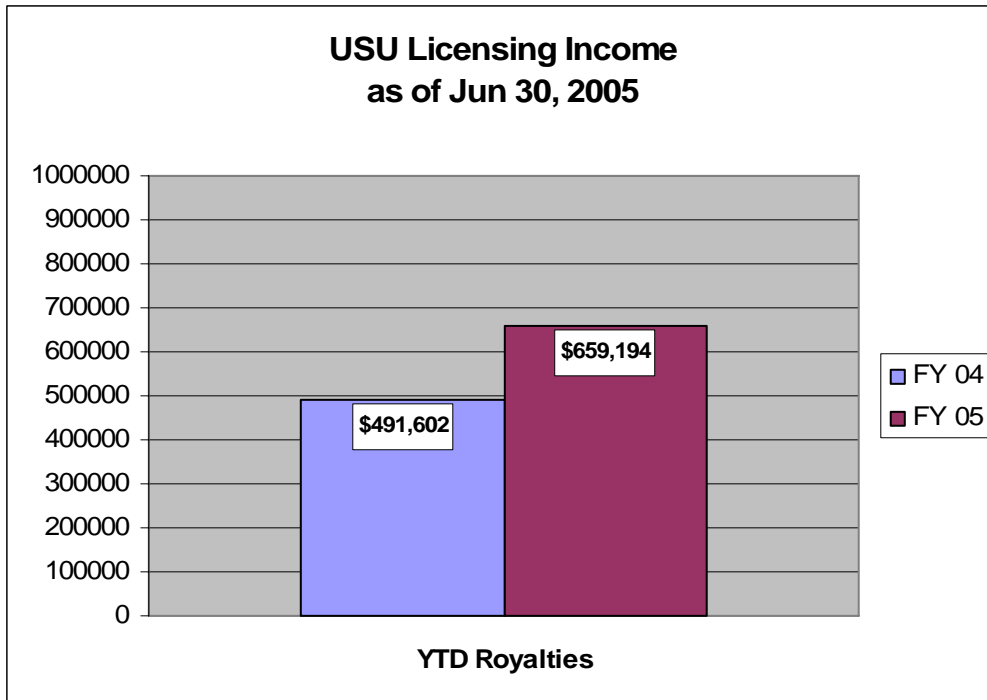
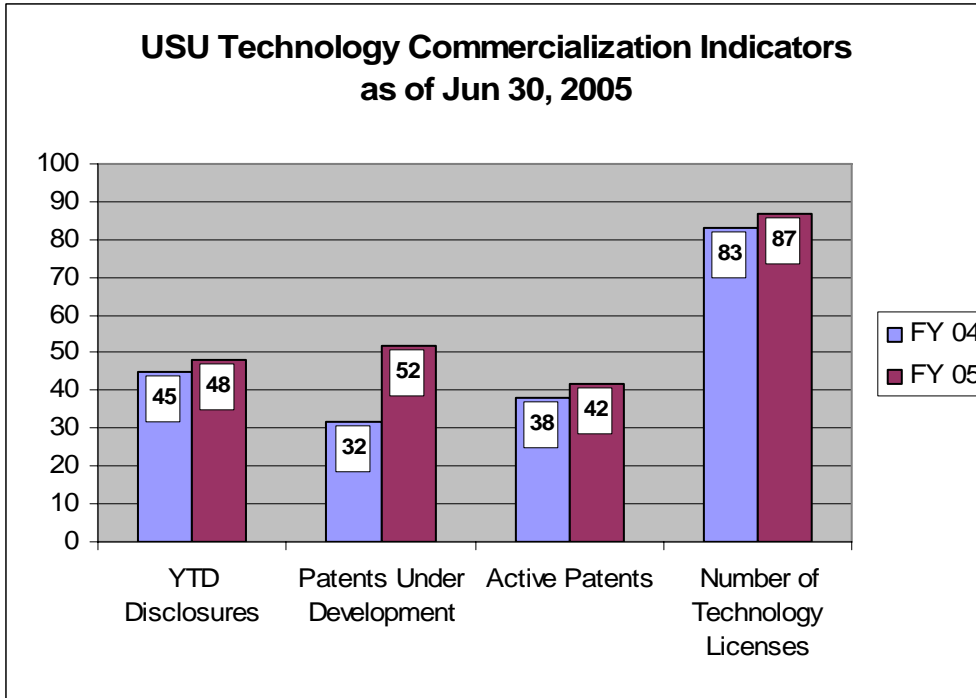
**SPONSORED PROGRAMS CONTRACT/GRANT AWARDS
BY RESEARCH CENTER**

RESEARCH CENTER	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY04-05
Ag. Experiment Station	\$12,890,156	\$14,075,399	\$8,706,601	\$10,891,952	\$11,605,967
Biotech. Center	\$86,719	\$68,247	\$12,879	\$0	\$0
CASS	\$1,475,352	\$1,877,538	\$1,810,200	\$1,709,473	\$1,647,479
CPD	\$10,027,928	\$9,227,716	\$8,391,484	\$11,791,164	\$11,873,218
Center for Space Eng. (Beginning FY2002, USURF reassigned reporting centers)	\$115,644	\$330,631	\$127,500	\$689,420	\$0
Cooperative Extension	\$4,683,379	\$4,776,956	\$5,364,247	\$5,771,652	\$4,339,414
Ecology	\$2,997,761	\$2,850,886	\$2,994,710	\$2,609,198	\$2,424,505
Eng. Experiment Station	\$12,797,261	\$1,403,020	\$430,762	\$3,263,631	\$274,991
International Programs	\$0	\$0	\$0	\$0	\$0
School of the Future	\$0	\$21,811	\$57,600	\$0	\$0
Provost	\$0	\$0	\$447,000	\$76,826	\$24,699
Univ. Research & Training	\$26,657,551	\$29,756,469	\$34,081,231	\$35,211,732	\$44,178,900
USURF/SDL	\$49,526,018	\$54,139,885	\$70,322,046	\$86,951,616	\$43,566,429
Remote Sensing	\$1,671,608	\$482,214	\$1,276,434	\$1,007,343	\$0
Utah Water Research Lab.	\$2,215,478	\$3,558,085	\$4,208,229	\$2,353,568	\$2,191,270
Total USU	<u>\$125,144,855</u>	<u>\$122,568,857</u>	<u>\$138,230,923</u>	<u>\$159,974,007</u>	<u>\$122,126,872</u>

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



APPENDIX F



APPENDIX G

UNIVERSITY RESEARCH COUNCIL Membership (2005-2006)

		Phone	UMC
Brent C. Miller	Vice President for Research, Chairman	1180	1450
Ann Aust	Associate Vice President for Research	1199	1450
Caryn Beck-Dudley	College of Business	2376	3555
Noelle Cockett	College of Agriculture	1167	1435
Jim Dorward	College of Education	1469	2800
Don Fiesinger	College of Science	2478	4400
Nat B. Frazer	College of Natural Resources	2445	5200
Steve Hansen	Space Dynamics Laboratory	4501	9700
Scott Hinton	College of Engineering	2775	4100
M. K. Jeppesen	Information and Learning Resources	2645	3000
Gary Kiger	College of Humanities, Arts, & Social Sciences	1200	0700
Joyce Kinkead	Vice Provost for Undergraduate Studies & Research	1706	1435
James MacMahon	Ecology Center	2555	5205
Mac McKee	Utah Water Research Laboratory	3188	8200
Gary Merkley	Faculty Senate	1139	4105
David G. Norton	USU Research Foundation	4568	9710
Henry Nowak	Technology Commercialization Office	9614	9730
H. Paul Rasmussen	Agricultural Experiment Station	2207	4810
Sarah Rule	Center for Persons with Disabilities	6800	1987
Larry Smith, Interim	School of Graduate Studies	1191	0900
Bart Weimer	Center for Integrated Biosystems	3356	8700
	Innovation Campus	9608	9600
 <u>Students</u>			
Spencer Watts	Academic Senate President	2912	0105
Tim Peterson	Science Senator	2912	0105
Jason Pickup	Graduate Studies Vice President	2912	0105

APPENDIX H

17-Nov-05

Utah State University Analysis of Facilities and Administrative Costs Generated and Allocated July 1, 2004 through June 30, 2005

College or Other Unit	Generated	Budget Allocations From 30% Return	Budget Allocations From 70% Centrally Held	Total Budget Allocations	Budget as a % of Generated
College of Agriculture					
Dean's Office - Agriculture			\$ 77,818.00	\$ 77,818.00	N/A
Agriculture - Economics	\$ 16,824.47	\$ 5,047.34	10,000.00	15,047.34	89.44%
Agricultural Experiment Station	15,453.60	4,636.08		4,636.08	30.00%
Agricultural Systems Technology and Education			13,659.00	13,659.00	N/A
Animal, Dairy and Veterinary Sciences	918,094.87	275,428.46	66,405.00	341,833.46	37.23%
Nutrition and Food Science	346,792.67	104,037.81	59,622.00	163,659.81	47.19%
Plants, Soils and Biometeorology	186,227.68	55,868.30	217,716.00	273,584.30	146.91%
Total College of Agriculture	1,483,393.29	445,017.99	445,220.00	890,237.99	60.01%
College of Business					
Dean's Office - Business			15,893.00	15,893.00	N/A
Accounting			6,116.00	6,116.00	N/A
Business Administration	12,291.14	3,687.34	3,767.00	7,454.34	60.65%
Business Information Systems			49,093.00	49,093.00	N/A
Economics	1,368.70	410.61		410.61	30.00%
Management and Human Resources	104,498.09	31,349.43	10,490.00	41,839.43	40.04%
Total College of Business	118,157.93	35,447.38	85,359.00	120,806.38	102.24%
College of Education					
Dean's Office - Education	25.81	7.74	98,331.00	98,338.74	381010.23%
Center for Persons with Disabilities	1,298,627.38	389,588.21	85,183.00	474,771.21	36.56%
Communicative Disorders	204,520.11	61,356.03	64,000.00	125,356.03	61.29%
Elementary Education			33,810.00	33,810.00	N/A
Family Consumer and Human Development	564,974.57	169,492.36	125,371.00	294,863.36	52.19%
Health, Physical Ed and Recreation Department			12,915.00	12,915.00	N/A
Instructional Technology	173,594.69	52,078.41	30,774.00	82,852.41	47.73%
Psychology	439,236.35	131,770.91	328,488.00	460,258.91	104.79%
School of the Future			25,000.00	25,000.00	N/A
Secondary Education			35,110.00	35,110.00	N/A
Special Education and Rehabilitation	60,650.82	18,195.25	22,015.00	40,210.25	66.30%
Total College of Education	2,741,629.73	822,488.91	860,997.00	1,683,485.91	61.40%
College of Engineering					
Dean's Office - Engineering	187,373.41	56,212.02	68,098.00	124,310.02	66.34%
Biological and Irrigation Engineering	268,064.48	80,419.34	23,642.00	104,061.34	38.82%
Civil and Environmental Engineering	178,925.16	53,677.55	75,701.00	129,378.55	72.31%
Electrical and Computer Engineering	127,745.70	38,323.71	73,418.00	111,741.71	87.47%
Engineering and Technology Education			31,000.00	31,000.00	N/A
Mechanical and Aerospace Engineering	154,327.61	46,298.28	502,700.00	548,998.28	355.74%
Utah Water Research Laboratory	529,829.51	158,948.85		158,948.85	30.00%
Total College of Engineering	1,446,265.87	433,879.75	774,559.00	1,208,438.75	83.56%
College of Humanities, Arts and Social Sciences					
Art			17,122.00	17,122.00	N/A
Dean's Office - Humanities, Arts and Social Sciences	8,812.69	2,643.81	40,864.00	43,507.81	493.70%
English			49,401.00	49,401.00	N/A
History			40,723.00	40,723.00	N/A
Landscape Architecture and Environmental Planning	877.40	263.22	28,262.00	28,525.22	3251.11%
Languages and Philosophy			22,491.00	22,491.00	N/A
Music			33,064.00	33,064.00	N/A
Political Science	10,230.10	3,069.03	70,000.00	73,069.03	714.26%
Sociology, Social Work and Anthropology	31,621.88	9,486.56	41,458.00	50,944.56	161.11%
Theatre Arts Department			19,110.00	19,110.00	N/A
Total College of Humanities, Arts and Social Sciences	51,542.07	15,462.62	362,495.00	377,957.62	733.30%

17-Nov-05

Utah State University
Analysis of Facilities and Administrative Costs Generated and Allocated
July 1, 2004 through June 30, 2005

College or Other Unit	Generated	Budget Allocations From 30% Return	Budget Allocations From 70% Centrally Held	Total Budget Allocations	Budget as a % of Generated
College of Natural Resources					
Dean's Office - Natural Resources			33,823.00	33,823.00	N/A
Aquatic, Watershed and Earth Resources	373,171.72	111,951.52	86,045.00	197,996.52	53.06%
Ecology Center	5,443.75	1,633.13	7,000.00	8,633.13	158.59%
Environment and Society	61,407.60	18,422.28	73,046.00	91,468.28	148.95%
Forest, Range and Wildlife Sciences	772,075.58	231,622.67	107,855.00	339,477.67	43.97%
Total College of Natural Resources	<u>1,212,098.65</u>	<u>363,629.60</u>	<u>307,769.00</u>	<u>671,398.60</u>	<u>55.39%</u>
College of Science					
Biology	441,299.46	132,389.84	228,249.00	360,638.84	81.72%
Center for Atmospheric and Space Sciences	396,659.62	118,997.89		118,997.89	30.00%
Chemistry and Biochemistry	423,892.19	127,167.66	98,545.00	225,712.66	53.25%
Computer Science	145,962.46	43,788.74	161,222.00	205,010.74	140.45%
Dean's Office - Science			63,556.00	63,556.00	N/A
Geology	65,257.43	19,577.23	23,300.00	42,877.23	65.70%
Mathematics and Statistics	130,211.82	39,063.55	33,311.00	72,374.55	55.58%
Physics	265,431.16	79,629.35	6,200.00	85,829.35	32.34%
Total College of Science	<u>1,868,714.14</u>	<u>560,614.26</u>	<u>614,383.00</u>	<u>1,174,997.26</u>	<u>62.88%</u>
Vice President - University Extension					
Cooperative Extension	10,951.90	3,285.57	68,400.00	71,685.57	654.55%
Extension Agriculture and Natural Resources	6,691.27	2,007.38		2,007.38	30.00%
Extension Family Life	1,674.73	502.42		502.42	30.00%
Extension Field Staff	31,720.64	9,516.20		9,516.20	30.00%
Extension Youth Programs	6,838.63	2,051.59		2,051.59	30.00%
Extension Community Development	226.50	67.95		67.95	30.00%
Continuing Education	21,508.65	6,452.60		6,452.60	30.00%
Uintah Basin Center	6,335.71	1,900.71		1,900.71	30.00%
Total Vice President - University Extension	<u>85,948.03</u>	<u>25,784.42</u>	<u>68,400.00</u>	<u>94,184.42</u>	<u>109.58%</u>
International Programs					
	<u>7,641.05</u>	<u>2,292.32</u>	<u>40,000.00</u>	<u>42,292.32</u>	<u>553.49%</u>
Vice President - Student Administration and Services					
Student Service Administration	20,025.38	6,007.61		6,007.61	30.00%
Student Involvement & Leadership Center	15,678.72	4,703.62		4,703.62	30.00%
Student Wellness Center	2,089.30	626.79		626.79	30.00%
Undergraduate Scholarships and Recruitment			100,000.00	100,000.00	N/A
Total Vice President - Student Administration and Services	<u>37,793.40</u>	<u>11,338.02</u>	<u>100,000.00</u>	<u>111,338.02</u>	<u>294.60%</u>
Utah State University Research Foundation					
Space Dynamics Laboratory	10,562,644.00	10,562,644.00	51,344.00	10,613,988.00	100.49%
Technical Support Services	113.39	34.02		34.02	30.00%
Total Utah State University Research Foundation	<u>10,562,757.39</u>	<u>10,562,678.02</u>	<u>51,344.00</u>	<u>10,614,022.02</u>	<u>100.49%</u>
School of Graduate Studies					
	5,651.43	1,695.43	272,000.00	273,695.43	4842.94%
Total School of Graduate Studies	<u>5,651.43</u>	<u>1,695.43</u>	<u>272,000.00</u>	<u>273,695.43</u>	<u>4842.94%</u>
Total Colleges and Non-Academic Units	<u>19,621,592.98</u>	<u>13,280,328.72</u>	<u>3,982,526.00</u>	<u>17,262,854.72</u>	<u>87.98%</u>
Support of Infrastructure					
Vice President - Research					
Disallowance Account			50,000.00	50,000.00	N/A
Internet II			70,000.00	70,000.00	N/A
Office of Technology Management and Commercialization			915,392.00	915,392.00	N/A
Undergraduate Research			25,000.00	25,000.00	N/A
Washington Based Support			237,173.00	237,173.00	N/A
Total Vice President - Research	<u>0.00</u>	<u>0.00</u>	<u>1,297,565.00</u>	<u>1,297,565.00</u>	<u>N/A</u>

Vice President - Administrative Services					
Accounting and Financial Reporting			149,490.00	149,490.00	N/A
Controller's Office			56,681.00	56,681.00	N/A
Facilities and Administrative Cost Study			234,983.00	234,983.00	N/A
Federal Single Audit			27,920.00	27,920.00	N/A
Human Resources	473.39	142.02		142.02	30.00%
Internal Audits			20,000.00	20,000.00	N/A
Purchasing			22,469.00	22,469.00	N/A
Total Vice President - Administrative Affairs	<u>473.39</u>	<u>142.02</u>	<u>511,543.00</u>	<u>511,685.02</u>	<u>108089.53%</u>
Total Support of Infrastructure (% is computed on total Facilities and Administrative costs generated from all units)	<u>473.39</u>	<u>142.02</u>	<u>1,809,108.00</u>	<u>1,809,250.02</u>	<u>382190.16%</u>
Provost's Office			80,950.00	80,950.00	N/A
Total Provost's Office	<u>0.00</u>	<u>0.00</u>	<u>80,950.00</u>	<u>80,950.00</u>	<u>N/A</u>
Vice President - Research					
Biotechnology Bond			790,010.00	790,010.00	N/A
Total Vice President - Research			<u>790,010.00</u>	<u>790,010.00</u>	<u>N/A</u>
Total	<u>19,622,066.37</u>	<u>13,280,470.74</u>	<u>6,662,594.00</u>	<u>19,943,064.74</u>	<u>101.64%</u>