EXECUTIVE SUMMARY

Six years have passed since USU’s Research Office merged with the School of Graduate Studies. Over that time, we’ve worked to develop strategies and programs to meet goals, demonstrate our values and further our mission.

In fiscal year 2016-2017, we’ve continued that effort, focusing on enhancing the efficiency and efficacy of recently implemented initiatives.

RGS training programs continued to grow in attendance as we’ve implemented regular surveys to gauge interest and needs. Technology efforts, including the reorganization of Technology Transfer Services and the implementation of Kuali, help streamlined processes for staff, faculty and students.

The future holds opportunities and challenges for RGS: the uncertainty surrounding future federal support for research and unpredictable F&A funding will put pressure on the RGS budget for the next few years. Additionally, the transition of Technology Transfer to an RGS division required significant efforts from RGS.

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OFFICE OVERVIEW

MISSION STATEMENT
The mission of USU’s Office of Research and Graduate Studies (RGS) is to facilitate a culture of excellence in research, scholarship and creative activity that spans the lifecycle of faculty and students through operational, training, funding and compliance support.

VALUES
Seven core values guide the way in which RGS executes its mission and formulates its key strategic goals and strategies. In the way a mission statement informs what RGS does, these values define how it is best accomplished.

RGS GOALS AND STRATEGIES
• Enhance Researcher Capacity & Productivity.
• Champion a culture of safety, compliance and integrity.
• Support Technology Transfer efforts.
• Enhance quality, quantity and inclusiveness of USU’s Grad Students and Programs.
• Enhance USU’s Undergraduate Research Program.

RGS ORGANIZATIONS AND DIVISIONS
RGS oversees nine divisions: Animal Care and Use, Environmental Health and Safety, Graduate and Undergraduate Research, Integrity and Compliance, the Institutional Review Board, Research Development, the School of Graduate Studies, Sponsored Programs and Technology Transfer Services. Each of these divisions works to support the RGS mission and strategic goals. In total, RGS has 63 full-time employees. The office also coordinates the USU Research and Graduate Councils. As of July 1, 2016 an additional division was added to RGS, Technology Transfer Services. This change will fundamentally affect RGS goals and strategies in the coming year.

CHAPTER 1
Strategic Planning & Implementation

INDIVIDUAL CAPACITY DEVELOPMENT
Faculty and graduate students should continue to grow their understanding of how to best propose, conduct and report research and scholarly activities.

INTEGRITY & SAFETY
Scholarship should be conducted with top consideration toward exceeding ethical and regulatory standards.

STUDENT ENGAGEMENT
Students are a core focus of a land-grant institution. They can have better educational experiences when they engage in research opportunities.

INTERDISCIPLINARY INTEGRATION
Research should not live within silos; all scholars can benefit from interdisciplinary learning.

APPLICATION
Research and scholarship should embrace the land-grant mission of providing meaningful impact for the state, nation and world.

INNOVATION
All activities should undergo constant evaluation for improvement in effectiveness and efficiency, and those opportunities should be implemented whenever possible.

TRANSPARENCY
As a public institution, all USU stakeholders should have access to a clear understanding of RGS functions and Operations.
### 1. Strategic Goal: Enhance Researcher Capacity & Productivity
- **Sponsored Programs**
  - [RGS.USU.EDU/SPO](http://RGS.USU.EDU/SPO)
- **Integrity & Compliance**
  - [RGS.USU.EDU/COMPLIANCE](http://RGS.USU.EDU/COMPLIANCE)

### 2. Strategic Goal: Champion a Culture of Safety, Compliance & Integrity
- **Research Development**
  - [RGS.USU.EDU/RD](http://RGS.USU.EDU/RD)
- **Environmental Health & Safety**
  - [RGS.USU.EDU/EHS](http://RGS.USU.EDU/EHS)

### 3. Strategic Goal: Support Technology Transfer Efforts
- **Technology Transfer Services**
  - [RGS.USU.EDU/TECHTRANSFER](http://RGS.USU.EDU/TECHTRANSFER)

### 4. Strategic Goal: Enhance Quality, Quantity, & Inclusiveness of USU’s Graduate Students & Program
- **School of Graduate Studies**
  - [RGS.USU.EDU/GRADSTUDIES](http://RGS.USU.EDU/GRADSTUDIES)

### 5. Strategic Goal: Enhance USU’s Undergraduate Research Program
- **Graduate & Undergraduate Research**
  - [RGS.USU.EDU/UNDERGRADRESEARCH](http://RGS.USU.EDU/UNDERGRADRESEARCH)
STRATEGIC GOAL 1

Enhance Researcher Capacity & Productivity

TRAINING FOR RESEARCH FACULTY (TRF)

In FY17, RGS continued its Training for Research Faculty workshops. The series provides resources and guidance on special topics related to research and graduate student mentorship through panels of faculty experienced in those areas. RGS queried all faculty in a survey in summer 2016 to determine what workshop topics were of greatest need and interest. After receiving feedback, RGS selected seven topics that were broadly applicable across disciplines, while others are chosen to address very specific faculty needs.

In 2016-17, an average of 30 faculty members RSVP’d for each TRF workshop. This is slightly lower than previous years’ attendance, likely due to more specialized workshop topics which included open access to data, interdisciplinary graduate training, and finding human research subjects.

The most attended TRF workshop of FY17 was “Supporting students who struggle with mental health issues.” The workshop shared warning signs, resources, and guidance for seeking help for graduate students, or anyone on campus. Significant ongoing discussion continued in the week following the December workshop.

TRF 2016-2017 TOPICS

- Support students who struggle with mental health
- Find participants for your research study
- Opportunities in interdisciplinary graduate training
- Increase your pool of potential graduate students
- Open access to data: What do I need to know?
- Utilize faculty Resources
- Mentor students more effectively

For FY18, RGS plans to reduce the number of offered workshops from seven to four, but it will continue with the format of utilizing faculty panels for input regarding content of the workshops. Next year’s workshops will implement broadcasts and online materials making these workshops more accessible to those who can’t attend due to time or location constraints.

KUALI IMPLEMENTATION

Effective February 2017, all campus units began utilizing Kuali for preparing and submitting sponsored proposals. To prepare for the implementation of Kuali Research, Sponsored Programs staff conducted over 20 campus-wide Kuali trainings, approximately 25 college/department-specific trainings and many one-on-one trainings to faculty within the first four months of Kuali implementation. Trainings were offered to Business Services personnel, department heads, college deans and any faculty interested in conducting sponsored research.

Further, Sponsored Programs created a number of quick guides, found on the RGS Kuali website, to lead faculty through proposal creation and budget preparation in Kuali. Sponsored Programs staff also assist with responding to requests for assistance with Kuali submitted through ServiceNow.

Kuali replaces Sponsored Programs’ paper based proposal submission process with an online system that streamlines proposal preparation, review, approval and submission. Kuali allows faculty to complete all internal and external proposal requirements in one spot, and allows submission to grants.gov directly through Kuali.

DEPARTMENT HEADS FORUM

In 2016, RGS hosted the first Department Heads Forum where we created a meeting space to allow for open conversation of challenging issues. On August 8, 2017, the second annual forum ran for two hours and covered a range of topics including Startup Funding, Space Surveys and Graduate Faculty in the departments. For each topic, critical information was exchanged and solutions were discussed. RGS is assembling a feedback summary for the department heads which will include links to requested information and documents.

SUNRISE SESSIONS

Now in its eleventh year, Sunrise Sessions bring the creative endeavors of USU’s faculty to our constituents in Salt Lake City. RGS continued with full management of the event, working closely with Advancement in tailoring each presentation’s audience to the speaker. The program continues to be supported by Regence.

RESEARCH WEEK

In early April, RGS hosted USU’s 12th annual Research Week (RW). RW highlighted the best of Undergraduate, Graduate and faculty research. Several events, including Ignite USU, the Student Research Symposium and the D. Wynne Thorne Lecture, shared faculty research. Several events, including Ignite USU, the Student Research Symposium and the D. Wynne Thorne Lecture, shared.

Over 50 awardees received formal recognition for their outstanding research acumen. The awards included Faculty Researchers of the Year, Doctoral Researchers of the Year, Masters Researchers of the Year and Undergraduate Researchers of the Year. At the Research Awards Gala two university awards, the D. Wynne Thorne Career Research Award and the Graduate Mentor of the Year, were awarded. Researchers who received notable grants or patents were also recognized for their accomplishments. Additionally, hundreds of students and faculty were recognized informally throughout the week.

Mark McLellan, Vice President for Research and Dean of Graduate Studies, introduces panelists at a Training for Research Faculty workshop.

On April 14, 2017, a standing-room-only crowd packed the library south atrium to hear nine students discuss the stories behind their research at Ignite USU.

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TEDxUSU

RGS organized its fifth TEDxUSU, an independently organized TED-like event dedicated to “ideas worth spreading.” Centered on the theme “Lift,” TEDxUSU 2016 featured eleven speakers whose talks spanned a wide range of disciplines. Speakers informed us of the role of native bees, the importance of diversity in comics and reframed the role and meaning of conflict.

For the first time, the TEDxUSU team pre-recorded a talk in a direct-to-camera format, making this talk available the same day as TEDxUSU. Additionally, graduate student speaker Amy Moser gave a talk on the role of geology in understanding and predicting earthquakes; it was featured on screens at the National Science Foundation headquarters in Washington D.C.

Over five years, TEDxUSU talks have been viewed over 836,000 times on YouTube.

TEDxUSU 2017

Due to the overwhelming interest in attending TEDxUSU, TEDx will be moving from the 400-person Manon Caine Russel Kathryn Caine Wanlass Performance Hall to the newly renovated Daines Concert Hall, quadrupling audience capacity. With this move, those interested in attending TEDxUSU will no longer have to enter a ticket lottery and can instead purchase tickets on a first-come-first-serve basis.
STRATEGIC GOAL 2

Champion a Culture of Safety, Integrity and Compliance

AAHRPP REACCREDITATION

In December of 2016, the USU Human Research Protections Program hosted site reviewers from the Association for the Accreditation of Human Research Protections Programs (AAHRPP). The IRB worked closely with the Office of Compliance Assistance to participate in the site-review required for Utah State University's reaccreditation cycle. Accreditation by AAHRPP is an assurance to the research community, participants included, that USU units diligently work to maximize protections to human participants in research. Students, faculty, staff and administrators met with AAHRPP site visitors to ensure that USU is adhering to the standards of accreditation set forth by the AAHRPP Council.

In March of 2017, Utah State University was awarded full AAHRPP Accreditation for the third time. AAHRPP Accreditation is awarded in five year cycles, with an annual reporting requirement every Spring semester. AAHRPP made two findings related to USU's Human Research Protections Program, both of which have been addressed to the satisfaction of the AAHRPP Council. Despite lower than average staffing for an IRB with as many protocols as USU produces, USU's IRB has demonstrated a commitment to ensuring high standards for its HRPP.

These three simple rules of safety help USU faculty and staff create a culture of safety:

1. If you are in authority over a location, activity, or program then you must know and understand the hazards associated with the location, activity, or program. (Assess hazards.)
2. Safely Train - Anyone entering into the location, activity, or program with a known hazard, you must ensure they are made aware of the hazard. (Complete safety training.)
3. Upon identifying the hazard and conducting training for the hazard, a record must be made regarding hazard assessment and the training. (Record the training details.)

AAALAC REACCREDITATION

The IACUC and LARC at USU continue in their dedication to high quality animal care and welfare. In March 2016, the LARC at USU participated in a triennial site visit with representatives from AAALAC International. Subsequent to the site visit the LARC and its staff have responded to recommendations that were made and received notification in March 2017 that full ongoing accreditation had been granted. The next AAALAC accreditation visit is expected to occur in the spring of 2019.

EHS PERSONNEL AT USU EASTERN

USU Eastern is the largest of Utah State University regional campuses, and the only full service regional campus. USU Eastern has its own student housing, dining, facilities, custodial, grounds and police services. The size of the USU Eastern campus and scope of the services they offer has required EHS staff to make frequent trips to the USU Eastern Campus in order to provide safety training, establish OSHA safety programs and address safety concerns. In FY16, an agreement was established between RGS and USU Eastern to provide the campus with a full time environmental health and safety professional, and Mr. Cameron Mix was hired into that position in FY17. Cameron brings high level safety expertise to USU Eastern and other regional campuses, and he facilitates local delivery of all required environmental, health and safety training. Cameron also participates on the USU Eastern Safety Committee as well as the USU Safety Committee. In sum, his presence on the USU Eastern campus helps ensure USU safety policies and all applicable occupational safety, industrial hygiene, radiation and environmental regulations are understood and regularly followed.

REVAMPED STRUCTURE OF USU SAFETY COMMITTEES

Approval of the revised USU Safety and Health Policy (K337) by the USU Board of Trustees in May of 2016 established a more formal and institutionally representative USU Safety Committee, as well as college/unit committees that are comprised of a safety representative from every USU department. The Safety Committee includes each of the eight academic College Safety Committee chairs, as well as the following representatives or their designees:

- The Director of USU’s Environmental Health and Safety Division (EHS)
- The chairs from the University Safety Committees (USU Biohazards Committee, Institutional Biosafety Committee, Chemical Hygiene Committee, and Radiological Safety Committee), who are appointed by the Vice President for Research
- The chair of the Risk Control Committee, who is appointed by the Vice President for Business and Finance
- The President of the Classified Employees Association
- The USU Police Chief
- A representative chosen by the Regional Campus/Eastern Administrative Council
- Other appropriate university units that participate in an ad hoc capacity as necessary. The Vice President for Business and Finance appoints individuals to represent USU’s auxiliary services. Those currently include USU’s Fire Marshall and the Directors for Housing and Dining Services.

NEW POLICY RELATED TO FEDERAL RULES FOR PUBLIC ACCESS TO RESEARCH PUBLICATIONS AND DATA

USU implemented two policy changes in FY16 related to new Federal rules for public access to research publications and data. First, USU policy S86-Open Access to Scholarly Articles, was revised to ensure its alignment with federal rules on public access to research publications. In January 2016, the Research Council approved a recommendation from the Library that section 4.1 of policy S86 be revised to include the following text (emphasized):

“All employees during their employment with the University to the University a nonexclusive license to exercise any and all rights under copyright relating to each of their scholarly articles, in any medium, provided that the articles are not sold for profit, and to authorize others to do the same. These articles will also be deposited in the University’s Open Access Institutional Repository to ensure the widest possible dissemination. The nonexclusive license will be waived at the sole discretion of the author, except in cases where a funder mandates requires article deposit, and will be administered on behalf of the Provost’s Office by the Library.”
STRATEGIC GOAL 3

Support technology transfer efforts

NEW DIVISION AND VISION

Technology Transfer Services (TTS) was restructured as a new division within RGS and relocated to Old Main. Rebranding our division to include services was an intentional decision to bring TTS’ focus back to USU’s faculty. Our goal is to provide faculty, staff and students training, consultation, business services, strategic protection and commercialization of USU discoveries and inventions. To achieve our goal, we have identified five strategies:

1. Provide training and communication to current and potential USU inventors.
2. Provide guidance on commercialization opportunities.
3. Coordinate efficient commercialization and legal services for IP holders.
4. Promote the commercialization of USU discoveries.
5. Foster regional economic development.

The TTS team is dedicated to providing the services and support to protect and promote the commercialization of discoveries and technologies invented at Utah State University that improve quality of life for faculty and staff.

CHRISTIAN IVerson, DIRECTOR

Christian Iverson’s primary area of focus is the commercialization of life science technologies. Christian has ten years of experience in biotechnology research, development, commercialization and start-up management.

Prior to joining Utah State in 2012, he served as the Executive Director of the Spendlove Medical Research Institute where he led the multiplex development of antibodies for the Q-Plex Technology. The technology was licensed to Quansys Biosciences and he was picked to function as the VP of Business Development, he oversaw the Sales and Marketing and Administration activities for the company.

Prior to his employment at Quansys, he was an R&D Project Manager at the Spendlove Medical Research Institute where he led the multiplex development of antibodies for the Q-Plex Technology. The technology was licensed to Quansys Biosciences and he was picked to function as the VP of Business Development. Christian Iverson earned his undergraduate degree in English with a minor in Chemistry as well as her MBA from Utah State University.

KATE ASTLE, TECHNOLOGY TRANSFER MANAGER

Kate Peterson Astle’s primary area of focus is the commercialization of education and software related technologies. Astle joined the Technology Transfer Services team in 2012.

During her time at USU, Kate has worked on a number of proposals and contracts, most recently helping USU receive the “Innovation and Economic Prosperity Designation” by the Association of Public Land-Grant Institutions.

Kate also served as an Entrepreneurial Mentor for an NSF-funded i-Corps team, where she had the opportunity to coach a team of scientific researchers through the process of customer discovery and market fit using lean startup methodologies.

Prior to joining the Technology Transfer Services team, Kate served as a Graduate Research Assistant for economics professor Dr. Nick Lei Guo. Kate earned her undergraduate degree in English with a minor in Chemistry as well as her MBA from Utah State University.

PROVIDE REGULAR FINANCIAL REPORTS TO IP HOLDERS

In an effort to provide an improved level of service and transparency we’ve implemented regular financial reports that are sent to our faculty inventors. This report details the relevant financial data for licensed IP–revenue received, accumulated IP, TTS expenses and the distributions of received revenue to individual inventors, departments and the university.

CONNECTIONS WITH FACULTY MEMBERS

Gaining the trust and cooperation of faculty—and educating researchers on key commercialization challenges—is critical to TTS’ success. Under the new direction from RGS, TTS is focused on serving and connecting with all USU faculty inventors. An important initial step was to host an open forum for the USU community to update them on changes to USU’s technology transfer transfer future and to engage in a conversation about technology transfer at USU. As a direct result from this listening session, TTS has been focused on establishing and in some cases rebuilding faculty relationships and jumpstarting the commercialization of USU intellectual properties.

ALAN EDWARDS, TECHNOLOGY TRANSFER MANAGER

Alan Edwards was added to the TTS team in March 2017. His primary focus is on the innovative technologies originating from the College of Engineering, Physics Department and the Space Dynamics Laboratory. He joined the Technology Transfer Services team in 2017, with previous experience as a technology manager at the University of Utah, commercializing faculty innovations ranging from laser interferometry to music recording systems through licensing or startup company.

Alan is a registered patent attorney with several years of experience protecting, enforcing and defending technologies that include diesel engines, photographic optics and nuclear plasma containment methods in New York, Utah, Colorado and Washington D.C. federal courts, with additional experience in trademarks, copyrights, trade secrets, licensing and domain name disputes. Alan has been an advisor to the officer of the National Congress of Inventor Organizations. He co-founded and was CEO of Great Sun Software, a sports-related startup company, and for 10 years was an award-winning journalist with the Salt Lake Deseret News, covering technology, government and a variety of other topics. Alan holds a BA in physics and MA in communications from Utah State University, and a JD from Duke University.
ESTABLISH AND WORK WITH TTS ADVISORY BOARD

An effective advisory board is essential to the technology transfer infrastructure. The TTS Advisory Board was organized in early 2017 and held its first meeting in March 2017. Our board member participation helps provide additional perspective needed to effectively guide TTS services and projects. TTS is pleased to have the following as members of its Advisory Board:

- G. Michael Alder
  Director, Office of Technology Transfer at Brigham Young University
- Jeff Bernel
  Adjunct Professor, University of Notre Dame and Valparaiso University
- Lisa M. Berreau
  Associate Dean of Research and Faculty Issues, Utah State University, College of Science
- Cory J. Card
  Principal Scientist, Cell Culture, GE Healthcare
- James Davis
  Chairman of the Management Department, Director of Executive Education, Jon M. Huntsman School of Business, Utah State University
- T. Wade Fallin
  CEO, Surgical Frontiers
- Jake Gunther
  Department of Electrical and Computer Engineering Department Head, Utah State University
- H. Scott Hinton
  President, Utah State University Research Foundation
- Susan Mooney Johnson
  President & CEO, Futura Industries
- Kevin Reeve, Director
  Teaching & Learning Technology, Utah State University, Academic & Instructional Services
- Kelly Slone
  President & CEO, BioUtah
- Kenneth White
  Dean of the College of Agriculture and Applied Sciences, Utah State University

We expect our board members to actively review TTS activities and strategies and assess future activities and plans of the office. In doing so, the advisory board will address its primary tasks:

- Ensure USU Technology Transfer Services provides effective services and technical support to the university’s research, outreach and teaching community.
- Foster more proficient disclosure, capture and commercialization of USU intellectual property.
- Strengthen the advisory board to be more active in assessing the research commercialization activity of new faculty startups.
- We believe in the importance of supporting USU intellectual property (IP) and helping faculty bring their IP to market.
- The advisory board will help us shape the next era of our technology commercialization activities, following the transfer and restructure of the office as a division of RGS. The members of the advisory board are expected to discuss TTS activities, operations and opportunities and provide critical feedback. The board is advisory to the Vice President for Research, and to the TTS leadership structure. Dr. Jeff Broadbent has been designated as chair of the advisory board.

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STRATEGIC GOAL 4

Enhance Quality, Quantity and Inclusiveness of USU’s Graduate Students And Programs

EMERGENCY HEALTH FUND

Many graduate students lack the financial resources to deal with medical emergencies. Unplanned expenses of that sort may put at risk a student’s ability to complete a graduate degree program. In spring 2017, RGS created an Emergency Medical Fund that can help defray unexpected health costs. Applications submitted by students are reviewed by Dr. James Davis (Director, Student Health & Wellness Center) and by RGS.

FLEXIBILITY IN GRADUATE STUDENTS ON STARTUP FUNDING

This year RGS was able to conduct discussions with department heads and others to get feedback on many of our programs. Some of the feedback we heard related to our new faculty startups. After RGS reviewed the feedback and discussed the implications the new faculty startups were modified to expand support for graduate students. Previously new faculty startups were limited to 1 year of RGS funded support for graduate students. Now up to 3 years of RGS funded graduate assistantships can be included on new faculty startups.

This is clearly of benefit to new faculty and is decidedly important in recognizing the needs of researchers who might heavily depend upon graduate student research as a major cost of their program versus laboratory equipment for example. Other additions to the new faculty startup form include a place for terms and conditions that the department or college feel are important to specify regarding the startup funds.

We believe that this new flexibility in the startup support will be a great addition to attracting new faculty to our ranks. We have already received positive feedback regarding this change and are seeing the expanded graduate assistantship support be used in offers to new faculty members. RGS is pleased to partner with departments and colleges on new faculty startups in their search for the best faculty hires possible.

RECURRING SURVEYS

RGS believes that making data-driven decisions is the best way to achieve both desirable and measurable results. Because of this, we place a high priority on data collection and analytics. Throughout the year, we conduct surveys and assemble focus groups to collect data about graduate student recruitment. We use these data to better target our recruiting efforts, and we also provide them to departments and graduate programs to help in their decision making.

Our office administers and analyzes a New Student Survey and an Opt-In Survey for graduate students on a yearly basis. We also collaborate with the Office of Analysis, Assessment and Accreditation (AAA) in providing a Graduating Student Survey. These surveys assess graduate student opinion on a variety of subjects, including their graduate school search, the availability of financial aid, social media use, overall satisfaction with the USU experience, etc.

Although RGS has recurring data collection methods, there are frequently more data needs that arise throughout the year. Our office administers various other surveys in order to fill these informational needs. These projects are termed “Ad-hoc Surveys”, and in 2017 will include a Department Graduate Recruitment Self-Assessment, a Non-Enroll Survey, a Potential Student Survey and analyses of various events hosted by the Project Management and Communications team. These data will be collected and analyzed to help in the decision process for specific areas.
In February of 2016, RGS hosted Utah State University’s first multi-department graduate recruitment weekend visit. Fourteen departments participated, bringing 61 potential graduate students to campus to get to know the programs and opportunities available to them at USU.

Prior to the implementation of the weekend visit, individual programs and departments were already bringing prospective students to campus. Over the past year, 67% of graduate recruitment grants requested from the Office of RGS were used in whole or in part for bringing prospective graduate students to campus. By providing centralized programming during the recruitment weekend visit, more students can receive a quality experience while engaging with USU.

Centralized programming for the weekend visit included a welcome breakfast, the February Graduate Training Series workshop, a campus tour, optional recreational activities such as skiing or snowshoeing and several meals. In the future, the Graduate Student Social will be included instead of the Graduate Training Series.

After the visit, participants were asked to rate their impression of USU prior to attending, as well as their current impression. Ratings from prior to the visit ranked from 3-10 with an average of 6.5, and ratings from after the visit ranked from 7-10 with an average of 8.7. After having attended the recruitment weekend, 90% of survey respondents said they were either likely or very likely to attend USU, 10% said they were neutral, and 0% reported that they were either unlikely or very unlikely to attend USU.

Departments accepted 49 of the weekend visit participants, of whom 55% chose to attend USU.

Each year the Graduate School reviews nominations and selects a graduate student to be the Graduate Researcher of the Year. This award recognizes an outstanding contribution in research or creative activity. In light of the greater time and effort that is typically associated with a Doctoral Dissertation relative to a Master’s Thesis, and to ensure that an outstanding Master’s student would have an equal chance for this recognition, the Graduate Council decided to make separate Master’s and Doctoral Researcher of the Year awards, beginning in spring 2018.

This year, RGS began hosting monthly socials for USU graduate students at the Logan Country Club. (The events are designed to fill a need expressed by students to be able to meet and mingle with others outside their own disciplines and cohorts. Each month a different college signs up to be host for that event.)
STRATEGIC GOAL 5

Enhance USU’s Undergraduate Research Program

UR MENTOR ORIENTATION
In fall, 2016, the division of Graduate and Undergraduate Research extended the orientation schedule to a new audience: faculty mentors. The faculty mentor orientation was designed to outline the undergraduate research program for the coming year, including important dates, events, and programming. It was also an opportunity to outline changes and additions to the undergraduate research program. Finally, it was an opportunity to get feedback from faculty mentors related to the undergraduate research program. All faculty mentors were invited, as were all new faculty.

INCREASE IN PEAK ENDOWMENT
Terry Peak, professor in the department of sociology, social work, and anthropology, and David Peak, professor of physics, have generously expanded the nature and scope of the David and Terry Peak Endowment for Undergraduate Research, and made another significant contribution. The endowment was amended to include funding for the Joyce Kinkead honors thesis of the year and the Undergraduate Research Mentor of the Year. Both of these awards will now be funded by the endowment. The endowment will continue to fund the Peak Prize award for the Undergraduate Researchers of the year at each college, and the university-wide undergraduate researcher of the year, awarded at the annual Robins awards.
The Research Council provides advice and recommendations to the Vice President for Research and the Dean of the School of Graduate Studies. Additionally, members of the council provide direct and important channels of communication between researchers and those who make decisions affecting research at USU.

SEPTEMBER 2016
The Research Council reviewed and discussed the distribution of awards and research spending. The Council also discussed the restructure and renaming of the Division of Technology Transfer Services (TTS), its new alignment under the Office of RGS and the new roles within the division. Christian Iverson was introduced to the Research Council as TTS Director. Additionally, the Research Council discussed draft revisions to Intellectual Policy #587. These revisions to the policy incorporate the restructure of TTS.

NOVEMBER 2016
The Research Council reviewed TEDxUSU 2016 and future plans for the event. With over 4000 requests for tickets and only 400 seats available, the 2017 event will be held in Daines Concert Hall, which accommodates approximately 1500 attendees. Recorded talks are featured at tedx.usu.edu. The Research Council discussed the successful implementation of Kuali by Natural Resources and the College of Science. Remaining colleges implemented Kuali on February 1, 2017 after each college successfully completed training.

JANUARY 2017
The Research Council continued discussion on the Kuali/Coeus update. As of Feb. 1, 2017, no SPO-1 forms will be submitted by paper or Docusign. A step by step guide to entering a proposal in Kuali can be accessed at: http://rgs.usu.edu/spo/. Technical work to interface Kuali data with Digital Measures was completed early in July 2017.

MARCH 2017
The Research Council discussed FY17’s F&A budget. Notable items from the new budget include the following:

- Support with colleges on new faculty startup packages in FY2018 will be distributed over a three-year budget span as 19% from RGS in FY2018, 40% in FY2019, 50% in FY2020. The distribution will then return to normal in FY2019 (1/3 shared funding over each of the subsequent three years).
- No new funding of E&G assistantships in FY2018.
- F&A funding to support PDRF will temporarily be moved to residual fee funding.
- RC/SPARC/GEM seed funding grants capped at $500K.
- No equipment match grants will be offered in FY2018. (Current matches will remain and are already allocated in budget. This program will return in 2019.)
- Post Doc support trimmed back.
- Cost savings implemented by purchasing energy directly from supplier versus third party that is designated for USTAR O&M fees.
- Disallowance budget reduced based on improved past vendor performance.
- Reduce the number of RGS funded Faculty Fellows going to Washington, DC this fall from 20 to 15.
ACTIVITIES OF THE GRADUATE COUNCIL

The Graduate Council advises the Vice President and the Dean for Research and Graduate Studies, providing a forum for considering major graduate program and student issues and approving changes in programs.

DIGITAL SUBMISSION OF THESIS TO LIBRARY

Beginning October 1, 2016, the library will accept electronic theses. Exceptions are still in place for embargoed theses.

CATALOG UPDATE

The Graduate General Catalog was updated to reflect current members and college/school participants currently on the Graduate Council.

PORTFOLIO OPTION

As of Jan 11, 2017, the full-time MBA program will waive the entrance exam requirement for students submitting a portfolio. The conditions for receiving this waiver can be found in the memorandum below:

RE: Portfolio Wavier Request for Full-time MBA Program (Approved 1-11-2017)

The MBA program in the Huntsman School of Business would like to amend the entrance exam requirement for the full-time MBA program. In addition to the entrance exam option, we would like to add a portfolio waiver option. We propose that the portfolio waiver be based on an applicant’s body of work experience in industry.

To be considered for the portfolio waiver, candidates must have a minimum of four years of managerial leadership experience. The admissions committee (consisting of four MBA program faculty, one from each Huntsman School Departmental Discipline) will review candidate experience portfolio for admission and make recommendations to the MBA Program Director who will make the final admission decision.

Many MBA programs across the country, including aspirational peer institutions, (e.g., the University of Notre Dame, University of Michigan, NYU Stern School, Northwestern, University of Southern California, Washington State, etc.) provide the option of an experience-based portfolio for admission for applicants with significant work experience. We, therefore, request that the option for a portfolio waiver be added to our application process for our full-time MBA program.

Director of MBA Programs
Huntsman School of Business
Utah State University

ADMISSIONS TEST REQUIREMENT

The Social Inequality and MOU Memorandum of Understanding regarding applicants to the MSW Program at USU dropped the admissions test requirement for applicants with a master’s degree.

ELIGIBILITY FOR GRADUATE MENTOR AWARD

The Council approved the wording change for award eligibility from “university employee” to “faculty” who taught within the last 12 months; this includes adjunct faculty.

GRADUATE STUDENT HEALTH INSURANCE

Due to unexpected, significant medical costs, premiums for the self-funded program will increase. The Council also discussed increasing deductibles, premiums and partnering with other universities.

FACULTY START UP FORM

The Council discussed the form to review guidelines and to encourage sharing within departments. This form now gives a three-year timeline for funding of assistantships and can provide more information and documentation of actual strategies. Download the Form Here.

GRAD COUNCIL ROSTER

<table>
<thead>
<tr>
<th>Chair</th>
<th>Mark McLellen</th>
<th>School of Graduate Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>EndTerm</td>
<td>2016</td>
<td>Abby Benninghoff Agriculture</td>
</tr>
<tr>
<td>2018 Kathy Puzey Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018 Konrad Lee Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018 Troy Beckert Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018 Nick Flann Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018 Rick Krannich CHaSS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018 Johan Du Toit Natural Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019 Michelle Baker Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017 Lisa Gabbert Faculty Senate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Britt Fagerheim Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Ty Aller Graduate Senator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Members of the USUSA graduate council meet together.
CHAPTER 3

By the Numbers

USU PROFILE

Utah State University is Utah’s land-grant and space grant institution. Its Carnegie classification is RU/H, a research university with high research activity. USU consists of the Logan Campus, a regional college (USU-Eastern) and three regional campuses (Brigham City, Tooele, Uintah Basin).

USU has eight academic colleges: Caine College of the Arts, College of Agriculture and Applied Sciences, Jon M. Huntsman School of Business, Emma Eccles Jones College of Education and Human Services, College of Engineering, College of Humanities and Social Sciences, S.J. and Jessie E. Quinney College of Natural Resources, and the College of Science. USU also has a highly productive Extension program.

USU ranks second in the nation in aerospace and aeronautical research funding and third in the nation in external funding for a college of education. USU also consistently is ranked highly as a high value university for graduate students and undergraduates.

PROFILE OVERVIEW

<table>
<thead>
<tr>
<th>Faculty Members (2016)</th>
<th>800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total headcount enrollment (Fall 2016)</td>
<td>28,118</td>
</tr>
<tr>
<td>Graduate degrees offered</td>
<td>142</td>
</tr>
<tr>
<td>Total # sponsored awards received (FY17)</td>
<td>1,416</td>
</tr>
<tr>
<td>Total USU sponsored awards (FY17)</td>
<td>$238.1 M</td>
</tr>
<tr>
<td>Total # USU proposals (FY17)</td>
<td>1,463</td>
</tr>
<tr>
<td>Total amount of USU proposals (FY17)</td>
<td>$679.4 M</td>
</tr>
</tbody>
</table>

SPONSORED AWARDS

USU SPONSORED AWARDS, FY 2013-17

<table>
<thead>
<tr>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Research</td>
<td>USU Research Foundation</td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$190.6 M</td>
<td>$44.4 M</td>
<td>$90.0 M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$221.4 M</td>
<td>$77.3 M</td>
<td>$99.6 M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$232.8 M</td>
<td>$75.4 M</td>
<td>$111.3 M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$243.9 M</td>
<td>$99.6 M</td>
<td>$98.5 M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$238.1 M</td>
<td>$84.3 M</td>
<td>$108.5 M</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Includes financial aid, Pell Grants, federal formula funds and gifts for research.
## SPONSORED AWARDS, FY13 - FY17

<table>
<thead>
<tr>
<th>USU ACADEMIC COLLEGE</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>Change Over LY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>$13,771,403</td>
<td>$19,153,454</td>
<td>$19,608,798</td>
<td>$15,738,020</td>
<td>$20,838,041</td>
<td>32%</td>
</tr>
<tr>
<td>Arts</td>
<td>$5,000</td>
<td>$21,700</td>
<td>$70,008</td>
<td>$38,000</td>
<td>$99,640</td>
<td>162%</td>
</tr>
<tr>
<td>Business</td>
<td>-</td>
<td>$239,118</td>
<td>-</td>
<td>-</td>
<td>$75,000</td>
<td>-25%</td>
</tr>
<tr>
<td>Education</td>
<td>$24,032,307</td>
<td>$27,192,393</td>
<td>$40,044,261</td>
<td>$32,047,117</td>
<td>$25,841,878</td>
<td>-19%</td>
</tr>
<tr>
<td>Engineering</td>
<td>$15,645,515</td>
<td>$11,869,831</td>
<td>$11,858,717</td>
<td>$12,057,115</td>
<td>$15,691,032</td>
<td>30%</td>
</tr>
<tr>
<td>CHaSS</td>
<td>$1,428,822</td>
<td>$896,037</td>
<td>$1,899,816</td>
<td>$1,827,820</td>
<td>$5,885,679</td>
<td>222%</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>$13,443,810</td>
<td>$9,572,317</td>
<td>$7,289,265</td>
<td>$9,761,161</td>
<td>$14,038,210</td>
<td>44%</td>
</tr>
<tr>
<td>Science</td>
<td>$6,484,336</td>
<td>$14,459,045</td>
<td>$9,744,040</td>
<td>$15,974,335</td>
<td>$11,745,768</td>
<td>-26%</td>
</tr>
</tbody>
</table>

### OTHER

<table>
<thead>
<tr>
<th></th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>Change Over LY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extension</td>
<td>$3,800,117</td>
<td>$4,479,248</td>
<td>$3,142,518</td>
<td>$3,249,655</td>
<td>$5,069,381</td>
<td>56%</td>
</tr>
<tr>
<td>Student Services</td>
<td>$960,612</td>
<td>$1,763,941</td>
<td>$2,283,886</td>
<td>$1,721,134</td>
<td>$792,224</td>
<td>-54%</td>
</tr>
<tr>
<td>USU Eastern</td>
<td>$2,660,336</td>
<td>$2,952,436</td>
<td>$2,938,077</td>
<td>$3,190,900</td>
<td>$3,620,329</td>
<td>13%</td>
</tr>
<tr>
<td>Miscellaneous¹</td>
<td>$7,860,853</td>
<td>$7,188,215</td>
<td>$2,417,895</td>
<td>$2,834,999</td>
<td>$4,803,063</td>
<td>69%</td>
</tr>
<tr>
<td>Campus Subtotal</td>
<td>$89,993,112</td>
<td>$99,626,736</td>
<td>$111,297,272</td>
<td>$98,540,187</td>
<td>$108,500,244</td>
<td>10%</td>
</tr>
<tr>
<td>USURF²</td>
<td>$56,228,730</td>
<td>$77,297,145</td>
<td>$75,192,952</td>
<td>$99,581,109</td>
<td>$84,372,932</td>
<td>-15%</td>
</tr>
<tr>
<td>Financial Aid, Pell Grants</td>
<td>$39,963,233</td>
<td>$39,484,606</td>
<td>$48,782,241</td>
<td>$39,922,418</td>
<td>$38,237,530</td>
<td>-4%</td>
</tr>
<tr>
<td>Federal Formula Funds</td>
<td>$4,432,614</td>
<td>$4,817,946</td>
<td>$4,480,428</td>
<td>$4,845,494</td>
<td>$4,864,716</td>
<td>0%</td>
</tr>
<tr>
<td>Gifts for Research</td>
<td>$20,125</td>
<td>$127,100</td>
<td>$521,459</td>
<td>$1,044,612</td>
<td>$2,149,549</td>
<td>106%</td>
</tr>
</tbody>
</table>

### USU Grand Total

<table>
<thead>
<tr>
<th></th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>Change Over LY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$190,637,803</td>
<td>$221,415,533</td>
<td>$232,794,322</td>
<td>$243,933,880</td>
<td>$238,114,971</td>
<td>-2.4%</td>
</tr>
</tbody>
</table>

1. "Miscellaneous" is a catch-all category, with the Provost’s Office, Administrative Services, and Regional Campuses accounting for the majority of these revenues.

2. AWS awards for FY14 in the amount of $488,684 have been included with USURF totals.

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## RESEARCH EXPENDITURES, FY 2012 - FY 2016

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Change Over LY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Expenditures</td>
<td>$157,355</td>
<td>$158,352</td>
<td>$169,605</td>
<td>$175,353</td>
<td>$183,105</td>
<td>4.42%</td>
</tr>
</tbody>
</table>

Source: NSF HERD Survey

1 Estimated. Includes tuition remissions to graduate students working on research. This information was not available for FY12 & FY13.

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ANNUAL REPORT
<table>
<thead>
<tr>
<th>Institution</th>
<th>Research Expenditures</th>
<th>Tenured Faculty</th>
<th>Tenure-Track Faculty</th>
<th>Total Faculty</th>
<th>Expenditures per Tenured Faculty ($K)</th>
<th>Carnegie Ranking</th>
<th>F&amp;A Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSU Colorado State University-Fort</td>
<td>$308.0</td>
<td>$317.2</td>
<td>75</td>
<td>73</td>
<td>754</td>
<td>753</td>
<td>223</td>
</tr>
<tr>
<td>KSU Kansas State University</td>
<td>$184.9</td>
<td>$188.7</td>
<td>106</td>
<td>106</td>
<td>598</td>
<td>545</td>
<td>219</td>
</tr>
<tr>
<td>MSU Montana State University</td>
<td>$113.3</td>
<td>$108.4</td>
<td>140</td>
<td>141</td>
<td>320</td>
<td>316</td>
<td>153</td>
</tr>
<tr>
<td>NMSU New Mexico State University-</td>
<td>$134.3</td>
<td>$132.4</td>
<td>129</td>
<td>133</td>
<td>400</td>
<td>392</td>
<td>166</td>
</tr>
<tr>
<td>OSU Oregon State university</td>
<td>$231.0</td>
<td>$245.3</td>
<td>90</td>
<td>86</td>
<td>595</td>
<td>589</td>
<td>297</td>
</tr>
<tr>
<td>UNeb University of Nebraska-Lincoln</td>
<td>$278.3</td>
<td>$284.4</td>
<td>80</td>
<td>79</td>
<td>766</td>
<td>751</td>
<td>273</td>
</tr>
<tr>
<td>UNev University of Nevada-Reno</td>
<td>$87.3</td>
<td>$90.1</td>
<td>155</td>
<td>150</td>
<td>370</td>
<td>366</td>
<td>157</td>
</tr>
<tr>
<td>UWyo University of Wyoming</td>
<td>$51.4</td>
<td>$57.0</td>
<td>191</td>
<td>184</td>
<td>411</td>
<td>413</td>
<td>174</td>
</tr>
<tr>
<td>WSU Washington State University</td>
<td>$326.4</td>
<td>$333.1</td>
<td>69</td>
<td>68</td>
<td>604</td>
<td>665</td>
<td>236</td>
</tr>
<tr>
<td>USU Utah State University</td>
<td>$169.6</td>
<td>$175.4</td>
<td>115</td>
<td>110</td>
<td>483</td>
<td>491</td>
<td>207</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institution</th>
<th>Undergrad Enrollment</th>
<th>Grad Enrollment</th>
<th>% Grad Enrollment</th>
<th>Grad Students per Faculty</th>
<th>Doctorates Awarded</th>
<th>MS Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23,598</td>
<td>23,917</td>
<td>7,756</td>
<td>6,697</td>
<td>24.7%</td>
<td>21.9%</td>
</tr>
<tr>
<td></td>
<td>20,327</td>
<td>19,817</td>
<td>7,756</td>
<td>6,697</td>
<td>24.7%</td>
<td>21.9%</td>
</tr>
<tr>
<td></td>
<td>13,298</td>
<td>13,633</td>
<td>1,684</td>
<td>1,603</td>
<td>11.2%</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>12,784</td>
<td>12,526</td>
<td>3,045</td>
<td>2,964</td>
<td>19.2%</td>
<td>19.1%</td>
</tr>
<tr>
<td></td>
<td>23,003</td>
<td>24,612</td>
<td>4,983</td>
<td>4,964</td>
<td>17.3%</td>
<td>16.8%</td>
</tr>
<tr>
<td></td>
<td>19,979</td>
<td>20,382</td>
<td>5,027</td>
<td>5,078</td>
<td>20.1%</td>
<td>20.1%</td>
</tr>
<tr>
<td></td>
<td>16,839</td>
<td>17,770</td>
<td>3,095</td>
<td>3,128</td>
<td>15.9%</td>
<td>15.9%</td>
</tr>
<tr>
<td></td>
<td>10,124</td>
<td>10,045</td>
<td>2,696</td>
<td>2,603</td>
<td>21.0%</td>
<td>20.6%</td>
</tr>
<tr>
<td></td>
<td>23,867</td>
<td>24,470</td>
<td>4,819</td>
<td>3,363</td>
<td>16.8%</td>
<td>12.1%</td>
</tr>
<tr>
<td></td>
<td>24,271</td>
<td>25,259</td>
<td>2,528</td>
<td>2,587</td>
<td>12.3%</td>
<td>11.7%</td>
</tr>
</tbody>
</table>

Sources:
1. NSF HERD report
2. IPEDS Data Center (This differs from the calculations used for internal tracking on page 33.)
3. Includes non-tenure track instructional faculty.
4. Based on the total number of tenured plus tenure-track faculty, instructional faculty were excluded.
## PERFORMANCE METRICS

### RESEARCH

<table>
<thead>
<tr>
<th></th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total New Awards</strong></td>
<td>$ 221.4 M</td>
<td>$ 232.8 M</td>
<td>$ 243.9 M</td>
<td>$ 238.1 M</td>
</tr>
<tr>
<td>National Rank for Research Expenditures (643 institutions)</td>
<td>115</td>
<td>110</td>
<td>NYA</td>
<td>NYA</td>
</tr>
<tr>
<td>New Sponsored Programs Proposals Submitted</td>
<td>1521</td>
<td>1600</td>
<td>1422</td>
<td>1463</td>
</tr>
<tr>
<td>Peer-reviewed Journal Publications</td>
<td>962</td>
<td>1000</td>
<td>1058</td>
<td>997</td>
</tr>
<tr>
<td>Books</td>
<td>42</td>
<td>31</td>
<td>42</td>
<td>41</td>
</tr>
<tr>
<td>Public Exhibitions and Public Performances</td>
<td>58</td>
<td>41</td>
<td>79</td>
<td>104</td>
</tr>
</tbody>
</table>

### GRADUATE STUDIES

<table>
<thead>
<tr>
<th></th>
<th>AY13-14</th>
<th>AY14-15</th>
<th>AY15-16</th>
<th>AY16-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall (day 15) Enrollment of Degree-Seeking Grad Students</td>
<td>2527</td>
<td>2528</td>
<td>2587</td>
<td>2479</td>
</tr>
<tr>
<td>Percentage of Student Body that is Grad Students</td>
<td>12.3%</td>
<td>12.3%</td>
<td>11.7%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Doctoral Degrees Awarded</td>
<td>115</td>
<td>108</td>
<td>102</td>
<td>NYA</td>
</tr>
<tr>
<td>Master’s Degrees Awarded</td>
<td>927</td>
<td>900</td>
<td>830</td>
<td>NYA</td>
</tr>
</tbody>
</table>

### GRADUATE & UNDERGRADUATE RESEARCH

<table>
<thead>
<tr>
<th></th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-reviewed Publications with Graduate Student Authors</td>
<td>339</td>
<td>357</td>
<td>341</td>
<td>302</td>
</tr>
<tr>
<td>Peer-reviewed Publications with Undergraduate Authors</td>
<td>38</td>
<td>53</td>
<td>54</td>
<td>65</td>
</tr>
</tbody>
</table>

### RGS PROGRAM REPORTS AND METRICS

#### RGS PORTION OF NEW FACULTY STARTUP COMMITMENTS

<table>
<thead>
<tr>
<th>College</th>
<th>Total FY13</th>
<th>Average FY14</th>
<th>Yearly Total FY15</th>
<th>Average FY16</th>
<th>Yearly Total FY17</th>
<th>Average FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caine College of the Arts</td>
<td>$ 13,218</td>
<td>$ 2,802</td>
<td>Yearly Total: 3,066</td>
<td>Yearly Average: 3,066</td>
<td>Yearly Total: 2,538</td>
<td>Yearly Average: -</td>
</tr>
<tr>
<td>College of Agriculture</td>
<td>$ 941,358</td>
<td>$ 54,357</td>
<td>Yearly Total: 72,600</td>
<td>Yearly Average: 36,300</td>
<td>Yearly Total: 74,814</td>
<td>Yearly Average: 39,834</td>
</tr>
<tr>
<td>Huntsman School for Business</td>
<td>$ 3,908</td>
<td>$ 1,954</td>
<td>Yearly Total: -1,954</td>
<td>Yearly Average: -1,954</td>
<td>Yearly Total: -1,954</td>
<td>Yearly Average: -1,954</td>
</tr>
<tr>
<td>College of Education &amp; Human Services</td>
<td>$ 2,156,334</td>
<td>$ 45,204</td>
<td>Yearly Total: 759,135</td>
<td>Yearly Average: 36,300</td>
<td>Yearly Total: 211,562</td>
<td>Yearly Average: 857,560</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>$ 2,999,400</td>
<td>$ 100,307</td>
<td>Yearly Total: 309,133</td>
<td>Yearly Average: 61,827</td>
<td>Yearly Total: 1,544,389</td>
<td>Yearly Average: 47,901</td>
</tr>
<tr>
<td>College of Humanities and Social Sciences</td>
<td>$ 425,174</td>
<td>$ 11,687</td>
<td>Yearly Total: 82,347</td>
<td>Yearly Average: 9,150</td>
<td>Yearly Total: 213,026</td>
<td>Yearly Average: 19,366</td>
</tr>
<tr>
<td>College of Natural Resources</td>
<td>$ 1,198,542</td>
<td>$ 83,098</td>
<td>Yearly Total: 40,000</td>
<td>Yearly Average: 40,000</td>
<td>Yearly Total: 82,700</td>
<td>Yearly Average: 82,700</td>
</tr>
<tr>
<td>College of Science</td>
<td>$ 2,681,872</td>
<td>$ 142,903</td>
<td>Yearly Total: 436,561</td>
<td>Yearly Average: 62,366</td>
<td>Yearly Total: 923,999</td>
<td>Yearly Average: 152,775</td>
</tr>
</tbody>
</table>

### Utah State University

<table>
<thead>
<tr>
<th>RGS Total Commitments</th>
<th>$ 10,419,806</th>
<th>$ 64,320</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Commitment</td>
<td>47,301</td>
<td>75,432</td>
</tr>
<tr>
<td>Total Startups</td>
<td>36</td>
<td>41</td>
</tr>
</tbody>
</table>

Note: Yearly totals are calculated based on full new faculty startup amount; this does not mean that they are paid out in full that same year. New faculty startups are paid over multiple years. Averages are based on total new faculty startup amount.
## RESEARCH CATALYST GRANTS (RC)

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Department / Center</th>
<th>College</th>
<th>Project Title</th>
<th>Co-PIs</th>
<th>($) Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ralph Meyer</td>
<td>ADVS</td>
<td>College of Agriculture &amp; Applied Sciences</td>
<td>Spermid Epigenetics in the Niacin-Deficient Male</td>
<td>$ 20,000</td>
<td></td>
</tr>
<tr>
<td>Scott Jones</td>
<td>PSC/ Climate</td>
<td>College of Agriculture &amp; Applied Sciences</td>
<td>Developing High Resolution Root-Zone Soil Moisture Products from Optical Satellite Images</td>
<td>$ 20,000</td>
<td></td>
</tr>
<tr>
<td>Simon Wang</td>
<td>PSC/ Climate</td>
<td>College of Agriculture &amp; Applied Sciences</td>
<td>Forestry-based Reconstruction of Snowpack for Western United States</td>
<td>H. W. Hua</td>
<td>$ 20,000</td>
</tr>
<tr>
<td>David Bolton</td>
<td>KHS</td>
<td>College of Education and Human Services</td>
<td>Does Vision Automatically Prepare the Brain to Generate Movements</td>
<td></td>
<td>$ 19,941</td>
</tr>
<tr>
<td>Chris Dakin</td>
<td>KHS</td>
<td>College of Education and Human Services</td>
<td>Vestibular Intervention for Fall Prevention</td>
<td>Edric Bressel</td>
<td>$ 20,000</td>
</tr>
<tr>
<td>Elizabeth Fauth</td>
<td>FCHD</td>
<td>College of Education and Human Services</td>
<td>Determining the Role of Stress and Social Support on Health Behaviors and Mood: Do Processes Differ for Adolescents and Older Adults</td>
<td>Troy Beckert</td>
<td>$ 19,963</td>
</tr>
<tr>
<td>Sarah Yeho Leopold</td>
<td>COMD</td>
<td>College of Education and Human Services</td>
<td>Improving Speech Intelligibility for Listeners Hearing Loss</td>
<td></td>
<td>$ 19,155</td>
</tr>
<tr>
<td>Amy Wilson-Lopez</td>
<td>TEAL</td>
<td>College of Education and Human Services</td>
<td>Developing an Instructional Framework to Support Engineering Argumentation</td>
<td></td>
<td>$ 18,997</td>
</tr>
<tr>
<td>Ziqi Song</td>
<td>CEE</td>
<td>College of Engineering</td>
<td>Improved Accuracy, Timeliness, and Cost-Efficiency for Highway Feature Extraction Utilizing Novel Automated Approach</td>
<td>Xiaojun Qi</td>
<td>$ 19,941</td>
</tr>
<tr>
<td>Nicholas Roberts</td>
<td>MAE</td>
<td>College of Engineering</td>
<td>Measurement of Heat Spreading, Effective Thermal Conductivity and Surface Temperature in Suspended and Supported Thin Films</td>
<td></td>
<td>$ 20,000</td>
</tr>
<tr>
<td>Ryan Davidson</td>
<td>ECE</td>
<td>College of Engineering</td>
<td>A New Method for Making RPA-Type Measurements in the Icososphere</td>
<td></td>
<td>$ 17,727</td>
</tr>
<tr>
<td>Kristina Scharp</td>
<td>LPSC</td>
<td>College of Humanities and Social Sciences</td>
<td>Exploring the Stories Hearing Parents Tell Their Deaf Children About Their Decision to (or not to) opt for Cochlear Implantation During Infancy</td>
<td>Brittan Barker</td>
<td>$ 19,094</td>
</tr>
<tr>
<td>Janice Brahaney</td>
<td>WATS</td>
<td>College of Natural Resources</td>
<td>Using Cosmogenic Elements as Geochronological Markers in Lake Sediments and Incorporating Instantaneous Sedimentation Rates into Holocene Age Models</td>
<td>Dennis Newell</td>
<td>$ 19,818</td>
</tr>
<tr>
<td>Trisha Atwood</td>
<td>WATS</td>
<td>College of Natural Resources</td>
<td>Trophic Cascades Shape Blue Carbon Hotspots in Seagrass Ecosystems</td>
<td></td>
<td>$ 19,923</td>
</tr>
</tbody>
</table>

## SEED PROGRAM TO ADVANCE RESEARCH COLLABORATIONS (SPARC) GRANT

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Department / Center</th>
<th>College</th>
<th>Project Title</th>
<th>Co-PIs</th>
<th>($) Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joan Hevel</td>
<td>Chem/ BioCh</td>
<td>College of Science</td>
<td>Redox Regulation of PRMT1</td>
<td></td>
<td>$ 19,941</td>
</tr>
<tr>
<td>Andreas Malmendier</td>
<td>College of Science</td>
<td>An Algebro-geometric Approach to Determining Special Function Identities and Their Implementation into Symbolic Computing</td>
<td></td>
<td>$ 19,712</td>
<td></td>
</tr>
<tr>
<td>Dennis Newell</td>
<td>Geology</td>
<td>College of Science</td>
<td>Great Salt Lake Microlithic Chronology and Isotope Geochemistry: Implications for Paleolake Hydrological and Geochemical Evolution</td>
<td></td>
<td>$ 20,000</td>
</tr>
</tbody>
</table>

## GRANT EXPERIENCE FOR MENTORSHIP (GEM) GRANTS

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Department / Center</th>
<th>College</th>
<th>Project Title</th>
<th>Co-PIs</th>
<th>($) Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Wall</td>
<td>Art &amp; Design</td>
<td>College of the Arts</td>
<td>Space, Place and Empire: Anxiety and Abundance in Postwar British Cinema</td>
<td>Michael Martin</td>
<td>10,000</td>
</tr>
<tr>
<td>Jessica Shumway</td>
<td>TEAL</td>
<td>College of Education and Human Services</td>
<td>A Number System Knowledge Instructional Treatment: Linking Quantities with Numerals</td>
<td></td>
<td>9,897</td>
</tr>
<tr>
<td>Kristin Hulvey</td>
<td>Wildland Resources</td>
<td>College of Natural Resources</td>
<td>Using GPS and Remotely Sensed Data to Discern Differences in Forage Use Among Three Common Livestock Grazing Systems</td>
<td>Mark Brunson</td>
<td>9,993</td>
</tr>
<tr>
<td>Kelly Bradbury</td>
<td>Geology</td>
<td>College of Science</td>
<td>Hydrogeochemical, Structural and Mechanical Properties of the Sedimentary-Crystalline Bedrock Interface Via Scientific Drilling in NE Iowa: Implications for Injection Induced Seismicity</td>
<td>John Shervais</td>
<td>10,000</td>
</tr>
</tbody>
</table>
PRESIDENTIAL DOCTORAL RESEARCH FELLOW ALLOCATIONS

The Presidential Doctoral Research Fellows program completed its fifth year in 2016. In addition to PDRF program covering 100% of university tuition on the plan of study, the program also includes a $10k stipend per year from RGS. Fellows must also be awarded a standard department assistantship (or other source) of funding. We are entering the recruiting season for the next cohort of PDRFs—students would start Fall 2018. Allocation of the 51 slots is partially determined by PHD headcount. It is: 10% (5 slots) for each of CAAS, QNR, and RGS (at large), 22% (11 slots) for each of EE,CEHS, ENGR, and SCI, and 6% (3 slots) for CHASS. Open slots are the result of (a) a student ‘graduating’ from the four-year PDRF program, (b) a slot that has gone unfilled, or (c) a slot that has been vacated.

The following fellows were recruited in 2016 and will begin their PHD programs in fall 2017:

- Devon S. Isaacs
  Psychology, Emma Eccles Jones College of Education and Human Services
- Junnan Geng
  Biological Engineering, College of Engineering
- Ibrahim A. Abdelmoteib Ibrahim
  College of Engineering
- Simon P. Shuster
  Mechanical and Aerospace Engineering, College of Engineering
- Emily Wilkins
  Environment & Society, Quinney College of Natural Resources
- Donald J. Benkendorf
  Watershed Sciences, Quinney College of Natural Resources
- Mathangi Soundararajan
  Chemistry & Biochemistry, College of Science
- Elizabeth G. Simpson
  Biology, College of Science
- Michael D. Briscoe
  Sociology Social Work & Anthropology, College of Humanities and Social Sciences.
- Claudia M. Wright
  Sociology Social Work & Anthropology, College of Humanities and Social Sciences
- Meng Xu
  Computer Science, College of Engineering
- Ryan Choi (PDRF), Wildland Resources Department, Seeking PhD Ecology Degree

**FACILITIES AND ADMINISTRATION ALLOCATION**

<table>
<thead>
<tr>
<th>F&amp;A Relevance</th>
<th>FY2017 Budget</th>
<th>% of Total Allocation</th>
<th>FY2017 Actuals/</th>
<th>% of Total Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>USU Eastern Revenues - 100% returned</td>
<td>150.0</td>
<td>163.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20% to USU Colleges/Departments/PIs</td>
<td>3,931.2</td>
<td>3,941.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70% to Central F&amp;A Pool</td>
<td>9,430.5</td>
<td>9,196.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total F&amp;A Generated</strong></td>
<td><strong>13,511.6</strong></td>
<td><strong>13,301.6</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funds Available for Distribution by RGS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F&amp;A Revenues in Central Pool (70%)</td>
<td>9,135.4</td>
<td>9,196.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unused Prior Period Allocations Returned to Central Pool</td>
<td></td>
<td>161.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carry Forward</td>
<td>-324.6</td>
<td>-324.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total F&amp;A available for distribution</strong></td>
<td><strong>8,810.8</strong></td>
<td><strong>9,033.7</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RGS Allocations from Central Pool (70% of Central F&amp;A Pool)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Discovery</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct College Support</td>
<td>2,676.3</td>
<td>3,300.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Commercialization</td>
<td>2,042.2</td>
<td>1,681.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core/Central Laboratories</td>
<td>927.5</td>
<td>900.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Research Services and Programs</td>
<td>371.7</td>
<td>382.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Discovery</strong></td>
<td><strong>6,017.7</strong></td>
<td><strong>6,265.4</strong></td>
<td></td>
<td><strong>69.36%</strong></td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Central Administration Functions</td>
<td>1,007.6</td>
<td>1,016.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Research Services and Programs</td>
<td>141.0</td>
<td>126.7</td>
<td></td>
<td></td>
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<tr>
<td>Compliance Personnel Support</td>
<td>374.1</td>
<td>364.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Education and Training</td>
<td>46.0</td>
<td>30.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Administration</strong></td>
<td><strong>1,562.7</strong></td>
<td><strong>1,538.2</strong></td>
<td></td>
<td><strong>17.93%</strong></td>
</tr>
<tr>
<td><strong>Engagement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Commercialization</td>
<td>559.0</td>
<td>626.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Education and Training</td>
<td>145.3</td>
<td>155.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Engagement</strong></td>
<td><strong>695.3</strong></td>
<td><strong>782.1</strong></td>
<td></td>
<td><strong>8.66%</strong></td>
</tr>
<tr>
<td><strong>Learning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct College Support</td>
<td>100.0</td>
<td>36.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Student Support</td>
<td>659.0</td>
<td>227.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Research Services and Programs</td>
<td>45.9</td>
<td>37.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Education and Training</td>
<td>68.4</td>
<td>68.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Learning</strong></td>
<td><strong>873.3</strong></td>
<td><strong>370.0</strong></td>
<td></td>
<td><strong>4.10%</strong></td>
</tr>
<tr>
<td><strong>Total F&amp;A Allocations</strong></td>
<td><strong>9,149.0</strong></td>
<td><strong>8,955.6</strong></td>
<td></td>
<td><strong>99.14%</strong></td>
</tr>
<tr>
<td><strong>FY17 (Over)/Under Allocated</strong></td>
<td><strong>-338.2</strong></td>
<td><strong>78.1</strong></td>
<td></td>
<td><strong>0.86%</strong></td>
</tr>
</tbody>
</table>

*Preliminary numbers may change.
CHAPTER 4

Division Reports

ENVIRONMENTAL HEALTH & SAFETY

ADMINISTRATION

Environmental Health & Safety (EHS) Director Steve Bilbao retired in FY17 after 14 years of service. After a national search, Eric Jorgensen was promoted from Assistant Director to fill Steve’s role. Additionally, Kirt Poulsen was promoted to the role of Assistant Director of EHS, and a new Hazardous Waste Manager was hired to replace Eric’s responsibilities in tracking and managing regulated wastes on campus. Finally, a full-time environmental health and safety professional, Mr. Cameron Mix, was hired to work on the USU Eastern campus. Cameron brings high-level safety expertise to USU Eastern and other regional campuses, and he facilitates local delivery of all required environmental, health and safety training.

During FY 17, the EHS Office was successfully managed at approximately 10% under budget while accomplishing all the duties of the EHS Office and implementing new USU Policy 337. To facilitate compliance with policy 337, major upgrades were made to the EHS Assistant program, including addition of a short questionnaire to determine what training is required based on employee activities. Supervisors now have the ability to determine what training personnel need, when that training has been accomplished and when they need to have refresher training. EHS personnel met with many of the colleges to get people registered into the system and provide tutorials on its effective use.

UNIVERSITY SAFETY COMMITTEE

The University Safety Committee expanded from the five traditional sub-committees (Biohazards, Radiation Safety, Chemical Hygiene, Institutional Biosafety Committee and Risk Management) to include representatives from the safety committees of all eight colleges, the three main areas under the Vice President of Business and Finance, representation from USU Eastern and four representatives from various areas within Student Services. The newly expanded University Safety Committee met twice during the last fiscal year. Attendance at all meetings exceeded 90% with each representative providing detailed reports of safety activities within their area including hazard identification, risk assessment/mitigation and record keeping. The chair of the safety committee, Dale Barnard, retired after seven years of service. Alvan Hengge, Chemistry Department Head, was installed as the new chair of the committee.

The 19 sub-committees reporting to the University Safety Committee include 144 faculty and staff members all working to attain full compliance with the USU Safety and Health Policy #337.

HEALTH & SAFETY

CHEMICAL HYGIENE/SAFETY

The indoor air quality at USU was protected through a series of programs managed by the EHS Office. Thirty-two emergency indoor air quality issues were investigated and resolved to maintain a safe and comfortable work place. Additionally, every fume hood on campus was inspected for proper functioning to assure no hazardous chemicals were released into the breathing zones within laboratories. Long-term ventilation issues were addressed to improve indoor air quality. These sites included the cadaver laboratory on the Uintah Basin campus and positive pressure issues in laboratories in the Eccles Science Learning Center.

BIOLOGICAL SAFETY

EHS also conducted inspections of areas where select agents and biological hazards were in use to assure compliance with all regulatory guidance. Inspectors from USDA visited USU on two separate occasions to assess compliance with regulations and for renewal of the Select Agents Program. Inspectors focused on the vivarium in USTAR building 650 and the LARC. Inspectors found a few minor issues, which laboratory and EHS personnel were able to immediately address and correct.

INDUSTRIAL HYGIENE

The EHS Office continued oversight for OSHA required occupational safety programs, and coordinated with safety representative within USU Facilities to provide forklift operator, Lock out-Tag out, confined space and electrical safety.
ACCIDENT INVESTIGATION
At the request of the University Risk Management Department, EHS Office personnel initiated a program to investigate accidents reported to risk management for ‘Worker Compensation’. This program is an attempt to identify causes of accidents and to develop procedures to reduce risks. Findings of accident investigations with causes and possible solutions are provided to the department where the accident occurred and to all other persons on campus that conduct similar activities. Severe or widely applicable accident investigations are also reported to the University Safety Committee.

ENVIRONMENTAL MANAGEMENT
HAZARDOUS WASTE DISPOSAL
- Collected 2,020 containers from 505 different areas on campus
- Disposed of 368 drums of waste totaling 67,929 pounds

Regulators from the State of Utah Division of Environmental Quality inspected the hazardous waste program. The program was found to be in full compliance with all local, state and federal regulations.

ASBESTOS PROJECTS
EHS personnel monitored and managed $770,468.80 in asbestos abatement projects in University buildings throughout the State.

RADIATION
All 29 radioactive material areas on campus were inspected and recertified for safe use of isotopes. The personnel working in these areas received refresher training or initial training as applicable.

Every isotope on campus was inventoried and recorded in an updated radioactive isotope inventory. This investigation determined that a number of isotopes could be discarded or had decayed. The removal of these isotopes from the university inventory decreased the regulatory burden and increased the overall safety of the program.

PHASE 3 SITE ASSESSMENTS
Seven properties purchased by or donated to the university were investigated to determine their potential for environmental liability. The sites were scattered across the state and included residential areas, agricultural real estate, and one commercial site.

AIR QUALITY
EHS personnel submitted a modification to the USEPA Title V air quality permit to keep the Logan campus in compliance with the new regulations imposed by the State as Cache Valley has been designated by the USEPA as ‘Serious Non-Attainment for PM2.5’.
LABORATORY ANIMAL RESEARCH CENTER & INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

ONGOING SUPPORT FOR GROWING RESEARCH PROGRAMS
The primary role of the LARC is to provide support to faculty members using laboratory animals in their research. The LARC has observed an increased demand for those services as represented by an approximate 5% increase in the number of animals being housed in the facility. The LARC continues to meet its support role by adding caging and other equipment and by continually evaluating current future animal care needs through internal review and regular communication with researchers.

FORMALIZED COLLABORATIVE RELATIONSHIP
The USU IACUC works to serve all animal users at the University by providing review and oversight of proposed use of animals in teaching or research. For many years, through informal agreements, the USU IACUC has helped provide animal use oversight to the Poisonous Plant Research Laboratory, a federal research laboratory funded by the United States Department of Agriculture-Agricultural Research Services. In the past year the IACUC and the RGS has formalized the relationship by establishing written Memorandum of Understanding. This more formal relationship helps to ensure proper oversight of a closely located research institution while also opening additional opportunities for collaboration and sharing resources between USU faculty members and federal animal scientists at the laboratory.

MAINTAINING ACCREDITATION
The IACUC and LARC at USU continue in their dedication to high quality animal care and welfare. In March 2016, the LARC at USU participated in a triennial site visit with representatives from AAALAC International. Subsequent to the site visit, the LARC and its staff have responded to recommendations that were made and, in March 2017, received notification that full, ongoing accreditation had been granted. The next AAALAC accreditation visit is expected to occur in the spring of 2019.

LARC STAFF PROVIDE SERVICE TO NATIONAL ORGANIZATIONS
Service within the field of laboratory animal medicine is an important responsibility for members of the USU animal care team. The Laboratory Animal Managers Association (LAMA) is an organization dedicated to advancing the quality of management and care of laboratory animals throughout the world. Lisa DeSoi, Supervisor of the LARC, currently serves on the program committee for LAMA, which is responsible for establishing national meeting curriculum, recruiting speakers and planning educational activities for the annual LAMA meeting. Lisa DeSoi currently serves for the second time on the program committee for LAMA, which is responsible for establishing national meeting curriculum, recruiting speakers and planning educational activities for the annual LAMA meeting.

RESEARCH DEVELOPMENT
NEW RD STAFF
In FY2017, RD partnered with the College of Science to hire a proposal development specialist. This individual began working with CoS faculty in July 2016.

Additionally, RD began discussions with the College of Humanities and Social Sciences and the Caine College of the Arts to hire a proposal development specialist to assist their faculty.

GRANTSMANSHIP TRAINING PROGRAM

GRADUATE STUDENTS
• The grant writing seminar tailored specifically to the needs of graduate students was offered once in FY2017:
  • 1 seminar – fall semester
  • 103 graduate students and/or postdocs attended

PROPOSAL WRITING INSTITUTE
The Proposal Writing Institute completed training its ninth, and largest ever, cohort in FY2017. Sixteen faculty members were selected via a competitive application process to participate in this 4-week, intensive proposal writing training opportunity. Including this most recent cohort, the Proposal Writing Institute has trained 114 faculty over the past nine years. At the end of FY2017, those faculty submitted 123 proposals worth nearly $68 million that can be tied directly to the projects worked on during the Institute. Of those submitted proposals, Institute faculty have received 23 awards worth nearly $11 million.

FACULTY
• 1 seminar – fall semester
• 71 faculty and research support staff attended

All seminars were presented by Grant Writers’ Seminars & Workshops (www.grantcentral.com). RGS covered seminar participants’ material costs, lunches, and breaks. The faculty seminar focused on “writing to the review process.

FUNDING FINDER
The Funding Finder database is the primary USU-provided resource for faculty to find funding opportunities. The database includes federal agency and private foundation/organization funding opportunities; limited submission opportunities; internal seed funding opportunities; undergraduate/graduate funding opportunities; faculty prize/recognition opportunities; and funding agency notifications regarding changes to policy/procedures, funding priorities, agency-specific training/educational opportunities, etc.

All faculty are encouraged to sign up for the weekly Funding Finder Newsletter, which can be done by visiting the main page (https://fundingfinder.usu.edu/) and clicking the Sign Up button. At the end of FY2017, there were 563 newsletter subscribers.

In FY2017, RD migrated to MailChimp for the weekly email distribution of the Funding Finder Newsletter. The use of MailChimp provides better metrics on recipient activity (e.g., opens, clicks) and allows for the addition of content outside of the Funding Finder database (e.g., special announcements, training dates, events).
RGS SEED GRANT PROGRAM
In FY2017, the RGS seed grant program received 41 applications and made 25 awards through its biannual competition cycles:

- **GEM**
  - 5 applications
  - 4 awards

- **SPARC**
  - 6 applications
  - 4 awards

- **RC**
  - 30 applications
  - 17 awards

Beth Fauth, associate professor in the Department of Family, Consumer and Human Development, along with Troy Beckert (not pictured), received a seed grant for determining the role of stress and social support on health behaviors and mood.

RESEARCH INTEGRITY & COMPLIANCE

RESPONSE TO REGULATIONS
During FY17 Research Integrity & Compliance (RIC) responded to four regulatory actions:

1. The Office of Human Research Protections (OHRP) in the Department of Health and Human Services issued a Notice of Proposed Rule Making that has potentially far reaching impacts on USU’s Human Research Protection Program (HRPP). USU, along with many institutions of higher education and academic medical centers, provided comments and participated in forums to alert OHRP of the negative consequences that would follow from many of the regulatory changes being proposed. During the current year, a final rule may be issued, and compliance with the new regulations may require significant effort by USU.

2. During FY16, a major effort to harmonize the Export Control regulations overseen within the Departments of Commerce and State came to fruition, and USU developed training and internal controls to achieve compliance with the new harmonized rule. The RIC established a partnership with Sponsored Programs to identify and negotiate terms and conditions that are related to export controlled projects.

3. The Office of Science & Technology Policy (OSTP) promulgated rules during FY15 that required all federal agencies to develop rules regarding the sharing of data that is acquired under federal funding. Those agency-specific policies became available during FY16, and USU has developed institutional systems and procedures (Appendix B, p. 56), as well as a new Research Data policy (#588, Appendix A, p.48), to implement data sharing requirements.

4. Policies related to Information Security and treatment of Protected Health Information related to the Health Insurance Portability and Accountability Act (HIPAA) are also being developed at USU, and RIC is representing RGS in the development of these policies.

MANAGEMENT OF COMPLIANCE SYSTEMS
In addition to its governance role at the university, RIC oversees and maintains the following systems to support research compliance:

**RESEARCH FINANCIAL AND ADMINISTRATIVE TRAINING SERIES (RFAST)**
RFAST is an online system used to provide training to all individuals within the university that conduct sponsored research. The training consists of modules that provide baseline training in areas including budgeting, grant preparation, post-award administration and regulatory compliance. The system provides evidence that USU’s researchers have been trained to utilize its internal control systems to apply best practices to its portfolio of grants and contracts.

**RESPONSIBLE CONDUCT OF RESEARCH (RCR) TRAINING**
RCR training is gaining increasing emphasis among federal funding agencies. USU’s RCR training is delivered to students through USU 6900, “Research Integrity,” which is a zero-credit course offered every semester that exposes students to key topics in research ethics such as research collaboration, mentor/trainee relationships, and conflicts of interest.

**CONFLICTS OF INTEREST (COI)**
Responsibility for disclosure and management of conflicts of interest resides with RIC. USU has used a system known as iComply to support faculty members in disclosing Financial interests that may represent conflicts of interest. The RIC works to assess whether disclosed interest gives rise to COIs that require management, reduction or elimination. During FY18, USU will transition to a COI disclosure module inside the Kuali software package. In FY17, we implemented a system for identification of potential institutional conflicts of interest (ICOI) in research involving human subjects. These types of conflicts arise when the university or its leadership have financial interests that may also be related to research being conducted at USU.
SPONSORED PROGRAMS

KUALI RESEARCH IMPLEMENTED
Effective February 2017, all campus units began utilizing Kuali Research for preparing and submitting sponsored proposals. To prepare for the implementation of Kuali Research, Sponsored Programs began using Kuali Research internally in October 2015, and rolled out the system to the College of Natural Resources, the College of Science, Student Services, and Regional Campuses and Distance Education in 2016.

Sponsored Programs staff conducted over 20 campus-wide Kuali trainings and approximately 25 college/department specific Kuali trainings, in addition to many one-on-one trainings to faculty, within the first four months of Kuali implementation. Trainings were offered to Business Services personnel, department heads, college deans, and faculty interested in conducting research.

Further, Sponsored Programs created a number of quick guides to step faculty through proposal creation and budget preparation in Kuali, which are found on the RGS Kuali website. Sponsored Programs staff also assist with responding to requests for assistance with Kuali submitted through ServiceNow.

Kuali replaces Sponsored Programs’ paper based proposal submission process with an electronic system that streamlines proposal preparation, review, approval, and submission all online. Kuali allows faculty to complete all internal and external proposal requirements in one spot and allows for grants.gov opportunities, submission to grants.gov directly through Kuali.

SPONSORED PROPOSALS AND AWARDS
Sponsored Programs staff continue to work with faculty on proposal preparation, proposal review, proposal submission, award creation, award monitoring, and award closeout activities. During FY17, Sponsored Programs processed 1066 award actions for $108.5 million in award funding. The $108.5 million in award funding is 10% more than the $98.5 million received in FY16. The number of proposal submissions and amount of proposal funding increased in FY17. During FY17, Sponsored Programs submitted 1239 proposals, which is 82 more than the number of proposals submitted in FY16. Proposal funding increased by $99 million in FY17 to $360.9 million.

DATA MANAGEMENT PROCESS
Sponsored Programs worked closely with other RGS Divisions and the Merrill-Cazier Library (Library) to develop and implement a process for managing data generated during sponsored programs consistent with federal regulations. As part of the data management process, Sponsored Programs staff collect Data Management Plans (DMP) and generate a Primary Metadata Document (PMD) at the time of award creation. The DMPs and PMDs are then provided to the Library for record creation of data and publications in Digital Commons. Each month, Sponsored Programs generates a report of new federal awards to ensure that the Library is receiving a PMD and DMP when required by a federal sponsor (Appendix B).

AUDITS
Sponsored Programs worked closely with auditors from the State of Utah and US Department of Education to strengthen USU subrecipient risk assessment and monitoring activities as required under the Uniform Guidance. Forms were created to assist faculty with documenting subrecipient monitoring activities and processes were strengthened to better document compliance.

SPONSORED PROGRAMS STAFF
Sponsored Programs is currently divided into three teams designated to support specific colleges. Each team consists of a Senior Grant and Contract Officer (assists with award creation and management), a Grant and Contract Officer (reviews and submits proposals), and a Grant and Contract Administrator (prepares subawards, conducts subrecipient monitoring activities and manages award closeouts). Sponsored Programs is staffed with 11 fulltime employees.

REPORTS
Sponsored Programs released a granular report of Sponsored Program proposals and awards, which is accessible to college deans and updated monthly. The granular report allows deans to see proposal and award numbers at the college, department, and individual faculty levels.

SPO AND SPO ACCOUNTING
In FY17, the directors of Sponsored Programs and Sponsored Program Accounting began meeting every other week to discuss index creation, award management, compliance concerns, and other issues related to performance of a sponsored award.
588.1 INTRODUCTION

Research data are an essential component of any research university, and shall be managed so that compliance with all legal, regulatory, contractual and policy obligations are met.

The purpose of this policy is to describe the rights and responsibilities of individual researchers and the institution in the use, retention, maintenance and sharing of data produced as part of USU’s research enterprise. Except as set forth herein, this policy applies to all USU personnel (faculty, staff and students) and encompasses all Research Data produced under USU projects, whether through external finding sources or USU sources. Research Data so produced at USU shall be recorded, maintained, retained, used, protected and shared in accordance with State and Federal regulations and with USU policies and procedures. In cases where a conflict or discrepancy exists between this policy and Federal or Utah State laws, regulations or guidance, the Federal or state requirements shall take precedence.

USU may choose not to claim rights to data generated or collected by:

- Investigators, if there is a specific condition to the contrary in the sponsored project’s grant, contract or cooperative agreement, or if the investigator is engaged in Scholarly Works as defined and within the limits set forth in USU Policy 587, “Intellectual Property,” such that the activity is considered to be the unrestricted property of the author.
- Students, so long as the students:
  - Are not also employees of the university with a work assignment related to research; and
  - Are engaged in activities that are conducted without the use of substantial University resources, including USU facilities, equipment, materials, or financial support.

Other related policies include:
- #583 – Research
- #584 – Human Participants in Research
- #585 – Animal Care and Use
- #587 – Intellectual Property (reflecting Federal guidance as included in OMB Uniform Guidance (2 CFR Part 200))
- #558 – Information Security Policy (Pending)

588.2 DEFINITIONS

2.1 **Research** shall be as defined in Policy 583.1.5.1, “Research” and shall be understood to encompass all those activities carried out by Investigators within their respective role statements, employment assignments or courses of study which are designed to increase knowledge or improve upon human inventions.

2.2 **Investigator** shall be as defined in Policy 583.1.3.2, “Investigator,” and under this policy shall mean a person or entity affiliated with USU, whether as an employee, student or otherwise, whose role statement, job description, employment assignment and/or function within the University is, either in whole or in part, to carry out Research, whether sponsored by external or internal sources. Such Investigators shall include, but not be limited to, USU faculty, professional researchers, librarians who have a research role, research assistants, laboratory and clinical staff, and others as may be designated by the Vice President for Research.

2.3 **Principal Investigator** shall be an Investigator who has primary responsibility within the University for the design, conduct and reporting of Research.

2.4 **Research Data** shall be as defined in the Uniform Guidance, 200.315(e)(iii), and shall mean:

"[T]he recorded factual material commonly accepted in the scientific community as necessary to validate research findings, but not any of the following: Preliminary analysis, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues. This ‘recorded’ material excludes physical objects (e.g., laboratory samples). Research data also do not include:

- Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which is protected under law; and
- Personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study."

Other related policies include:
- #583 – Research
- #584 – Human Participants in Research
- #585 – Animal Care and Use
- #587 – Intellectual Property (reflecting Federal guidance as included in OMB Uniform Guidance (2 CFR Part 200))
- #558 – Information Security Policy (Pending)
Though the above Uniform Guidance definition focuses on the “scientific community”, USU implements this more broadly across our academic community encompassing any Investigator engaged in Research, as defined above.

2.5 Intangible Property, as defined in 2 CFR 200.59 shall mean “property having no physical existence, such as trademarks, copyrights, patents and patent applications and property, such as loans, notes and other debt instruments, lease agreements, stock and other instruments of property ownership,” and includes Research Data in accordance with 2 CFR 200.315(e)(3)

2.6 Tangible Research Property shall be as defined in Policy 587.2.5: “tangible items produced in the course of research, such as compositions, chemical compounds, Biological Materials, materials, drawings, devices, integrated circuit chips, computer databases, computer software, prototypes, circuit designs, and equipment.” Tangible property shall be treated as Research Data only to the degree that it meets the definition in 2.4 above, or when agency-specific regulatory language or contract language requires that it be classified as Research Data (e.g., physical samples or photographic images when they are used to support findings in published papers).

588.3 OWNERSHIP OF DATA

OMB Uniform Guidance, Section 200.315(a) provides guidance on ownership and use of Intangible Property, including Research Data. USU applies this guidance to all Research Data. Therefore, title to Research Data vests in Utah State University (USU) immediately upon its acquisition. USU must use Research Data for any originally-authorized purpose as outlined in any funding agreement sponsoring the Research, and must not restrict access to the Research Data in contravention of Federal or other applicable regulations or contractual requirements.

588.4 RETENTION

Research Data must be retained in accordance with 2 CFR 200.333 for federally funded Research (i.e., a minimum of three years after the submission of the final expenditure report in most cases) or, for non-federally funded research, for a minimum of three years after the completion of the research project under which it was gathered. Longer retention of data may be required under additional circumstances, such as, but not limited to, the following:

- Conditions of the funding agency,
- Program income transactions,
- Protection of intellectual property,
- Student involvement. Research Data must be retained at least until the degree is awarded or until it is clear that the student has abandoned the work.
- Charges, audits, claims, or litigations regarding research, such as allegations of scientific misconduct, non-compliance or fraud or abuse. In these circumstances, Research Data and underlying data gathered in the conduct of research that is the subject of investigation is often required to be retained for seven (7) years after proceedings adjudicating such charge, audit, claim or litigation have resulted in full resolution and final action. Consult University Counsel and the Division of Research Integrity and Compliance for specific retention requirements when audit, investigations or legal proceedings incorporate Research Data.

Retention requirements must be compliant with any data restrictions, as outlined in section 588.5.4, below.

If public access to Research Data is required by the sponsor as set forth in 5.1, below, the University is responsible for providing such access unless the research study is transferred to another entity, as set forth in Section 588.5, below. Therefore, the Research Data must remain at the University under the management of a designated investigator/data steward.

588.5 ACCESS TO DATA

5.1 Data Sharing Requirements

Under the Office of Science and Technology Policy Memorandum entitled “Increasing Access to the Results of Federally Funded Scientific Research” (dated February 22, 2013), the Federal Government requires that: “to the greatest extent and with the fewest restraints possible…the direct results of federally-funded scientific research are made available to and useful for the public, industry and the scientific community. Such results include peer-reviewed publications and digital data.”

USU’s mission aligns with this requirement. USU’s Publication Policy as stated in Policy 583.6, is that “[r]estrictions on publication of the results of Research are incompatible with the basic concept of a research and educational institution as a source of knowledge.” USU Policy 586, “Open Access to Scholarly Articles”, further states: “Utah State University is committed to the widest dissemination of employees’ scholarly articles.” The results to be made available extend to Research Data that supports peer-reviewed publications. Federal agencies have promulgated policies under the OSTP guidance. USU complies with all applicable agency policies, and makes Research Data available as broadly as possible while also providing protection to data collected or acquired in the planning or conduct of research that is specifically restricted or controlled under Federal laws and regulations (e.g.,
Repositories to ensure that no data that is under contractual, regulatory or policy controlled data repositories. PIs shall exercise caution when publishing data to collaboration. Such collaborations may be facilitated through the use of public or in addition to the sharing of Research Data that supports published research results, restrictions, as set forth in 5.4, below, are released to a repository or system that does not provide adequate security, as required under USU Policy # 551, "Information Security."

USU's University Libraries provides access to public data archiving through its Open Access Institutional Repository, currently DigitalCommons@USU, provided at http://DigitalCommons.usu.edu. Refer to USU's Repository Terms of Deposit for guidance on preparation and submission of data to the Open Access Institutional Repository. When USU Research Data is to be archived in discipline-specific or other public data repositories, metadata directing users to such data may be included in the University Open Access Institutional Repository as a means of fulfilling Data Sharing requirements.

USU is subject to regulatory requirements that affect the acquisition and protection of data associated with Research and other operations. Among federal regulations and policies that affect USU's treatment of data are the following:

- The Health Insurance Portability and Accountability Act (HIPAA), 45 CFR Part 160 and Part 164, Subparts A, C & E, controls the use and release of Electronic Private Health Information (e-PHI) and impacts Research carried out by, or in collaboration with, USU Health Care Components. See USU’s Hybrid Entity Declaration for a list of units required to comply under HIPAA.
- The Family Educational Rights and Privacy Act (FERPA) 34 CFR Part 99 and the associated Protection of Pupil Rights Amendment (PPRA) protects individual's educational records and controls the information that can be gathered and released concerning students in US educational institutions. FERPA and PPRA impacts Research carried out with students in K-12 and institutions of higher education.
- Export Control regulations are contained in the Export Administration Regulations (15 CFR 730-774) and the International Traffic in Arms Regulations (22 CFR 120-130). These regulations are overseen by the Department of Commerce and the Department of State, respectively. The goal of export control regulations is to prevent the sharing of technological items information that has been identified as posing potential threats to US national interests with foreign nationals. Data that is export controlled should never be shared publicly, but work accomplished as Fundamental Research may be released, as it is exempt from export control. Investigators should coordinate with the RGS Division of Sponsored Programs and USU Export Control Officers associated with RGS Division of Research Compliance & Integrity, when conducting research involving export controls.
- Federal agency restrictions are sometimes placed on release of information or technology developed under federal funding. Such data are sometimes referred to as Sensitive but Unclassified in federal funding instruments. The Division of Sponsored Programs has primary responsibility for negotiating the terms of federal agreements, and seeks to limit USU’s liability related to data restrictions. Investigators should coordinate with the Sponsored Programs Division when they identify language that appears to restrict USU’s ability to freely publish its research findings.
- USU Information Security Policy provides guidance on protection of restricted data, including physical security and information technology systems security. The policy discusses oversight of Institutional Data and provides for the classification of data types.
- Intellectual Property protections are set forth in USU Policy 587 and reflect Bayh-Dole and other statutes. For additional information concerning
intellectual property rights, contact the Technology Transfer Services Division within the Office of Research and Graduate Studies.

- Contractual Restrictions are sometimes negotiated between USU and research sponsors that include restrictions on release of certain data. For example, non-disclosure agreements often accompany certain research contracts of cooperative agreements. The Division of Sponsored Programs (DSP) has primary responsibility for negotiating contracts with research sponsors. Investigators should coordinate with DSP to provide the least restrictions reasonable related to public release of data, in accordance with the intent of the OSTP Memorandum referred to in Section 5.1 above.

588.6 TRANSFER OF RESEARCH DATA ASSOCIATED WITH A TRANSFERRED CONTRACT OR GRANT

Original Research Data and preliminary data collected or acquired in the conduct of Research at USU must be retained at USU, except as set forth below when the Principal Investigator (PI) leaves the university. When an investigator at USU leaves the University, the investigator may take copies of Research Data and other data associated with the Research when the individual’s participation in the design, conduct or reporting of the associated project can be established, and with permission from an authorized university representative.

When a PI leaves USU the Department Head and/or Dean, shall determine who will take responsibility for Research Data as set forth in RGS Procedure 588-PR.

588.7 AUTHORITIES and RESPONSIBILITIES

7.1 University
Utah State University has the authority and is responsible for
- Negotiating and Complying with the terms of sponsored research agreements;
- Ensuring the appropriate use of project resources, e.g. animals, human subjects, recombinant DNA
- Protecting the rights of researchers, including, but not limited to, their rights to access data associated with research in which they participated;
- Securing intellectual property rights;
- Facilitating the investigation of charges, such as research misconduct or conflict of interest;
- Maintaining confidentiality of data, where appropriate; and
- Complying with applicable state and federal laws and regulations

7.2 The Principal Investigator
The Principal Investigator (PI) has the authority and responsibility for primary stewardship of Research Data and all data associated with the conduct of research under their supervision on behalf of the University. In this capacity, the PI is responsible for data management in keeping with this policy and best practices in the PI’s discipline as follows:

- Designing and implementing data acquisition processes that will support the conduct and reporting of research
- Implementing data management systems that accommodate any applicable data security, protection, or restriction requirements
- Ensuring proper management and retention of data in accordance with this and other USU policy
- Establishing and maintaining appropriate procedures for the protection of restricted data and other essential data and records
- Ensuring compliance with program requirements
- Maintaining appropriate confidentiality of data
- Complying with applicable state and federal laws and regulation
- Archiving data appropriately, following USU’s Repository
- Terms of Deposit and/or licensing with Creative Commons or Open Data Commons license.

In case of incapacity of the PI, that individual’s Data Trustee will take custody of the research data until other suitable arrangements are made for alternate custody of the data.