

FY2014 Annual Report
Office of Sponsored Programs &
Grants Management

SPGM Staff

Tom Cruise

Director 540.831.5035 tcruise@radford.edu

Martha Hall

Administrative Assistant 540.831.5035 mhall5@radford.edu

Shirl Nolen

Pre-Award Administrator 540.831.5910 sanolen@radford.edu

Ginger Williams

Proposal Development Manager 540.831.5912 gwilliams11@radford.edu

Cindy Gwinn

Assistant Director — Post-Award
540.831.5412
crgwinn@radford.edu

Tiffany Buck

Grants Specialist
540.831.6589
tjbuck@radford.edu

Carolyn Hopkins

Grants Specialist
540.831.7762
chopkins8@radford.edu

Tammie Duncan

Grants Specialist
540.831.7763
tduncan@radford.edu



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Take Advantage of the different services our office can provide during the grant process....

- Assistance in Finding Grant Opportunities
- Setting up and training for COS Pivot
- Review Agency Guidelines
- Budget Preparation for Grants
- Proofreading Grant Proposals for grammar and format
- Facilitate Multi-disciplinary teams
- Preparing application packages
- Help in obtaining internal approvals
- Submitting application to Sponsors
- Various Training Sessions & Workshops
- Negotiating Awards
- Establishing funding on the Institution's general ledger system.



Dear Colleagues,

It is with great pleasure once again to present the Office of Sponsored Programs and Grants Management's Annual Report for Fiscal Year 2014. As a result of the hard work and dedication by our faculty, I am happy to report that grant awards received from our various sponsors rose nearly 6% over the prior fiscal year, with the actual funding amounts requested on proposals exceeding 25% over last year's submission amounts. Specifically, total awards rose to \$5.7M with total dollars requested on proposal applications significantly rising to \$25M (one of the biggest years on record!). In times of tight or reduced budgets at the federal and state level for discretionary grant spending, including highly competitive single digit success rates on funded applications used by most of our larger sponsors, such an increase should be recognized as an accomplishment for the university, our faculty scholars and the students. They are engaging in these fascinating, yet rewarding, projects that contribute to the discovery and dissemination of new knowledge benefiting our local communities and broader society. With the ultimate goal of striving to do more, we wish to recognize what has been done in the past by outlining our activities in the following pages of this comprehensive report. Further, I would like to add our collaborations with other institutions, as a way to leverage additional grant dollars, increased yet again this past year. Some of the collaborations were a carry forward from existing relationships with other colleagues, but new partnerships were formed as well. We expect to see this trend continue in the upcoming year.

So again, congratulations to all our awardees, as well as those who have worked extremely hard under tight deadlines to submit proposals. As the university looks strategically at growing grants in the upcoming year, I can assure that our commitment to provide efficient services with outstanding support will align with any new initiatives set forth. I hope you enjoy looking at our report, please feel free to contact me should you have any questions about the data contained herein, or if you would like to learn a little more about the services provided by our office.

Respectfully Submitted,

Thomas W. Cruise, CRA
Director of Sponsored Programs and Grants Management
540-831-5035



The Office of Sponsored Programs and Grants Management (SPGM) supports all faculty and staff in the pursuit of external funding that benefits the university and its students.

SPGM coordinates the solicitation and administration of grants, contracts, and cooperative agreements on behalf of the university. Our responsibilities include assisting faculty and staff in identifying potential funding opportunities; providing faculty/staff with development services through various forms of outreach; negotiating awards; overall post -award administration of grants and contracts awarded to the university, as well as suggestions of policies and procedures relating to such efforts.

Grants and contracts handled by SPGM are those funds received by the university for a specific purpose or program, under the direction from a member of the faculty community. Funding is usually geared towards research, public service, or instructional activities. However, other forms of funding can include curriculum development, faculty development, equipment and/or facility renovation, student fellowships, conferences and performances.



Highlights of RU Research



Dr. Beth McClellan has been studying ancient volcanic and sedimentary rocks exposed in the Mount Rogers area of SW Virginia, work funded by the U.S. Geological Survey EdMap Grant Program, as well as internal grants through RU. She is currently collaborating with faculty at Virginia Tech, as well as with USGS geologists. Her research always involves students, and to date she has supervised eight RU geology majors in field and laboratory research, and three others in lab analyses.





Skip Watts preparing to go out on the ice of Mountain Lake in January to the data buoy to upload information from instruments resting on the lake bottom.

Over several years, Dr. Skip Watts and his team have studied, investigated, mapped and analyzed the cause leading to the drainage of water from Mountain Lake located in Giles County, Virginia. Their current contract with the Mary Moody Northen Endowment is allowing the researchers to decrease the loss of water due to seepage from the bottom of the lake in an effort to raise the water level.

The team has used a natural process of physical weathering to create the missing intermediate sized stone from some of the existing larger rock slabs and depositing quantities of this stone at appropriate locations on the bottom of the lake. These stones will restrict any further water loss and hopefully, over time, see an increase in water levels at the lake. Hopefully soon, we will all be able to enjoy the lake due to their efforts.



George (Paki) Stephenson directing students using the underwater Remotely Operated Vehicle at Mountain Lake on a cold rainy day.

Dr. Katie Hilden and Dr. Jennifer Jones received a grant funded by SCHEV titled Project Integration Station. In collaboration with Pulaski County Public Schools, **Project Integration Station was** implemented in Riverlawn Elementary. This program is designed to creatively integrate science and literacy instruction with the use of non-fiction texts to enhance students' learning in science, reading and writing. It is likewise crafted to offer opportunities for teachers to plan vertically by developing a common language used throughout the school both in terms of instruction and science/literacy content.





Dr. Lauren Flora is conducting a study to assess the validity of a predetermined iPad-compatible hearing screening app. This research will determine if this app, when taken in a controlled testing environment, corresponds to results from clinical pure-tone audiograms obtained from a calibrated diagnostic audiometer and administered in an environment meeting ANSI standards. In addition, this study is exploring the implications of these new, widely available apps for both the consumer and the practicing audiologist with regard to health management behaviors and delivery of professional services.



Dr. Nathan Bicak, Dr. Holly Cline and Dr. Rick Roth are teaching students across various disciplines about designing and building a tiny house. Through a grant, students were able to meet with tiny house experts to learn about sustainable and affordable habitations. The students have begun to build and design a tiny house focusing on living simply. This research project and class will span across three semesters.





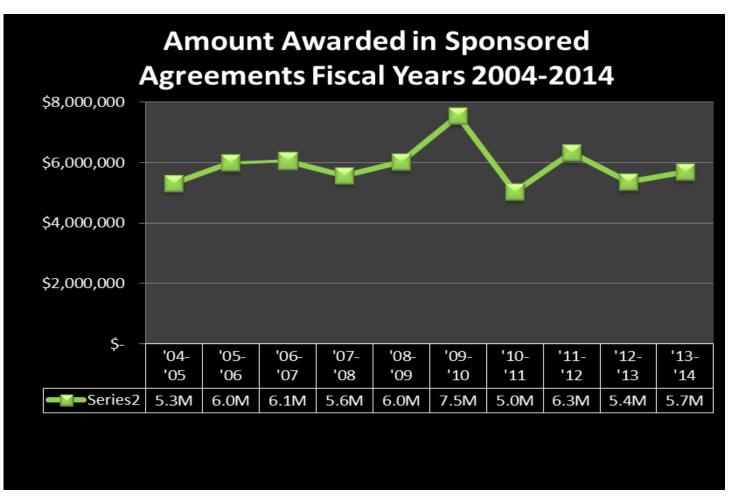




Awards Received for FY 2014

The faculty, staff, and students of Radford University have again brought in \$5 million or more in grants, contracts, and cooperative agreements for the thirteenth consecutive year. During Fiscal Year 14, forty-six (46) awards were received for a total of \$5,691,292 in external funding.

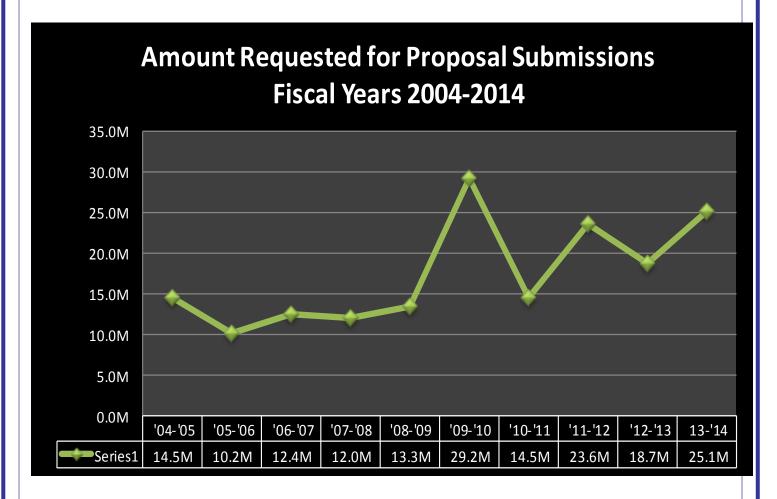
Our success may be seen in the following graph.



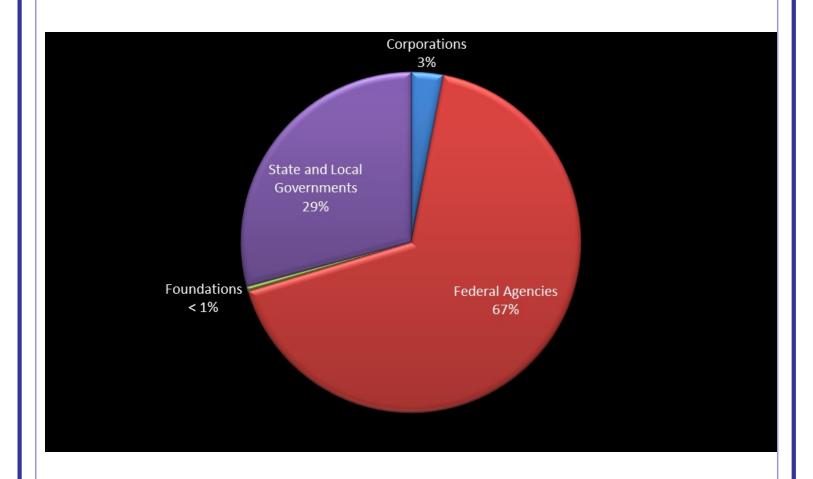


Proposal Submissions for FY 2014

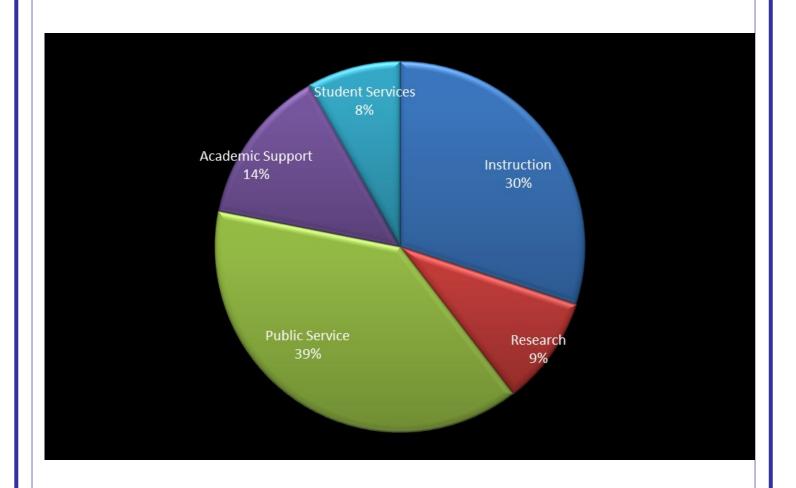
We are proud of our faculty, staff and students who submitted the second highest requested amount in proposal submissions within the past ten years.



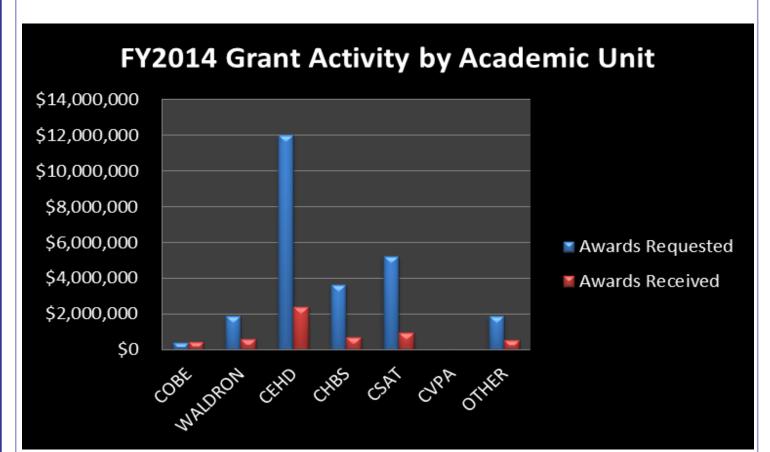








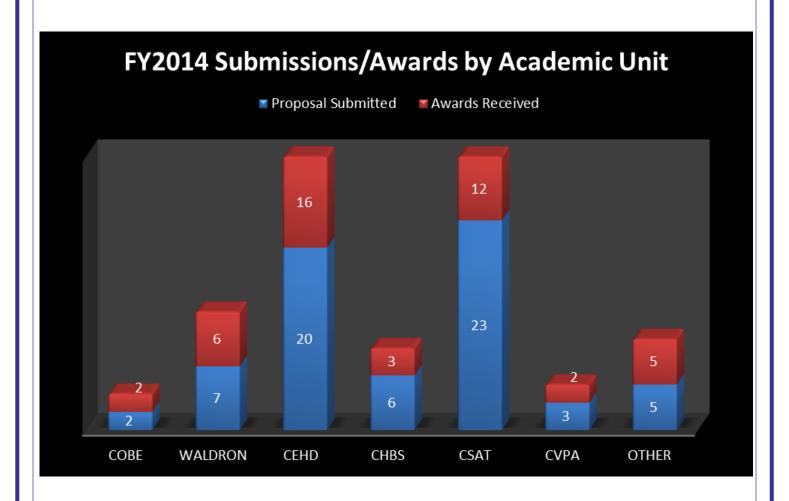




Department	Amount Requested	Amount Received
СОВЕ	\$413,999	\$449,434
WALDRON	\$1,893,437	\$602,357
CEHD	\$12,008,871	\$2,398,857
СНВЅ	\$3,613,075	\$721,504
CSAT	\$5,239,104	\$976,911
CVPA	\$20,568	\$5,585
OTHER	\$1,873,411	\$536,644

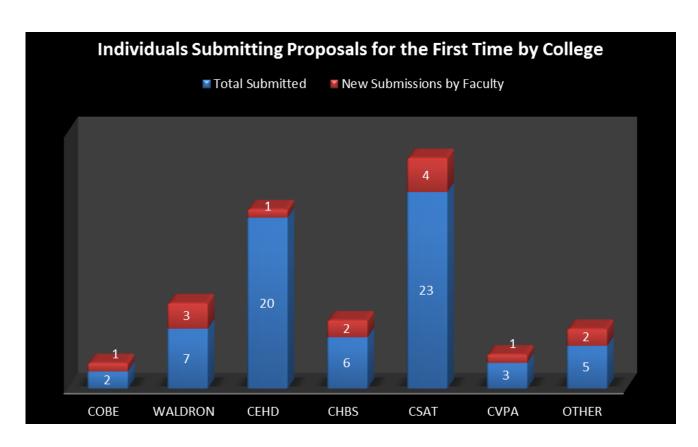


Awards by Academic Unit





Submissions and Awards



Waldron College of Health and Human Services

- Dr. Vickie Bierman
- Dr. Brent Harper
- Dr. Alex Siyufy

College of Humanities and Behavioral Sciences

- Dr. John Brummette
- Dr. Lynn Zoch

College of Science and Technology

- Dr. Anthony Curtis
- Dr. Shawn Huston
- Dr. Christopher Monceaux

• Dr. Sara O'Brien

College of Education and Human Development

• Dr. Joshua Carroll

College of Visual and Performing Arts

• Dr. Nathan Bicak

College of Business and Economics

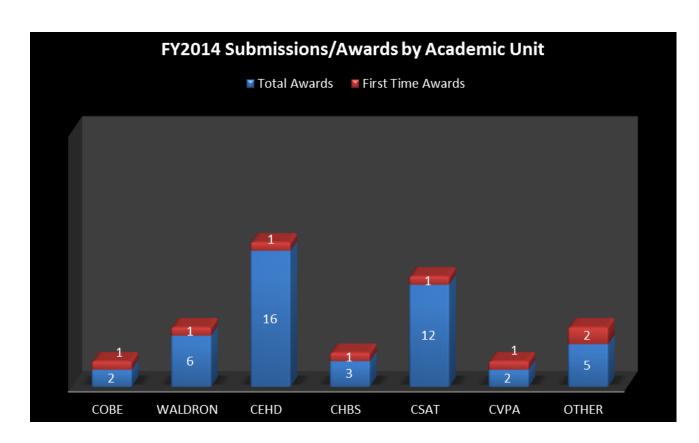
Dr. Thomas Duncan

Other Departments

- Ms. Jill Dill
- Mr. Christopher Miller

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Waldron College of Health and Human Services

Dr. Vickie Bierman

College of Humanities and Behavioral Sciences

- Dr. John Brummette
- Dr. Lynn Zoch

College of Science and Technology

Dr. Shawn Huston

College of Visual and Performing Arts

Dr. Nathan Bicak

College of Education and Human Development

Dr. Joshua Carroll

College of Business and Economics

• Dr. Thomas Duncan

Other Departments

- Ms. Jill Dill
- Dr. Christopher Miller



The Office of Sponsored Programs and Grants Management are committed to providing excellent outreach opportunities for our faculty, staff, students and community. We know that navigating and learning about the world of grants can be challenging, so our office has tried to provide the best possible outreach opportunities in various areas to the RU community.



In the Fall of 2013, we invited our new faculty to a luncheon, "The Secret Pathway to Research", which featured four guest panel speakers. New faculty were able to learn the different avenues, tips and tricks of the trade from these panelists. It also allowed the new faculty to find possible members to collaborate with on new and upcoming research projects.

Below is a comprehensive list of outreach activities provided by our office in FY2014:

- Our Turn sessions for the Fall, Spring and Summer sessions on Pre-Award and Post-Award topics.
- Sent a faculty member to the National Science Foundation's one-day workshop.
- Fall Research Luncheon attended by 25 new faculty in November, 2013.
- Trained 41 faculty/students on Pivot, a database for finding funding opportunities.
- Grant 101 training session for
 - ♦ Occupational Therapy Students
- Specialized COS training session for
 - ♦ Psy.D. Students
 - One-on-One faculty training
- RU Discovery newsletter with eight issues.
- Dissemination of the Research Development & Grant Writing Newsletter.



The Million Dollar Circle program recognizes members of the RU faculty who receive a cumulative total of \$1 million dollars or more in external grants or contracts. Members of the Million Dollar Circle are formally recognized for their accomplishment at the beginning of the academic year following the fiscal year in which they become eligible for the award.



During this past fiscal year, the Office of Sponsored Programs and Grants Management was pleased to announce the following members of the RU community who achieved this honor:

Dr. Jean Mistele
Department of Mathematics and Statistic
\$1,319,193

Dr. Premchand Uppuluri
Department of Information Technology
\$1,280,526

Dr. Orion Rogers

Dean of the College of Science and Technology
\$1,204,071

Dr. Ian Barland
Department of Information Technology
\$1,199,526

Dr. Agida Manizade
Department of Mathematics and Statistics
\$1,110,939



INTERNAL GRANTS TO ASSIST IN SECURING EXTERNAL AWARDS

<u>Seed Grants</u> are offered to enable members of the faculty and staff to secure competitive external awards. A typical Seed Grant provides funding to conduct a preliminary study that leads to a major research grant, or a grant with a research component. As a condition on receiving a Seed Grant, proposed sponsors must allow for indirect cost recovery in the budget.

Deadlines for proposals are rolling: (September 15—April 15)



<u>Traveling to Meet with Potential Sponsors</u> are small travel stipends given to faculty who are interested in meeting with Program Managers to discuss projects and funding possibilities.

Applicants for Traveling to Potential Sponsors programs may submit at any time.

Awards are subject to the availability of funds.

SEED GRANT AWARDS

Dr. Justin Anderson

Biology

Association of mosquito digestive tract bacteria with virus infection status

\$20,000

Dr. Lauren Flora

Communications Science and Disorders

Investigation of an iPad-Compatible Hearing Test App and its Influence on Hearing Health

Management Behaviors

\$17,524.77

Dr. Joyce Caughron

Dr. Jason Davis

Biology

Exploration of microbial community biodiversity in anthropogenically altered and pristine areas of the Attitudes in Calculus Peruvian Amazon.

\$19,997.50

Dr. Anthony Dove - Mathematics

Dr. Caleb Adams - Mathematics

Ms. Emily Dove - Psychology

Examining the Influence of the Flipped Classroom Approach on Student Achievement and Student

\$20,000



COLLEGE OF GRADUATE AND PROFESSIONAL STUDIES' UNIVERSITY RESEARCH AWARDS

The Dean of the College of Graduate and Professional Studies sponsored an internal grant competition this fiscal year called the *University Wide Research Awards*. The purpose of a University Wide Research Award is to provide support to two or more faculty engaged in a jointly authored, multi-disciplinary research project. Multi-disciplinary implies that the faculty members reside in different academic departments. The expectation is that funded projects result in products (articles, books, performances, exhibitions, grant applications) that will eventually be peer reviewed/juried.

University Research Awards

Dr. Justin Anderson – Biology
Dr. Christopher Monceaux – Chemistry
Antiviral activity of phenazine pigments from Pseudomonas bacteria
\$20,000

Dr. Kimberly Lane – Chemistry
Dr. Tara Phelps-Durr - Biology
Dr. Timothy Fuhrer— Chemistry
Development of Molecular Modeling and Simulation Core
\$19,400

Dr. Brooke Blanks –STEL
Dr. Jennifer Jones—STEL
Dr. Patricia Winter—Music
Project Zinthu Za Za Aliyense (Something for Everyone): Building Capacity for Inclusive
Education for Children with Disabilities in Rural Malawi Phase II
\$18,879



Altieri, Elizabeth, STEL. Co-PI: Kenna Colley, STEL. George Mason University flow through from ED. \$61,738. Severe Disabilities Grant. This proposal is for funding to teach one or two courses as part of the Virginia Department of Education Statewide Training Consortium.

Altieri, Elizabeth, STEL. Co-PI: Kenna Colley, STEL. George Mason University flow through from ED. \$25,500. Visual Impairment Grant 2013-2014. This proposal is to pay for partial tuition support for students, and to teach a course as part of the Virginia Department of Education Statewide Training Consortium as a subaward on George Mason University's grant.

Altieri, Elizabeth, STEL. George Mason University flow through from U.S. Department of Education. \$100,000. Virginia Collaborative for Preparation of Teachers of Students with Multiple Disabilities Accompanied by Sensory Loss. The purpose of the Virginia Collaborative for Preparation of Teachers (VACPT) of Students with Multiple Disabilities Accompanied by Sensory Loss project is to prepare through innovative distance education 40 fully trained and highly qualified (HQ) Special Education Professionals to work with students with multiple disabilities accompanied by sensory disabilities.

Anderson, Justin, Biology. Co-PI: Christopher Monceaux, Chemistry. National Institute of Health. \$415,537. *Pseudomonas bacteria and phenazine metabolites as anti-arbovirus agents*. The goal of our project is to determine whether pigments produced by *Pseudomonas* bacteria can kill viruses and mosquitoes.

Anderson, Justin, Biology. Jeffress Memorial Trust. \$10,000. *Preventing Arbovirus Infection with Pokeweed Antiviral Protein*. The goal of this project is to determine whether this protein can interfere with the mosquito-borne dengue viruses, which cause significant morbidity and mortality around the world.

Bicak, Nathan, Interior Design and Fashion. Co-PI: **Richard Roth**, Geospatial Sciences and **Holly Cline**, Interior Design and Fashion. Anonymous Sponsor. \$3,085. *Tiny House Research Trip*. The purpose of this proposed work is to provide Radford University students currently enrolled in a design/build course with the opportunity to learn from tiny house experts.

Bierman, Vickie, Nursing. Health Resources and Services Administration flow through from DHHS. \$985,239. Advanced Nursing Education CARE. The purpose of this proposal is to engage advanced practice nursing students and other health care students and professionals in an interprofessional collaborative practice model that will address chronic illness, behavioral health, continuing education and an IPE course and conference.

Blanks, Brooke, STEL. Co-PI: Ellen Austin, STEL. U.S. Department of Education. \$1,043,676. Project Slide: Scholarly Learning in Deaf Education. Project SLIDE at Radford University (RU) will address national, state, or regional shortages of personnel fully credentialed to serve children with hearing impairments, ages birth through 21, who participate in the general curriculum by preparing personnel in a five year dual certification program to serve this population.

Blanks, Brooke, STEL. Co-PI: Patricia Winter, Music and Jennifer Jones, STEL. The Spencer Foundation. \$47,964. Project Zinthu Za Za Allyense. This interdisciplinary project will provide opportunities for experts in special education, music therapy and literacy education to work with local teachers to coconstruct Community Music Therapy, special education and literacy professional development workshops for primary school educators from 20rural schools outside of Lilongwe, the capital of Malawi.

Blanks, Brooke, Virginia Department of Education. \$93,850. RU Special Education General Curriculum K-12 Traineeship Grant. This proposal is for funding for traineeships for the education of Special Education personnel for 2013-2014.

Boyd, Clifford, Anthropological Sciences. Co-PI: Rhett Herman, Physics. Town of Blacksburg. \$15,775. Lee Street Cemetery Survey. This proposal is to complete a survey of the Lee Street Cemetery in Blacksburg, Virginia, to identify and mark unmarked graves.

Boyd, Clifford, Forensic Science Institute. Co-PI: Donna Boyd, Forensic Science Institute. National Science Foundation. \$126,051. Mitochondrial DNA Extraction, Sequencing, and Analysis of Samples from Three Late Prehistoric Virginia Populations. The for the design and implementation of a historic tour goal of this project is to evaluate sociopolitical and mortuary patterning in southeastern U.S. late prehistoric Native American populations through the application of mitochondrial DNA data.

Brummette, John, School of Communications. Co-PI: Lynn Zoch, School of Communications. Pennsylvania State University Arthur W. Page Center. \$3,000. Identifying the Roles that Values Serve in Guiding Stakeholder Expectation of Organizations. The proposed quantitative study seeks to continue the development of a stream of research that has focused on examining the importance of congruent stakeholder and organizational values in the communication and actions of organizations.

Burggraf, Virginia, Nursing. Health Resources and Services Administration flow through from DHHS. \$561,645. Advanced Education Nursing Traineeship HRSA. This proposal is to increase, by 20% each year, enrollees in the DNP NP and NMW programs beginning 2014; begin a new cohort, Veteran BSN-DNP and enroll only veterans in the cohort; advertise the Veterans BSN-DNP cohort, and graduate a minimum of 25 FNP students and 5 NMW students in the next five years.

Burkhardt, Cindy, Chemistry. National Science Foundation. \$51,179. TUES:NSF Symposia: The Impact of the National Science Foundation on Undergraduate Education: Examples of Curricular *Innovations*. This proposal is to organize three symposia to be sponsored by the National Science Foundation.

Byrd, Anthony, Business Assistance Center. George Mason University flow through from SBDC and SBA. \$407,499. 2014 Small Business Development Center. A proposal for grant funds to manage the Small Business Development Center programs in Southwest Virginia.

Carroll, Joshua, Recreation, Parks and Tourism. City of Radford. \$525. Design and Implementation of a Historic Tour of Radford, Virginia. This proposal is of Radford, Virginia.

Cassidy, Corey, Associate Dean of Waldron College Colley, Kenna, STEL. Co-PI: Virginia Bussey and of Health and Human Services. Community Foundation of the New River Valley. \$2,459. This proposal is for a new education prevention and awareness program for young children (birth-five years) and their parents who are experiencing homelessness in the New River Valley of Virginia.

Colley, Kenna, STEL. Co-PI: Brooke Blanks, STEL. W.K. Kellogg Foundation. \$490,936. Bridge to the Future: Experiential Education in Career Readiness to Improve Post-Secondary Transition and **Employment Outcomes for Disadvantaged Youth** and Families. Bridge to the Future proposal is a collaboration bringing together higher education, community agencies, K-12 schools, and local businesses to develop career readiness curricula and programming to prepare economically, educationally, and/or socially disadvantaged K-12 students and their families for post-secondary transition to employment.

Colley, Kenna, STEL. Co-PI: Virginia Bussey and Leslie McArthur-Fox, STEL. Virginia Department of Education flow through from ED. \$1,011,488. Training and Technical Assistance Center (TTAC). The Virginia Department of Education's state-wide projects with TTACs provide professional development and support designed to assist schools in addressing accountability and improvement goals for students with disabilities.

Colley, Kenna, STEL. Co-PI: Virginia Bussey and Leslie McArthur-Fox, STEL. Virginia Department of Education flow through from ED. \$58,375. Training and Technical Assistance Center (TTAC) Supplement. This is a supplement to the TTAC program which provides professional development and support designed to assist schools in addressing accountability and improvement goals for students with disabilities.

Leslie McArthur-Fox, STEL. Virginia Department of Education flow through from ED. \$115,000. Training and Technical Assistance Center (TTAC) Supplement. The Virginia Department of Education's state-wide projects with TTACs provide professional development and support designed to assist schools in addressing accountability and improvement goals for students with disabilities.

Devaney, Margaret, Dance. Virginia Commission for the Arts. \$2,500. Keith Lee Dances. This proposal is for a mini performance and master class by Keith Lee Dances.

Dill, Julie, Sexual Abuse and Substance Abuse Education. Anheuser-Busch Foundation. \$7,535. RU Normal Social Norming Campaign. This proposal is to institute a campaign to change the culture of drinking on Radford University campus through a social norming campaign.

Duncan, Thomas, Economics. Charles Koch Foundation. \$6,500. Guest Speaker Program. This proposal is to have two guest speakers come to present on campus.

Dunleavy, Matt, Office of the Provost. Co-PI: Jeffrey Pittges, Information Technology and **Thomas Pierce**, Psychology. Institute of Education Sciences. \$399,209. Mobile Innovation Lab (MILL) Partnership. This proposal will build upon the existing relationship among the Mobile Innovation Learning Lab, Radford University, Radford City Public Schools and the New River Community College to expand research and development in the area of mobile learning games and learning analytics.

Dunleavy, Matt, Office of the Provost. Co-PI: **Brooke Blanks**, STEL. W. K. Kellogg Foundation. \$524,478. Mobile Innovation Learning Lab (MILL). The proposed project will have four major components: 1) mobile literacy games for the iPod touch and iPad; 2) learning analytics and reporting; 3) professional development for teachers and child- the Commonwealth of Virginia Department of care providers; and 4) engaging adults to effectively use mobile learning games to support and enhance the development of children's literacy skills.

Dunleavy, Matt, Office of the Provost. Co-PI: Jeffrey Pittges, Information Technology. National Science Foundation. \$834,987. Mobile Innovation Learning Lab (MILL) Research Partnership-DATA. The proposed research project will have three major components: 1) Mobile math games for the iPod touch and iPad, 2) learning analytics and reporting; and 3) pre-service and in-service professional development.

Dunleavy, Matt, Office of the Provost. Co-PI: Jeffrey Pittges, Information Technology. National Science Foundation. \$448,684. Mobile Innovation Learning Lab (MILL) Research Partnership. The proposed research project will have three major components: 1) Mobile math games for the iPod touch and iPad, 2) learning analytics and reporting; and 3) pre-service and in-service professional development.

of Game and Inland Fisheries. \$20,000. Bat Surveys in Virginia. This grant will fund surveys to assess the status of three bat species currently being considered "Endangered Species" through the **Endangered Species Act.**

Hendrix, Nicole, Criminal Justice. Co-PI: Isaac Van Patten, Criminal Justice. National Institute of Justice. \$237,705. Targeting Safety: The Role of School Based Education in Reducing Death and *Injury Related to Firearms*. The proposed study examines the use, implementation and effects of **Education Elementary School Gun Safety Guidelines** and Curriculum, partnering with the National Center for the Prevention of Community Violence.

Hilden, Katherine, STEL. Co-PI: Jennifer Jones, STEL. SCHEV flow through from ED. \$142,347. Integration Station Expanded: Best Literacy & Science Practices. The goal is to increase implementation of research-based strategies in the classroom, leading to increased student achievement in literacy and science.

Hoover, Kathryn, STEL. Virginia Department of Taxation. \$68,000. Virginia Consortium for Teacher Preparation in Early Childhood Special Education. The purpose of this proposal is to address the critical shortage of Virginia licensed teachers who carry endorsement in Early Childhood Special Education.

Hoover, Kathryn, STEL. Co-PI: Kathleen Pierson, STEL. Virginia Department of Behavioral Health and Developmental Services flow through from ED. \$210,580. Infant and Toddler Connection 2014-Franci-Powers, Karen, Biology. Virginia Department 2015-State Funds. The program's purpose is to provide early intervention services to eligible children birth to 2 years of age or their 3rd birthday.

> Hoover, Kathryn, STEL. Co-PI: Kathleen Pierson, STEL. Virginia Department of Behavioral Health and Developmental Services flow through from ED. \$127,095. Infant and Toddler Connection 2014-2015-Federal Funds. The program's purpose is to provide early intervention services to eligible children birth to 2 years of age or their 3rd birthday.

Huston, Shawn, Physics. National Institute of Standards and Tech. \$9,500. NIST Surf Undergraduate Fellowship. The Summer Undergraduate Research Fellowship (SURF) Program will provide a research opportunity for undergraduate students to work with internationally known NIST scientists, to expose them to cuttingedge research and to promote the pursuit of graduate degrees in science and engineering.

Jacobsen, Laura, STEL. Co-PI: Agida Manizade, Mathematics and Statistics. Virginia Department of Education. \$250,000. This project's long term effort includes preparation for selected secondary mathematics teachers to serve as Lead Teachers guiding innovation in mathematics content and pedagogy while increasing students' mathematics achievement and interest in STEM fields.

Jacobsen, Laura, STEL. Co-PI: Agida Manizade, STEL. National Science Foundation. \$7,500,000. STEM Leadership in Secondary Mathematics. This proposal is a collaborative effort among K-12 educators, mathematicians, mathematics educators, engineers from NASA and the National Institute of Aerospace and scientists addressing the urgent need to improve U.S. students' international competitiveness through military service. in mathematics.

Jones, Franklin, Physics. Co-PI: Walter Jaronski, Physics. SCHEV flow through from ED. \$167,418. Southside 6-9 STEM Collaboration. Radford University will partner with selected school divisions in Southside Virginia to increase the STEM knowledge of teachers at the middle-school and high an optimal witricity charging in WSN with minimizing -school levels and to improve STEM instruction throughout the divisions.

Kennan, William, Academic Affairs. Co-PI: Joseph Scartelli, Dean of the College of Visual and Performing Arts. Virginia Department of Education. \$714,504. 2014 (FY2015) Residential Governor's School Cost Proposal. The purpose of this proposal is to host the Summer Governor's School.

King-Ingham, Alice, Social Work. \$198,842. Virginia Department of Social Services. Community Resource Adoptive Foster Family Training (CRAFFT) 2014-2015. This proposal is for a grant that will be used to train foster parents and social service workers to strengthen relationships and promote the growth and development of healthy, productive children.

Lane, Kimberly, Chemistry. Co-PI: Timothy Furher, Chemistry and Tara Phelps-Durr, Biology. Jeffress Memorial Trust. \$99,093. Developing a Molecular Modeling Core: A Pipeline for Investigation of Protein Behavior. The overall goal of this proposal is to demonstrate how molecular modeling experiments can be used to guide bench work in the laboratory (ex. mutagenesis, binding assays and protein crystallization).

Leake, Valerie, Psychology. Co-PI: Brooke Blanks, STEL. Department of Veterans Affairs. \$1,994,737. Rural Veterans Military Resource Center. This proposal is to establish an Appalachian Veterans Service Coordination Center at Radford University which will be a one-stop-shop for recent veterans and their families to access the services and benefits in mental health and education that they earned

Lee, Hwajung, Information Technology. KIER (Korea Institute of Energy Research). \$95,032. Wireless Electricity Charging Protocol for Wireless Sensor Networks. This research proposes to integrate wireless electricity (witricity) charging technology into wireless sensor networks (WSN) and investigate energy loss and maximizing network lifetime.

Miller, Chris, Library. British Library. \$57,727. The Music of Burma on Record. This project is to continue large-scale preservation through digitization of recorded music in Burma produced by local Burmese recording companies in the early 1920s to the end of the 1950s.

Moore, Sandra, STEL. Co-PI: Ellen Austin, STEL. Virginia Department of Education. \$200,000. Teacher Preparation and Professional Development Project – Hearing Impairment PreK-12. This proposal is to provide education and professional development to full-time undergraduate and graduate students as well as practicing teachers, speech pathologists, and other service providers.

O'Brien, Sara, Biology. Co-PI: Tony Curtis, Biology. National Science Foundation. \$630,531. Advancing Student Success in Anatomy and Physiology and Beyond: A Study to Determine Best Pedagogical Practices and a Plan to Apply These Methods in Other STEM Fields. This proposal seeks funding to support the assessment, refinement, and extension of a course delivery project at RU focused on identifying, developing and sharing pedagogical "best practices" for teaching.

Ramsey, Anthony, Nursing. Carilion Health Systems. \$86,520. *BS & MS Degree in Nursing 13-14*. A proposal to support the provision of upper-division and graduate nursing courses, including those at the Roanoke Higher Education Center and in online and other alternative educational formats, as part of the Bachelor of Science Degree in Nursing and Graduate programs in Nursing, which are offered by the University.

Schoppelrey, Susan, Social Work. Virginia Department of Social Services. \$20,000. Strengthening Family Activities for the ISC. This proposal is to provide training, technical assistance, and evaluations for the design and development of family strengthening and/or fatherhood activities to Innovators for Success Council (ISC).

Sheehy, Robert, Biology. William and Mary flow through NSF. \$107,756. Collaborative Research: Bio IUSE Ideas Lab: Supporting Faculty in Quantitative Undergraduate Biology Education and Synthesis (QUBES). This proposal is to support the implementation of higher quality quantitative biology learning opportunities by addressing five interrelated goals (1) supporting faculty acquisition and implementation of specific quantitative biology concepts and teaching resources, (2) increasing the visibility, utility and adoption of existing quantitative biology materials, (3) coordinating the efforts and resources of disparate communities invested in promoting quantitative biology education, (4) describing and tracking faculty contributions to quantitative biology education scholarship and (5) studying and disseminating the features of this system that influence implementation success.

Shelton, Mythianne, Physics. Honda Foundation. \$50,437. *Good Morning from Barrow, Alaska Workshops for K-12 Teachers.* This proposal seeks funds to assist two female elementary preservice teachers who will be participating in a 4-credit hour Artic Geophysics Course for Teachers that will incorporate undergraduate student/faculty collaborative research and educational outreach.

Shoemaker, Patricia, Office of the Dean of the College of Education and Human Development. Advance Education, Inc. \$62,588. Advance Education, Inc.: Virginia Southern Association of Colleges and Schools Council for Accreditation and School Improvement (SACS CASI). This proposal is for RU to house and at as fiscal agent for the Advance Education, Inc.: Virginia Southern Association of Colleges and Schools Council for Accreditation and School Improvement.

Science Foundation. \$462,942. Strategies for Encouraging Interest in STEM through Integrating Cryptography into the High School Curriculum. The project will involve integrating a course involving cryptography, the science of disguising information, as a regular part of curriculum offerings taught by the Virginia Governor's schools, which are designed to give gifted high school students academic opportunities beyond those normally available in the students' home high school.

Siyufy, Alex, Physical Therapy. Co-PI: Brent Harper, Physical Therapy. Foundation for Physical Therapy. \$38,732. A Descriptive Study of the Centralization Phenomenon Occurrence Post Lumbar Spine High Velocity Low Amplitude Thrust Manipulation, A Prospective Analysis. This proposal is to study the impact of these approaches on pain referral patterns in order to determine the most ideal and cost-effective treatment for patients with low back pain.

Small, Christine, Biology. Co-PI: R. Stockton Maxwell, Geospatial Science. USDA Forest Service Southern Research Station. \$49,917. Integrating Southern Forest Issues into Undergraduate Curricula: Training Students as Scientists and Natural Resource Professionals. This project will better prepare undergraduates science students to address problems in our nation's forest and increase awareness of post-graduate opportunities in natural resource fields.

Uppuluri, Premchand, Information Technology. Co -PI: Joseph Chase and Jeffrey Pittges, Information Technology. Google RISE. \$49,711. RU Secure: Inspiring Passion for Computer Science. This proposal is to provide immersive, hands-on experience through an immerse game and summer workshop on computer security.

Sigmon, Neil, Mathematics and Statistics. National Uppuluri, Premchand, Information Technology. Co. -PI: Joseph Chase, Information Technology and Jeffrey Pittges, Information Technology. National Security Agency. \$49,925. Prepare and Dare: Preparing High School Students and Nurturing their Passion in Cyber Security. This proposal is for the second phase of the Scare and Prepare program which helps to spark and nurture a passion for computer security among high school students.

> **Uppuluri, Premchand**, Information Technology. Co -PI: Jean Mistele, Mathematics and Statistics; Ian Barland, Information Technology; and Orion Rogers, Office of the Dean of the College of Science and Technology. National Science Foundation. \$618,443. Preparing the Next Generation of Leaders in Science, Technology and Mathematics. This proposal will support academically talented but financially disadvantaged students from high school and those that transfer from community colleges to pursue a major in Science, Technology or Mathematics.

> Van Patten, Issac, Criminal Justice. Co-PI: Nicole Hendrix, Criminal Justice. National Institutes of Justice. \$659,129. Video Witness: The Role of Body -Worn Video Networks in Reducing Coercieve Police-Citizen Encounters. This study proposes to examine the combination of scenario-based police -citizen encounter training and the use of a bodyworn video network in reducing coercive use-offorce incidents in Roanoke, Virginia.

> Wagner, Melinda, Sociology. East Tennessee State University flow through from the Appalachian Regional Commission. \$4,000. Appalachian Teaching Project. This proposal is for RU to offer a course in which students will address the question, "How do we build on community assets to shape a positive future for Appalachia?"

Watts, Chester, Geology. The Mary Moody Northen Endowment. \$12,000. Monitoring and Documenting Lake Restoration at Mountain Lake. This project is to utilize principles of Engineering Geoscience to decrease the loss of water due to seepage from the bottom of the lake in an effort to raise the water level to full pond, or near full pond, levels.

Wojdak, Jeremy, Biology. University of Pittsburgh flow through NSF. \$568,993. Collaborative Research: Bio IUSE Ideas Lab: Supporting Faculty in Quantitative Undergraduate Biology Education an Synthesis (QUBES). This proposal is to support the implementation of higher quality quantitative biology learning opportunities by addressing five interrelated goals: (1) supporting faculty acquisition.

Webster, Francis, Chemistry. Environmental Protection Agency. \$89,975. Lessons from Nature: Synthetic Humic Acid Materials for Improved Water Purification (EPA P2 Phase II). This research proposal is to meet the challenge of increasing the use of waste oil for biodiesel production through the development of a novel carbon catalyst for the esterification of fatty acids, removing from waste feedstock.

Winter, Patricia, Music. Co-PI: Corey Cassidy, Waldron College. \$14,983. Music Therapy and Speech/Language Therapy: A Collaborative Research for Young Children with Communication Disorders. This two-fold project proposes to evaluate music therapy interventions and speech/language interventions as integral therapeutic strategies for toddlers and preschool aged children with speech and language disorders. This project will also evaluate the impact of caregiver training as a support for the generalization of language development from the clinic to the home environment.

Wojdak, Jeremy, Biology. National Science Foundation. \$138,350. AIMS: Amazing Images to Learn Mathematics & Statistics. This project will be used to create, assess and disseminate learning materials that will allow meaningful hypothesis formation, data collection, and most importantly analyses of biological research.

flow through NSF. \$568,993. Collaborative Research: Bio IUSE Ideas Lab: Supporting Faculty in Quantitative Undergraduate Biology Education and Synthesis (QUBES). This proposal is to support the implementation of higher quality quantitative biology learning opportunities by addressing five interrelated goals: (1) supporting faculty acquisition and implementation of specific quantitative biology concepts and teaching resources, (2) increasing the visibility, utility and adoption of existing quantitative biology materials, (3) coordinating the efforts and resources of disparate communities invested in promoting quantitative biology education, (4) describing and tracking faculty contributions to quantitative biology education scholarship and (5) studying and disseminating the features of this system that influence implementation success.

Yang, Wei Chi, Mathematics and Statistics. Co-PI: Anthony Dove, Mathematics and Statistics. Texas State University to Institute of Education Services. \$1,399,999. Dynamic Geometry in Rural High School Classrooms. This project will be a replication study to investigate the effectiveness of a dynamic geometry approach on high school students' geometry learning in several states across the country.



Altieri, Elizabeth, STEL. Co-PI: Kenna Colley, STEL. George Mason University flow through from ED. **\$61,738**. Severe Disabilities Grant. This award is for funding to teach one or two courses as part of the Virginia Department of Education Statewide Training Consortium.

Altieri, Elizabeth, STEL. Co-PI: Kenna Colley, STEL. George Mason University flow through from ED. **\$25,500**. Visual Impairment Grant 2013-2014. This grant is to pay for partial tuition support for students, and to teach a course as part of the Virginia Department of Education Statewide Training Consortium as a subaward on George Mason University's grant.

Anderson, Justin, Biology. Jeffress Memorial Trust. Boyd, Clifford, Anthropological Sciences. Co-PI: \$10,000. Preventing arbovirus infection with pokeweed antiviral protein. This award is to test pokeweed antiviral protein (PAP) for its ability to interfere with infection of mosquitoes in three ways: (1) determine PAP antiviral activity against La Crosse and dengue viruses, (2) assess PAP mosquito larvicidal activity, and (3) express PAP in insect cells and determine whether they are refractory to virus infection.

Bicak, Nathan, Interior Design and Fashion. Co-PI: Richard Roth, Geospatial Sciences. Co-PI: Holly Cline, Interior Design and Fashion. Anonymous Donor. **\$3,085**. *Tiny House Research Trip*. The purpose of this grant is to provide Radford University students currently enrolled in a design/ build course with the opportunity to learn from tiny house experts.

Bierman, Vickie, Nursing. Health Resources and Services Administration flow through from DHHS. **\$255,473**. Advanced Nursing Education CARE. The purpose of this proposal is to engage advanced practice nursing students and other health care students and professionals in an interprofessional collaborative practice model that will address chronic illness, behavioral health, continuing education and an IPE course and conference.

Blanks, Brooke, STEL. Virginia Department of Education. \$62,228. RU Special Education General Curriculum K-12 Traineeship Grant. This grant is for funding for traineeships for the education of Special Education personnel for 2013-2014.

Rhett Herman, Physics. Town of Blacksburg. \$15,775. Lee Street Cemetery Survey. This grant is to complete a survey of the Lee Street Cemetery in Blacksburg, Virginia, to identify and mark unmarked graves.

Brummette, John, School of Communication. Co-PI: Lynn Zoch, School of Communication. Pennsylvania State University Arthur W. Page Center. \$3,000. This quantitative study seeks to continue the development of a stream of research that has focused on examining the importance of congruent stakeholder and organizational values in the communication and actions of organizations.

Byrd, Anthony, Business Assistance Center. George Devaney, Margaret, Dance. Virginia Commission of Mason University flow through from SBDC and SBA. Arts. \$2,500. Keith Lee Dances. This funding is for a \$442,934. 2014 Small Business Development Center. Grant funds are to manage the Small Business Development Center programs in Southwest Virginia.

Carroll, Joshua, Recreation, Parks and Tourism. City of Radford. \$525. Design and Implementation of a Historic Tour of Radford, Virginia. This grant is for the design and implementation of a historic tour of Radford, Virginia.

Colley, Kenna, STEL. Co-PI: Virginia Bussey and Leslie McArthur-Fox, STEL. Virginia Department of Education flow through from ED. \$58,375. Training and Technical Assistance Center (TTAC) Supplement. This is a supplement to TTAC program which provides professional development and support designed to assist schools in addressing accountability and improvement goals for students with disabilities.

Colley, Kenna, STEL. Co-PI: Virginia Bussey, TTAC; and Leslie McArthur-Fox, TTAC. Virginia Department of Education flow through from ED. \$1,011,488. Training and Technical Assistance Center (TTAC). This grant provides funding for the Training and Technical Assistance Center which provides professional development and support design to assist schools in addressing accountability and improvement goals for students with disabilities.

Colley, Kenna, STEL. Co-PI: Virginia Bussey, TTAC; Leslie McArthur-Fox, TTAC. Virginia Department of Education flow through from ED. \$115,000. Training and Technical Assistance Center (TTAC) Supplement. This supplement is for additional funding for the Training and Technical Assistance Center which provides professional development and support design to assist schools in addressing accountability and improvement goals for students with disabilities.

mini performance and master class by Keith Lee Dances.

Dill, Julie, Sexual Abuse and Substance Abuse Education. Anheuser-Busch Foundation. \$7,535. RU Normal Social Norming Campaign. This grant will help institute a campaign to change the culture of drinking on Radford University campus through a social norming campaign.

Duncan, Thomas, Economics. Charles Koch Foundation. **\$6,500**. *Guest Speaker Program*. This grant is for two guest speakers to present on campus.

Francl-Powers, Karen. Virginia Department of Game and Inland Fisheries. \$20,000. Bat surveys in Virginia. This project will assess the status of two bat species currently being considered for "Endangered Species" status through the Endangered Species Act.

Hilden, Katherine, STEL. Co-PI: Jennifer Jones, STEL. SCHEV flow through from ED. \$92,020. Integration Station: Bridging best practices in literacy and science. This award is to creatively integrate science and literacy instruction with the use of non-fiction texts to enhance students' learning in science, reading and writing.

Hoover, Kathryn, STEL. Virginia Department of Education flow through from ED. \$68,000. Virginia Consortium for Teacher Preparation in Early Childhood Special Education. The purpose of this grant is to address the critical shortage of Virginia licensed teachers who carry endorsement in Early Childhood Special Education.

Hoover, Kathryn, STEL. Co-PI: Kathleen Pierson, STEL. Virginia Department of Behavioral Health and Developmental Services flow through from ED. \$210,580. *Infant and Toddler Connection 2014-2015-State Funds*. The grant is to provide early intervention services to eligible children birth to 2 years of age or their 3rd birthday.

Hoover, Kathryn, STEL. Co-PI: **Kathleen Pierson**, STEL. Virginia Department of Behavioral Health and Developmental Services flow through from ED. \$127,095. *Infant and Toddler Connection 2014-2015-Federal Funds*. The grant is to provide early intervention services to eligible children birth to 2 years of age or their 3rd birthday.

Huston, Shawn, Physics. National Institute of Standards and Tech. \$8,635. NIST Surf Undergraduate Fellowship. The Summer Undergraduate Research Fellowship (SURF) Program provides a research opportunity for undergraduate students to work with internationally known NIST scientists, to expose them to cutting-edge research and to promote the pursuit of graduate degrees in science and engineering.

Jacobsen, Laura, STEL. Co-PI: Agida Manizade, Mathematics and Statistics. Virginia Department of Education. \$230,000. Secondary Mathematics Professional Development Center. This grant is to prepare selected secondary mathematics teachers to serve as Lead Teachers guiding innovation in mathematics content and pedagogy while increasing students' mathematics achievement and interest in STEM fields.

Jones, Franklin, Physics. Co-PI: Walter Jaronski, Physics. SCHEV flow through from ED. \$158,081. *K-5 STEM Education across the Blue Ridge*. This project is to strengthen science education in grades K-5, with a particular emphasis on the transitional grades 4-5, in the collaborating school systems, and to develop models of science instruction for these grades which can be used throughout the state.

Kennan, William, Academic Affairs. Co-PI: Joseph Scartelli, Dean of the College of Visual and Performing Arts. Virginia Department of Education. \$714,504. 2014 (FY2015) Residential Governor's School Cost Proposal. The purpose of this proposal is to host the Summer Governor's School.

King-Ingham, Alice, Social Work. \$198,842. Virginia Department of Social Services. *Community Resource Adoptive Foster Family Training (CRAFFT) 2014-2015*. This grant will be used to train foster parents and social service workers to strengthen relationships and promote the growth and development of healthy, productive children.

King-Ingham, Alice, Social Work. Virginia Department of Social Services. **\$1,534**. *VDSS CAC Supplement*. This grant is a supplement for the coordinator and assistant coordinator positions of the CACNRV.

Manizade, Agida, Mathematics and Statistics.
College of William and Mary flow through Virginia
Department of Education. \$1,744. Tidewater Team
to Improve Middle School Mathematics Instruction.
This grant is to work with the College of William
and Mary on a collaborative proposal to serve as a
member of the advisory board for the project, help
develop a math course and recruit teachers for
training in mathematics.

Miller, Chris, Library. British Library. \$57,727. The Music of Burma on Record. This grant is to continue large-scale preservation through digitization of recorded music in Burma produced by local Burmese recording companies in the early 1920s to the end of the 1950s.

Moore, Sandra, STEL. Co-PI: Ellen Austin, STEL. Virginia Department of Education. \$200,000. Teacher Preparation and Professional Development Project – Hearing Impairment PreK-12. This grant will provide education and professional development to full-time undergraduate and graduate students as well as practicing teachers, speech pathologists, and other service providers. Onega, Lisa, Nursing. Virginia Department of Social Schoppelrey, Susan, Social Work. Virginia Services. \$39,988. Bright Light Therapy for *Individuals with Dementia*. This grant is to determine if the degree of improvement in depression and agitation scores over the course of eight weeks is significantly greater in persons with dementia receiving bright light exposure than in persons with dementia receiving placebo light exposure.

Database Instructional Games. This grant is to provide funding for students to more effectively learn the area of business intelligence through the Database Instructional Games.

Ramsey, Anthony, Nursing. Carilion Health Systems. \$86,520. BS & MS Degree in Nursing 13-14. This award is to support the provision of upperdivision and graduate nursing courses, including those at the Roanoke Higher Education Center and in online and other alternative educational formats, as part of the Bachelor of Science Degree in Nursing and Graduate programs in Nursing, which are offered by the University.

Roberts, Colleen, Police Department. Virginia Office of Emergency Medical Services flow through from VDH. \$6,538. Virginia Rescue Squad Assistance Fund. This grant will purchase Kenwood Nect Edge radios, Motorola Minitor V pager, and a Toughbook tablet for the RU EMS department.

Roberts, Mary Ann, STEL. Co-PI: Jane Swing, STEL. Virginia Department of Education (flow-through from ED). \$61,720. EL Civics 2013-2014. This grant is for the Office of Adult Education and Literacy at RU to work with the Office of Adult Education and Literacy in the Virginia Department of Education to provide staff development and training to adult education practitioners in Virginia.

Department of Social Services. \$20,000. Strengthening Family Activities for the ISC. This grant is to provide training, technical assistance, and evaluations for the design and development of family strengthening and/or fatherhood activities to Innovators for Success Council (ISC).

Sheehy, Robert, Biology. William and Mary flow through from NSF. \$3,600. RNC-UBE Incubator: An Pittges, Jeff, Information Technology. \$10,000. DIG: online networking hub for collaboration, discovery, and synthesis in quantitative biology curricula. This grant is for a collaborative proposal and will be used to support activities of the network participants, such as participant travel, materials and supplies for the network project.

> Shoemaker, Patricia, Office of the Dean of the College of Education and Human Development. Advance Education, Inc. \$62,588. Advance Education, Inc.: Virginia Southern Association of Colleges and Schools Council for Accreditation and School Improvement (SACS CASI). This proposal is for RU to house and act as fiscal agent for the Advance Education, Inc.: Virginia Southern Association of Colleges and Schools Council for Accreditation and School Improvement.

> Swing, Jane, STEL. Co-PI: Ann Mary Roberts, STEL. Virginia Department of Correctional Education. \$12,000. Partnership with DOC for VAILL Participants. This grant is for thirty DCE personnel to participate in the Virginia Institute for Lifelong learning at Radford University campus.

> Trageser, Susan, Student Affairs. U.S. Department of Education. \$172,501. Student Support Services. This grant is to institute a campaign to change the culture of drinking on Radford University campus through a social norming campaign.

Trageser, Susan, Student Affairs. U.S. Department of Education. **\$292,343**. *Student Support Services*. The program is designed to identify qualified individuals from disadvantage backgrounds and to prepare them to succeed in a program of postsecondary education.

Uppuluri, Prem, Information Technology. Co-PI: Ian Barland, Information Technology: Jean Mistele, Mathematics and Statistics, Orion Rogers, Office of the Dean of the College of Science and Technology. National Science Foundation. \$602,101. Preparing the Next Generation of Professionals in Science, Technology, and Mathematics. This funding is to recruit, retain, prepare and give scholarships to students in the STEM disciplines.

Uppuluri, Prem, Information Technology. Co-PI: Joseph Chase, Information Technology and Jeffrey Pittges, Information Technology. National Security Agency. \$45,000. Prepare and Dare: Preparing High School Students and Nurturing their Passion in Cyber Security. This grant is for the second phase of the Scare and Prepare program which helps to spark and nurture a passion for computer security among high school students.

Wagner, Melinda, Sociology. East Tennessee State University flow through from Appalachian Regional Commission. \$4,000. Appalachian Teaching Project. This grant is to offer a course in which students will address the question, "How do we build community assets to shape a positive future for Appalachia?"

Watts, Chester, Geology. The Mary Moody
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This project is to utilize principles of Engineering
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Webster, Francis, Chemistry. Environmental Protection Agency. \$89,975. Lessons from Nature: Synthetic Humic Acid Materials for Improved Water Purification (EPA P3 Phase II). This grant's research objective is to meet the challenge of increasing the use of waste oil for biodiesel production through the development of a novel carbon catalyst for the esterification of fatty acids, removing the waste from feedstock.

