The UNH Research Office

Advancing Excellence in Research, Scholarship, and Creative Activities

FY 2013 Annual Report of Research Office Activities

The UNH Research Office, led by the Senior Vice Provost for Research (SVPR), provides leadership and services to support UNH faculty, students, and staff in their research, scholarship, and creative activities; facilitates cooperation between UNH and the business community; and communicates and promotes the breadth and depth of UNH research and discovery, and resulting impacts within and beyond the University. The SVPR reports to the Provost (thus integrating research within the academic mission and resources) and serves as a member of the Provost’s Council and the President’s Cabinet.

The Research Office accomplishes its mission of advancing excellence in research, scholarship, and creative activities by providing the essential infrastructure and resources to support a dynamic and growing research program across all academic disciplines of UNH. The Office’s comprehensive goal is to increase and support external research funding and recognition of faculty and student excellence.

Advancing the UNH Strategic Plan

Activities of the Research Office are guided by the Report of the President’s Blue Ribbon Panel on Research and the goals and initiatives of the University’s strategic plan: “Breaking Silos, Transforming Lives, Reimagining UNH – UNH 2020.” Additional guidance is provided by the UNH Research Council which serves as an advisory body to the SVPR on matters pertaining to the support and advancement of the Research Office’s mission. The Council provides a forum for communication and opportunities for collaboration among the Research Office, the colleges and schools, the research centers and institutes, and other key players in the UNH research enterprise.

The SVPR is the “point person” and Research Office units provide support for five of the ten Academic Initiatives of the UNH Strategic Plan:

- Commercializing UNH’s Intellectual Capital;
- Independent Research, Scholarship, and Creative Activity;
- Interdisciplinary Schools and Academies: Development of Schools of Marine Science and Ocean Engineering, Earth System Science, and Public, Community, and International Service;
- New Ventures Fund; and
- Research Leveraging: Advancing large-scale interdisciplinary research.

FY 2013 Activities

Despite the challenging budget environment, the SVPR focused on enhancing opportunities to support research and scholarship, intellectual property commercialization, and development of interdisciplinary schools in FY 2013.

Commercializing UNH’s Intellectual Capital: The Research Office has an entire unit devoted to commercializing UNH’s intellectual capital: the Office for Research Partnerships and Commercialization. (See pages 12-16.) In addition, the SVPR supports the New Hampshire Innovation and Commercialization Center to accelerate companies which have the potential to stimulate economic development and create new jobs; provides support to faculty startup companies; and through the New Hampshire Innovation Research Center, funds research and
development activities between New Hampshire companies and faculty and students. In FY 2014 we will introduce a new effort called "UNH Innovation" to coordinate our activities focused on commercialization, consulting and external services, corporate engagement, and economic development.

Independent Research, Scholarship, and Creative Activity: An initiative launched in FY 2012 and repeated in FY 2013 promotes independent research activity with the National Institutes of Health (NIH). "UP-2-NIH" began with an internal competition for funds to be used by selected researchers to complete collection of preliminary data or otherwise propel their research to the point at which a proposal could be prepared to submit to NIH. Already we have seen the results of this initiative. In FY 2012, 26 proposals were submitted and 7 were awarded or recommended for funding. In FY 2013, 18 were submitted, 2 were awarded, and 7 are pending. This is the largest number of submissions to NIH in UNH history.

Interdisciplinary Schools and Academies: The SVPR worked with faculty members involved in marine sciences and ocean engineering to develop a new interdisciplinary school that organizes UNH’s research, teaching and outreach strengths in these areas. The new School of Marine Science and Ocean Engineering, which was announced in September 2013, will support three doctoral programs (oceanography, ocean engineering, and marine biology) in collaboration with academic departments across UNH’s colleges. Another interdisciplinary school, the School of Public Policy, currently is being developed by faculty across the campus.

New Ventures Fund: The SVPR promotes New Ventures Fund activities, including the Research and Engagement Academy, for tenure-track, extension, and research faculty interested in enhancing their scholarly agendas through external funding. Led by Dr. Julie Williams, Senior Vice Provost for Engagement and Academic Outreach, and supported by the Research Development and Communications Office, the Academy is a semester-long learning community with seven interactive workshops about successful strategies with federal agencies and foundations and individualized coaching by faculty experts through the grant writing process. Other New Ventures activities include various “learning communities” which bring together faculty members who share an interest in a particular funding opportunity, such as the Early Career programs at the National Science Foundation or the U.S. Department of Energy, or an area of interdisciplinary study, such as humanities and culture or sustainable ecosystems.

Research Leveraging: The focus of the UNH research leveraging initiative is to position interdisciplinary groups of faculty and other key research personnel to be competitive for major external grants that will advance new ideas and paradigms. An evaluation of an initiative that awarded eight teams “startup” funds was completed in August. The teams’ topics covered a wide range of interests: geosciences education, health analytics, sustainability science research, biofuel generation using Clostridial bacteria, interdisciplinary approaches to and using geospatial technologies to create long-term models of human-environment interaction, societal dynamics of the Maya collapse, indigenous and rural science education, and integrative analyses of the neural basis of behavior. Of the 32 objectives identified across the projects, 25 were fully achieved, 6 were partially or mostly successful, and 1 was unsuccessful. A major accomplishment of this program was leveraging $680,000 in seed funds to the 50 faculty in the eight teams, resulting in $17.4 million in externally-sponsored awards. These awards are contributing to advances in development of sustainable fuel sources; development of a new method for geochemical tracking in archaeological studies; establishment of new research partnerships in France, Tanzania and Taiwan; and development of an improved methodology for understanding neuron activity in animals. Many of these efforts required a strong interdisciplinary component to be successful. This grant model shows a strong promise of sustainability.
Organization of the Research Office

Administrative and Service Units and Research Centers

The Research Office is composed of a central administrative office and six service units: Research Development and Communications, Research Partnerships and Commercialization, Sponsored Programs Administration, Research Integrity Services, Research Computing and Instrumentation, and Environmental Health and Safety. The Research Office is also the administrative center for the New Hampshire National Science Foundation (NSF) Experimental Program to Stimulate Competitive Research (EPSCoR). The OSVPR serves as principal investigator for the NSF EPSCoR project and provides overall direction for UNH’s EPSCoR-like programs from other federal agencies.

Until FY 2014, the Research Office provided administrative oversight for several interdisciplinary research centers:

- Coastal and Ocean Technology Programs
  - the Atlantic Marine Aquaculture Center (AMAC)
  - the National Estuarine Research Reserve System (NERRS) Science Collaborative;
- Marine Program;
- Piscataqua Region Estuaries Partnership (PREP); and
- New Hampshire Sea Grant College Program.

These centers will now be part of the School of Marine Science and Ocean Engineering directed by Dr. Larry Mayer who reports to the Director of the Institute for the Study of Earth, Oceans, and Space (EOS), Dr. Harlan Spence.

An organizational chart for the Research Office is provided on page 32. A listing of the unit staff can be found on pages 33-35. In addition to this Annual Report, individual unit newsletters and other Research Office publications can be found on the Research Office web site.

Research Office Strategic Working Groups

The SVPR created strategic working groups in 2010 to provide her with guidance on ways to improve and enhance Research Office activities to support the UNH research enterprise. Stakeholders from the faculty, Research Office staff, and members of the broader UNH and USNH communities, as appropriate, make up the membership. The current working groups and their chairs are:

- Centers and Institutes Working Group (K. Gardner)
- Compliance and Risk Management Working Group (B. Manning & J. Simpson)
- Grants Management Advisory Committee (V. Sosa)
- Intellectual Property/Tech Transfer/Commercialization Working Group (M. Sedam)

FY 2013 Funding Profile

Due to the delay in submission of the President’s budget, federal agencies were late to release funding opportunity announcements and awards. These delays, in addition to the impacts of sequestration and the end of ARRA funding, resulted in sponsored program awards as of June 30, 2013 being lower than anticipated. By the end of August 2013, however, UNH had received three times the number of awards than in previous years. This was encouraging but we continue to face future federal budget challenges, increased competition, and uncertainty.
Research and sponsored program awards to UNH in FY 2013 exceeded $96M. Although FY 2013 direct funding from Federal and Business & Industry sponsors was comparable to that in FY 2012, awards from Non-Profits decreased by $10M, awards from the State of New Hampshire by $7.6M, and awards from Other Universities by $3M. The decrease in Non-Profit funding can be attributed primarily to decreased NASA-funded contracts through our strategic partner, the Southwest Research Institute (SwRI), which is a not-for-profit organization. This, again, can be attributed to the impact of sequestration and, in the case of NASA, a decrease in funding for heliophysics research. Similar explanations apply to the decreases in State of New Hampshire and Other Universities funding, because the majority of those funds originate with federal sponsors. UNH’s new cooperative research collaboration agreement with SwRI will offer future opportunities for submitting joint, highly-competitive proposals to whatever programs are available from NASA or other sponsors.

Federal agencies that provided funding for UNH projects in FY 2013 are shown below.

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FY 2013 externally sponsored awards received by major UNH units are shown below. “Other” includes Student and Academic Services, Academic Affairs, Business Affairs, Facilities, General Administration, and the Library.

FY 2014 Initiatives Planned by the SVPR

In FY 2014, the SVPR will introduce new initiatives as well as continuing many of the FY 2013 objectives.

New Initiatives

- Coordinate with the UNH Leitzel Center for Mathematics, Science, and Engineering Education to develop initiatives to support increased proposal submissions to the U.S. Department of Education and to the National Science Foundation Education and Human Resources Directorate. (This is responsive to a larger UNH effort to promote STEM education.)
- Support submission of two National Aeronautics & Space Administration Earth Venture proposals.
- Convene a faculty group to begin discussions about a UNH School of Earth System Science.
- Support submission of an NIH Center of Biomedical Research Excellence application focused on genomics.
- Develop relationships with the NH House Science and Technology Committee and NH Senate Commerce Committee.
- Explore opportunities to hold UNH student innovation competitions in engineering, environment, and marine sciences.
• Lead the new NSF EPSCoR Track II award, “Sustaining coastal systems: Linking science and decision-making to reduce pollution-related impairment.”
• Launch UNH Innovation to harness UNH’s economic development components in a coordinated and highly effective organization designed to leverage UNH’s intellectual and physical assets.
• Continue to develop communications strategies that highlight UNH research and impacts, including social media, electronic newsletters, and other products.
• Conduct a review of UNH Centers and Institutes to improve quality and capacity.
• Working with interdisciplinary faculty members, support development of an interdisciplinary entrepreneurship minor.

Ongoing Initiatives

• Sponsor a third year of UP-2-NIH focused on improving UNH competitiveness for National Institutes of Health funding.
• Continue to support faculty and their grant submissions related to the Research Leveraging Initiative, Research & Engagement Academy, “Learning communities,” and a proposed Path to Professorship program with the Senior Vice Provost for Engagement and Academic Outreach.
• Implement a UNH-wide strategy for public sharing of research data as required by federal agencies.
• Secure research analytics software to help UNH administrators and faculty better understand faculty research strengths and strategic competitiveness.
• Complete Sponsored Programs Administration strategies for supporting faculty and student research, including implementing electronic proposal routing.
• Develop and deploy an on-line compliance training and monitoring program for faculty, students, and staff.
• Continue to lead the current $20 million NSF EPSCoR Cooperative Agreement, “Interactions Among Climate, Land Use, Ecosystem Services and Society.”
• Provide support to five new startup companies deploying UNH’s intellectual property, and support continued increases in the annual UNH invention disclosure and licensing rates.
• Implement a coordinated UNH strategy to increase public-private partnerships and to increase the number of sponsored research agreements with business and industry, including the launch of an externally-focused website.
• Continue to operationalize a strategy with the UNH Graduate School and the Office of National Fellowships to encourage and support undergraduate and graduate student applications for research and dissertation fellowships and other prestigious funding opportunities.
• Continue to support the development of the new UNH School of Marine Science and Ocean Engineering.
• Continue agreement with Cornell University to assume primary leadership of the Shoals Marine Laboratory.
• Finalize new policy on intellectual property.
• Continue to pursue new instrumentation through federal agency programs and organize instrumentation locations, services, and support to optimize use by faculty, students, and external parties.
• Continue work with UNH government relations liaison to implement a state and federal government relations strategy that supports sponsored program funding and advancement of the research mission.
Research Development and Communications

Research Development and Communications (RDC) directly supports two of the ten UNH 2020 Strategic Plan Programmatic Initiatives: Independent Research, Scholarship, & Creative Activity, and Research Leveraging. RDC’s mission reflects its role in these initiatives through helping faculty and other UNH researchers enhance their strategies and skills for grant seeking, facilitating development of multi-disciplinary and institution-wide proposals, coordinating UNH responses to special funding and award programs, and promoting communication of UNH research and discovery activities to the general public, UNH, and the business community.

During FY 2013, RDC was staffed with two full-time employees and several graduate students from UNH’s MFA program. These graduate students assisted with proposal development, program execution, communications, and administrative support for all RDC programming. Highlights of RDC’s FY 2013 accomplishments appear below.

New Initiatives in FY 2013

UP-2-NIH (University of New Hampshire Program to Stimulate Applications to the National Institutes of Health)

Many UNH faculty members have research interests and expertise in health, biomedical and behavioral sciences, yet their success in competing for NIH funding has been limited. In FY 2012, NIH funding represented only $1.5M of UNH’s total $118M funding profile. To enhance UNH faculty NIH competitiveness, RDC initiated UNH’s first UP-2-NIH programming in FY 2013. Using an RDC-designed curriculum, the first cohort of nine faculty members participated in monthly seminars and workshops, guided by on- and off-campus faculty mentors with NIH expertise. By June 30, four of the nine had submitted applications to NIH; the other five are committed to submit in FY 2014. One new award has been received to date.

NSF GRFP (National Science Foundation Graduate Research Fellowship Program)

The NSF GRFP provides up to three years of support to awardees, including $32,000 in annual stipends, $12,000 cost-of-education allowances, international research and professional development opportunities, and XSEDE super-computer access. Partnering with the Graduate School, National Fellowships Office, and Research Office faculty fellow Anita Klein, RDC provided personnel resources to advertise the FY 2013 GRFP opportunity, conduct writing workshops, and review and edit applications for strategic presentation. Twenty applications were submitted, resulting in four awards and one honorable mention, the best single-year outcome in UNH history. These awards enrich both the graduate students’ research and that of their faculty advisers.

Stimulating Multi- and Interdisciplinary Research Proposals

RDC hosted informational meetings and/or provided support during FY 2013 for several multi-disciplinary funding opportunities, including NSF IGERT, PFI-BIC, MRI, and SEES competitions. A new MRI award was received for a field emission scanning electron microscope that will be used for research in nanotechnology, materials science, mechanics, manufacturing, and earth sciences. In addition, RDC partnered with Patrick Messer (RCI) and Scott Valcourt (UNH IT) to promote, manage the proposal planning process, and co-write (with nine faculty members) a proposal to the NSF Campus Cyberinfrastructure - Network Infrastructure and Engineering (CC-NIE) Program to enable UNH faculty to access national and global high-performance end-to-end dynamic network services for extremely rapid, unimpeded movement of diverse and distributed scientific data sets and advanced distributed computing. This resulted in a two-year award for $499,225.
Participation in UNH “Learning Communities” in FY 2013

Research & Engagement Academy (R&EA)

From participation in the internal peer review selection process of twenty R&EA applicants, through facilitating and presenting at monthly workshops, to assisting individuals with their funding and proposal preparation strategies, RDC played a prominent role in promoting proposal submissions for the AY12-13 R&EA faculty participants, and for the AY10-11 and AY11-12 R&EA alums. For the latter two cohorts of 63 faculty, 99 proposals have been submitted for $33,708,821 resulting in $10,651,860 in awards to date.

Faculty Early Career Development (NSF) and Early Career Research (Department of Energy – DOE) Programs

RDC staff participated in or led workshops for both programs, accompanied a faculty cohort to visit NSF program officers, established individual timetables and milestones for proposal preparation/submission, arranged for expert external pre-submission review, and edited the 11 NSF and 4 DOE proposals submitted during calendar year 2012. Of the 15 applicants, Xiaowei Teng was the recipient of the highly coveted DOE Early Career Research award, the second such award received by a UNH faculty member since this program began four years ago. With this award, Dr. Teng will support one Ph.D. student and five undergraduate students. (See sidebar.)

Hosted/ Presented Grant Seeking Skills Workshops and Seminars in FY 2013

During FY 2013 RDC hosted and/or presented the following programs to UNH faculty, postdocs, graduate students, and other researchers to deepen their understanding of the sponsored research environment and their grant seeking knowledge and skills:

- Fundamentals of NIH – a webinar by NIH organized by UNH RDC for all NH institutions
- Strategies for Success with Foundations – a seminar co-hosted with the UNH Foundation
- Webinars on funding priorities, programs and advice for proposers as presented by federal agencies (AHRQ, AFOSR, AMRMC, DTRA, DOD, DOE, EPA, HRSA, NEH, NSF, NSF Bio Division of Integrative Organismal Systems, ONR, SAMHSA, USDA NIFA, US Ed’s National Center for Education Research, White House OSTP)
- Funding Opportunities for Early Career Investigators – an RDC workshop
- Using Engagement to Broaden the Impact of Your Project; Innovative Broader Impacts in Research Projects – two workshops by UNH Cooperative Extension and RDC
- Writing Clearly and Concisely for Grant Proposals: Concrete Strategies for Strengthening Your Writing – an RDC-hosted seminar by Jeralyn Haraldsen, freelance grant writer
- Survey, Evaluation, and Assessment Expertise, Services, and Resources at UNH – an RDC-hosted seminar with Andy Smith (Survey Center), Bruce Mallory (Carsey Institute), and Victor Benassi (Center for Teaching and Learning Excellence)
- Fulbright Day at UNH: Fulbright Programs to Foster International Scholarship – day-long workshops and seminars co-organized and hosted with the UNH Office of National Fellowships

Xiaowei Teng, assistant professor of chemical engineering, received a 2013 U.S. Department of Energy (DOE) Early Career Research (ECR) Award to pursue research that will improve energy storage in super-capacitors. This research has implications for electric vehicles, which currently use lithium-ion batteries to store energy. The long charging time of these batteries has been a major barrier to electric vehicle technology development.

The DOE ECR program supports development of outstanding scientists early in their careers and stimulates careers in the disciplines supported. Chosen from about 700 proposals, Teng’s award ($750,000 over five years) is one of just 65 awards made to researchers from U.S. universities and national labs in FY 2013.
• Finding Funding: Search Tools and How to Use Them Effectively – an RDC workshop
• Strategies for Success with U.S. Dept. of Energy Research Programs – an RDC-hosted workshop with Kristin Bennett, President, KBScience
• UNH Resources for Data Management – a workshop co-hosted by RDC, RCI, and UNH IT

One-on-One Support in FY 2013

RDC helps individual researchers to develop competitive proposals, including: identifying appropriate sponsors and programs; connecting with federal program officers; planning activities for successful proposal writing and resubmissions; arranging for expert internal and external critiques of draft proposals; strategies for increasing the likelihood of securing funding; and proposal writing, polishing, and editing designed to help ensure that submitted proposals present the projects effectively and meet each sponsor’s formatting and content guidelines. The RDC editorial team also researches and provides standardized language and data required for certain solicitations. Response to these services from RDC’s customers remains overwhelmingly positive.

RDC provided one-on-one support to more than 230 individuals in FY 2013. The editorial team polished/edited 71 proposals, resulting in higher proposal scores and evaluations than in prior years. One notable success story resulting from RDC support is the new $750,000, 4-year NSF Research Coordination Network (RCN) Science, Engineering and Education for Sustainability (SEES) award under the direction of Jennifer M. Jacobs, Jo Daniel, Jack D. Kartez, Paul H. Kirshen, and Katharine Hayhoe. (See sidebar.)

Communicating to the UNH Community and Beyond in FY 2013

UNH Research Web Site  The UNH Research web site presents an overview of UNH research activity and the services provided by all the Research Office support units. A “quick find” drop-down menu enables users to locate commonly-used resources; navigation tips are available. In FY 2013, 75 Research Spotlight articles featured recent research activities of UNH faculty and graduate students.

In FY 2013, an eighth Research Area (Humanities & the Arts) was added to the home page and the Health & Society area was refocused to Health, Behavioral & Social Sciences – changes made to better reflect the research contributions of faculty in these disciplines. Also, content was added for UNH infrastructure resources in scientific instrumentation, library guides (including data management), computing (software and hardware), and specialized faculty/staff expertise in research project design, management, evaluation, assessment, survey design and methodology, and statistical methods and analysis.

Research Office unit editors play a key role in maintaining and enhancing the web site. The Research Office Web Master and editors meet quarterly to exchange ideas and lessons learned, and to support development of staff members’ skills as web editors.
UNH and non-UNH explorers of the UNH Research web site used “Contact Us” 86 times in FY 2013 to request information from the Research Office or provide feedback on the site. Responses were provided by the Web Master.

**Direct Communications** Funding opportunities and other sponsor news was “pushed out” to the research community through monthly email messages announcing limited submission opportunities, targeted email messages to RDC’s agency interest list subscribers, and posts to the Research Office blog. In addition, distribution of Research Development & Grant Writing News (produced by Academic Research Funding Strategies, LLC) provides a monthly update on federal agency funding information along with grant seeking strategies and advice.

**Communications for Research Office Staff and about Research Office Activities** During FY 2013, RDC moved from monthly to quarterly publication of a division-wide newsletter to keep the 90+ staff across the division connected with each other. Each OSVPR Insider includes SVPR notes about her initiatives during the quarter, feature articles about individual office activities, and a staff member human interest profile. Also, RDC published the FY 2012 Research Office Annual Report, with circulation to the USNH community.

**Communicating the Depth, Breadth, and Quality of UNH Research and Scholarship** RDC’s Senior Associate participates in the UNH Web Team and in the UNH Communicators Network, composed of University Communications and Marketing (UCM) staff and college writers, editors, and web editors. RDC staff work with UCM to write and place various stories about UNH research excellence and accomplishments in the Campus Journal and UNH Today. Notable stories were written for the Campus Journal about UNH’s two NSF Major Research Instrumentation (MRI) awards received in FY 2013 – one for a DNA sequencer (W. Kelly Thomas, Project Director) and the other for a Cray supercomputer (Joachim Raeder, Project Director).

In FY 2013 RDC staff wrote and posted to the UNH Research web site research profiles of faculty associated with seven of the eight web site Research Areas: Business & Technology (Venky Venkatachalam); Engineering & Physical Sciences (Erin Bell); Health, Behavioral & Social Sciences (Jill McGaughy); Humanities & the Arts (Rachel Trubowitz, Julee Holcombe, and Julia Rodriguez); Marine & Ocean Sciences (Larry Mayer); Space Science (Harlan Spence); and Sustainability & the Environment (Serita Frey). UCM republished these profiles in the Campus Journal.

RDC was responsible for creating and publishing UNH’s first Research Digest, a compilation of research news reported by various UNH news media and campus publications in 2012. Available in hardcopy and on the UNH Research web site, UNH Research Digest 2012 contains 271 stories referencing 415 URLs that cover all of the eight Research Areas featured on the UNH Research web site. The short, “teaser” stories are designed to whet the reader’s appetite; the URLs are provided so the reader can access the original articles to learn more.

RDC nominates outstanding faculty for prestigious external recognition or awards and for service on national-level committees or panels. Such nominations involve submission of recommendations from UNH, peers, and other leaders in the nominee’s research field; a detailed career history; and representative scientific publications. In some cases, the nominee provides a proposal for research to be conducted with award funds. In FY 2013, RDC nominated Kevin Short (University Professor, mathematics) for a Benjamin Franklin Medal; Tom Weber and Tom Lippmann (both from the UNH Center for Coastal & Ocean Mapping) for membership on the National Academy of Science’s NSF Decadal Survey of Ocean Sciences Committee; and assisted Katie Edwards (assistant professor, psychology) with a W.T. Grant Foundation Scholars nomination, for which she was named a semi-finalist.
New and Continuing Initiatives Planned for FY 2014

- Contribute to increasing the number of proposals submitted in FY 2014 (over FY 2013) by directly promoting or writing 40 proposals.
  - Promote and help write 3 multi-/interdisciplinary proposals related to cyber-infrastructure.
  - Write 2 major foundation proposals to support research infrastructure/center/institute/school needs.
  - Promote applications to the U.S. Department of Energy for 5 UNH faculty new to this sponsor.
  - Stimulate and support 20 research proposals by graduate students.
  - Support 10 U.S.-NIH participants’ applications to the National Institutes of Health.
  - Promote counting proposals not currently counted by SPA, but for which Research Development contributes resources, expertise, and assistance.

- Increase the number of nominations of faculty for prestigious awards or national-level committees from 4 to 8.
  - Begin to inventory opportunities.
  - Begin to inventory current department practices for nominations.
  - Begin to inventory current UNH awardees, professional memberships, and national committee assignments.
  - Create a strategic plan for more frequent and more strategic nominations.
  - Nominate at least 8 faculty during FY 2014.

- Enhance communications about UNH research and research services.
  - Implement a UNH Research Office Twitter account and evaluate impact.
  - Redesign Research Office web site homepage to showcase Research Office resources and social media.
  - Upgrade web site software to achieve compatibility with new UNH web page graphic identity, make the web site responsive to multiple user devices, and enable event calendaring and other enhancements.
  - Identify, prioritize, and develop training materials for RDC office staff and our customers.
  - Adapt the Research Office web site training area to accommodate training materials developed in common by all Research Office units.
  - Add RDC-related content to the UNH Scholars’ Repository.
  - Continue physical and electronic communications pieces: quarterly division-wide newsletter, annual report of Research Office accomplishments and goals, annual or more periodic research digest.
  - With University Communications and Marketing, develop plans for a sophisticated research publication for marketing purposes for release in 2015.
  - Encourage and/or create publicity for high-profile awards and research projects for 8 researchers.
  - Plan and carry out 6 campus-wide themed research seminars celebrating UNH faculty research excellence.

- Enhance opportunities for UNH graduate students to fund their research.
  - Develop a curriculum and syllabus for a grant writing course for graduate students, and obtain Graduate School approval to offer the course for credit.
  - Continue expanding the Research Office partnership with the UNH Graduate School and the UNH Office of National Fellowships.
  - Further develop support for students applying for the National Science Foundation Graduate Research Fellowship Program (NSF GRFP), with information sessions, writing workshops, one-on-one application assistance, and editorial services.
  - Replicate the UNH-NSF GRFP strategy with other federal agencies as appropriate (such as the Department of Defense).
Research Partnerships and Commercialization

The Office for Research Partnerships and Commercialization (ORPC) is responsible for managing UNH’s intellectual assets (copyrights, trademarks, and patents) and is increasingly involved in efforts relating to local economic development and entrepreneurship. FY 2013 was an excellent year for the ORPC as the office experienced significant growth in a number of key areas of intellectual asset management.

Common leading indicators used to measure the outputs of technology transfer are invention disclosures and patents filed, while lagging indicators include patents issued, licenses signed, and startups created. UNH revamped its technology transfer efforts in late 2010 and has seen good results in all areas, including specific and marked improvement in licensing output, which represents the number of times a company has agreed to use UNH technology. Disclosure rates now more closely reflect the size of UNH’s research awards, as disclosures are the pipeline to future revenues.

The chart below shows the growth and success of the technology transfer enterprise since FY 2011 (when a new reporting approach was implemented); records were set in every category measured.

In addition, licensing revenue increased during this period from approximately $310,000 to $395,000. This growth includes a change in how royalties are reported, with FY 2011 and prior years including reimbursement of patent expenses and FY 2013 reporting solely based on licensing income. It is expected that in FY 2014 licensing revenue will exceed $500,000 for the first time.

Lastly, the work done to improve ORPC's systems was near completion as FY 2013 drew to close. Over the past two years, ORPC staff has worked hard to implement an intellectual asset management database; complete a thorough set of standard operating procedures for data entry and quality control; convert to a paperless office; become compliant with reporting technology transfer milestones to the Federal government; and improve our ability to track, notify, collect and distribute royalty income. When the systems work is complete, ORPC will be more able to effectively manage both existing growth and the larger growth to come.

Technology Transfer

Successful technology transfer is a by-product of a successful research enterprise. At the core, technology transfer takes the outputs of academic research and finds companies willing to use those outputs to create novel products and services. There are no limits on where technology transfer can apply; UNH has licensed research results in
areas as far ranging as copyrights to curricula for bullying prevention to testing protocols for telecommunications interoperability.

Copyrights

In September 2012, ORPC collaborated with the UNH music department to host a seminar, “Understanding the Relationship Between Copyrights and Music” which was attended by more than 100 faculty and students. Guest speakers were Peter and Kate McGovern, Senior Intellectual Property Teaching Fellows at the UNH School of Law and experts on copyright, entertainment, and music law. The McGoverns introduced the concept of copyrights as related specifically to music, the mechanics of making music copyrights available, and recognizing the longevity of copyrights. Perhaps most importantly, they emphasized and re-emphasized one critical message for all seminar attendees to take home: the work that you create has value and you have to protect that value, whether for yourself today, for yourself in a few years, or even for your legacy planning.

Startups and Spin-offs

Research from UNH’s chemistry department has resulted in an exclusive license agreement for an anti-fatigue hydrogel between the University and Wakup, Inc., UNH’s sixth startup company. The licensed technology was developed originally at UNH by Shaojun “Shaw” Yao for his Ph.D. dissertation. Yao began to consider the possibilities of starting a company around his research after participating in the University’s Holloway Innovation-to-Market competition in the spring of 2012. Wakup’s first product, Wakup Energy Gel, is an all-natural stimulant that provides an inexpensive, calorie-free, and caffeine-free alternative to coffee, energy drinks, and energy shots.

In October of 2012, Kevin Short, University Professor of Mathematics, was honored with the University’s second annual Innovator of the Year Award for his discovery of chaotic compression technology and its applications in signal processing. Short launched UNH’s first spin-off company, Chaoticom, and most recently the University’s fifth spin-off, Setem Technologies. Setem Technologies uses Short’s research to develop signal separation technology that addresses the “cocktail party problem”—the ability to focus on the specific speech source and mitigate/eliminate any extraneous background noise or interference.

Patents

On March 19, 2013, the U.S. Patent and Trademark Office (USPTO) issued UNH’s first design patent for the Tablet Pedestal/AT Pad Stand, a device developed by Dr. Therese Willkomm. Dr. Willkomm is the Director of ATinNH, the New Hampshire state-wide assistive technology program with the UNH Institute on Disability, and also an assistant professor in the occupational therapy department. The AT Pad Stand was developed initially by Dr. Willkomm to assist those with disabilities in using an iPad. It is a portable and completely flexible tablet stand developed to benefit educators, presenters, and individual users who experience various disabilities. It allows iPads, as well as other tablets, to be positioned at any height, angle, or distance from a user’s face using the flexible center tubing and the swivel mounting plate. The nonslip base
offers stability for those individuals with disabilities to interact with communication apps and utilize picture and video features on any tablet. Additionally, individuals with low vision, communication impairments, motor impairments, or grasping impairments benefit from the hands-free mounting plate.

**Innovation Catalyst Seminar Series**

The ORPC concluded another successful Innovation Catalyst Seminar Series in FY 2013. Many thanks to all the exceptional speakers in the series! Numerous industry experts presented on a variety of topics related to the theme of “Innovations in…” various business segments important to the State of New Hampshire. The final presentation, from Executive Director Marc Sedam, was on “Innovations in Lean Startups.” Marc discussed the concept and how that concept is being applied on and off campus to create better companies, faster. Marc’s presentation and the others from the series are available on the Innovation Catalyst Seminar Series web page on the Research Office web site.

The theme of the Fall 2013/Spring 2014 series will be announced in early fall. These seminars are educational, free, open to the public, and always conclude with refreshments and networking. The seminars are a great opportunity to engage with fellow innovators, entrepreneurs, researchers, University staff, students and local business leaders.

**UNH InterOperability Laboratory (UNH-IOL)**

The UNH-IOL is a neutral, third-party entity dedicated to testing data networking technologies through industry collaboration. In existence since 1988, the lab reports to the Research Office through the Office for Research Partnerships and Commercialization. The mission of the lab is to foster multi-vendor interoperability while preparing students for careers in industry. The UNH-IOL has grown steadily into one of the industry’s premier independent proving grounds for new technologies, with a focus on quality assurance. Testing is conducted in the lab’s 32,000+ square foot facility, which houses a multi-million dollar array of test equipment and the latest devices from member companies. In return for these devices and their support, members are entitled to high-caliber interoperability and conformance testing against other vendors’ devices.

The UNH-IOL has grown to employ 110 undergraduate students and 15 graduate students, and has built close working relationships with the College of Engineering and Physical Sciences (CEPS). The lab directly supports CEPS programs by engaging in new collaborative initiatives to encourage and attract incoming students. Such initiatives include participation in High Technology Day, UNH Tech Camp and Engineeristas, Girls Technology Day, and the Computer Science Advisory Board. The UNH-IOL also has supported the computer science and electrical engineering departments by hosting activities and tours for prospective UNH students during CEPS open houses and at other times as requested. The UNH-IOL supports CEPS students directly by employing them in a “real world” engineering work environment and augmenting their education with experience unobtainable in the classroom.

UNH-IOL outreach programs continue to grow. In FY 2013, 14 students participated in the High School Internship program, gaining hands-on experience by working in the lab for seven weeks (up from 9 students in FY 2012).

In FY 2013, the UNH-IOL collaborated with 170 commercial companies, which funded over 270 testing memberships. The lab’s employees spoke at more than 35 industry events and published 9 white papers and research articles. The lab has expanded its commercialization efforts by submitting 7 disclosures and is now licensing these
test tools to companies all over the world. The lab currently operates 28 distinct consortia in seven technology areas: Enterprise, Core/Telco, Access, Storage/Datacenters, Precision Timing, Consumer Electronics, and High Performance Computing.

**NH Innovation Research Center (NHIRC)**

NHIRC is a matching grant program that connects New Hampshire companies with expertise at research universities to solve scientific or technical problems. Established in 1991 and funded by the NH Legislature, the NHIRC is administered by ORPC on behalf of the State.

The NHIRC has awarded more than $6 million in state funds to support research for 135 companies in New Hampshire and boasts leverage of nearly 20:1 on state dollars, including a major component of NH’s NSF EPSCoR program. Since its inception, NHIRC is responsible for creation of 650 NH jobs and its awardees have received more than $32 million in federal Small Business Innovation Research awards and over $900 million in follow-on capital.

In FY 2012, the NHIRC was subject to a 60% reduction in funding from the state. In response, the Center adjusted its allocation of resources and chose to focus on promoting the federal SBIR (Small Business Innovation Research)/STTR (Small Business Technology Transfer) grants programs. In partnership with the NH Small Business Development Center, the NHIRC has funded NH Inspires Innovation, a program that provides basic SBIR/STTR overviews of and specific training on preparing grant applications to the National Institutes of Health, the National Science Foundation, the Department of Defense, and the Department of Energy. The program has been received very well, has trained over 80 individuals and companies, and is tracking proposal development and growth by trainees.

**UNH Innovation**

Growth in the technology transfer enterprise at UNH has been healthy in recent years. It has been important to put technology transfer on firm footing in order to improve the potential of UNH as an engine for local and regional economic development. A detailed mapping of UNH resources and capacity in FY 2013 led to the creation of an overarching strategy for improving and accelerating UNH’s economic development impact – “UNH Innovation.”

UNH Innovation (UNHI, pronounced “uni”) is the new organization responsible for the commercial outputs of UNH in ways that are both authentic to UNH and advantageous to outside entities. The organization will be run by Marc Sedam (current ORPC Executive Director) and comprises three distinct units:
**Licensing** Primarily the technology transfer capacity, UNHI Licensing will manage and license all intellectual assets owned or controlled by UNH with the exception of trademarks owned by UNH and used by the Athletics Department. UNHI Licensing also will seek to improve the quality and frequency of corporate sponsored research.

**Services** UNHI Services will work with third parties to provide access to unique UNH resources such as instrumentation or facilities under rental agreements. Other services will include the existing InterOperability Laboratory (UNH-IOL), faculty consulting, and capacity to external organizations by select UNH departments.

**Ventures and Economic Development** UNHI VED will serve as the gateway to an improved economic development effort, focused around the potential for UNH to create new startup companies from its technology pool and foster startup capacity and effort from its students, staff, alumni and others in New Hampshire. Plans include creation of a seed fund to invest in promising technologies and convert them into viable companies; a crowd funding platform to foster alumni participation in interesting research; a “venture mentoring service” to activate alumni and provide access to talent at UNH; and, in time, a captive venture capital fund to provide “Series A” funding to excellent startups.

**New and Continuing Initiatives Planned for FY 2014**

- Implement “UNH Innovation” as a new organization.
- Create a new “Corporate Engagement” web site that will serve as a central entry point for companies to work with UNH. In addition to communicating the UNH Innovation effort, the web site will coordinate and connect with University Advancement, Career Services, and other key University activities.
- The new Director of Corporate Development will provide connectivity to the business community, oversee creation of a new web site that will clearly direct outside companies to the right UNH resources, and explore the ability of UNH to provide access to student talent along with additional UNH resources to increase the number of access points between UNH and companies.
- Hire a Marketing Director to improve knowledge about UNH programs and assets.
- Provide $1M in financial impact to the University in the form of licensing income, corporate sponsored research, equipment rentals, and any other revenue stream originating from an outside entity.
- Receive at least two grants for economic development, commercialization, or entrepreneurship efforts.
- Expand UNH-IOL commercialization efforts to increase IOL royalty revenue.
- Expand IOL training programs to include a second year component along with a formalized mentor-based structure.
- Create a strategic IOL-industry internship program placing students during their post-junior-year summer.
- Increase STEM programs and involvement by IOL.
- Maximize IOL customer retention.

UNH Innovation has set the following goals for FY 2014:

- Royalty income: $500,000
- Invention disclosures: 50
- **Licenses:** 50
- Patents filed: 20
- **Issued patents:** 10
- Income from UNHI Services and VED: $500,000
**Sponsored Programs Administration**

Sponsored Programs Administration (SPA) supports principal investigators (PIs); facilitates both pre-award and post-award processes; and mediates among the interests of the institution, sponsors, and the faculty. SPA’s Grant and Contract Administrators provide assistance with budget development and compiling the components of proposals, are responsible for the actual proposal submissions, and exercise signature authority on behalf of the University in accepting grant and contract awards. SPA’s Financial Research Administrators are responsible for a range of activities associated with financial management and compliance, including: billing and financial reporting, cash and receivables management, effort reporting certifications, award closeout, and audit coordination. SPA administrators are experts in the regulations and policies of UNH’s sponsors, the government, and the University.

**The FY 2013 Funding Environment**

The current fiscal environment in Washington, D.C. has resulted in diminished spending on university-based research and development (R&D); year-to-date data suggest that federal funding for research this year, despite passage of *The Consolidated and Further Continuing Appropriations Act, 2013*, will not recover to pre-FY 2013 levels.

As shown at the left, SPA assisted UNH PIs in submitting 752 proposals during FY 2013, requesting $294M in external support. Reflecting the uncertain funding environment, this represented 10% fewer proposals in FY 2013 compared with FY 2012. During FY 2013, SPA established 662 awards within UNH’s grants management and financial systems accounting for $96M of external support.

As shown at the right, research expenditures for FY 2013 were down just over 10% from FY 2012. There were significant reductions in those areas where federal funding is passed through from a prime awardee to UNH in the form of a subcontract, such as from the State or other universities. There also were reductions in expenditures as a result of some large projects completing their most intensive (and expensive) phases.
The End of ARRA

As federal fiscal year 2013 closes, funding provided under the American Recovery and Reinvestment Act of 2009 (aka, the "stimulus," aka the "Recovery Act," aka “ARRA”) will wind down—mostly. Three awards (one from NSF and two from NTIA) were granted exceptions to the general requirement that stimulus funding be ended. In recent years, ARRA funding provided a significant portion of UNH’s funding; in all, UNH received 40 ARRA awards totaling over $67 million dollars. Twenty eight of the awards received ($63.2 million) came to UNH as a prime recipient and 12 awards ($4.3 million) as a subrecipient.

Process Improvement

SPA staff participated in a number of different process improvement activities during FY 2013, including a re-engineering initiative staffed by the UNH IT Project Management Office and several process review and documentation projects. SPA also assumed responsibility for monthly distribution of performance data to key stakeholders across the campus. This monthly information push provides the management staff within each Responsibility Center with the previous month’s proposal and award data for their units, as well as a comparative look back to recent fiscal years.

GMAC

Following an extended dormancy period, the Grants Management Advisory Council (GMAC) has been reconstituted by the OSVPR. GMAC is intended to identify for discussion and action those challenges and opportunities that could impact the effectiveness of research administration and support and represent, at all levels, the interests of the broad and diverse UNH grants management community. The GMAC membership is selected from across all units that have grant management responsibilities.

Effort Certification

During FY 2013, SPA’s Financial Management Group worked on a collaborative effort with RCI staff to implement an electronic effort certification system. Though long anticipated, this project had to overcome a number of technical obstacles as well as the challenge of resistance to changing long-standing business processes. The new system was deployed for FY 2013 effort certification.

InfoEd Electronic Research Administration System Expansion

SPA staff, along with RCI staff, tested the proposal development functionality and system-to-system capabilities of the InfoEd Electronic Research Administration System. Having previously conducting a pilot with an unsupported, early release of the software to take advantage of an improved budgeting module, we decided to launch an updated, but supported, version of the software during FY 2013 to stabilize our systems and better prepare for electronic routing, which we plan to pilot and roll out during FY 2014.

New and Continuing Initiatives Planned for FY 2014

- Training
  - Create annual training plan.
  - Deliver topical face-to-face training.
  - Deploy and evaluate persistent web-based training.
• Develop and implement a policy addressing financial compliance requirements for sponsored programs.
  o Engage GMAC to guide scope and strategy.
  o Develop strategy.
• Improve resources available for providing sponsored programs data to the UNH management community.
  o Push out monthly proposals, awards, accounts receivable, and NFE information to deans, BSC directors, and PIs, as appropriate.
  o Assess use of “PI Packet” for project management and compliance.
• Improve SPA’s yearly forecasting capacity.
• Test electronic proposal routing (InfoEd IPRD) and participate in rollout.
• In collaboration with RCI, provide leadership for the electronic proposal routing rollout.

Stacia Sower, Director of the Center for Molecular and Comparative Endocrinology at UNH and professor of biochemistry, studies lampreys, a species “around long before the dinosaurs,” because they are the most basal vertebrates, allowing her to look at the “basic plan” of the molecular control of reproduction across all vertebrates. With support from a prestigious accomplishment-based renewal grant from the National Science Foundation (submitted on her behalf by SPA staff in FY 2013), her current research seeks to answer the question: how does one glycoprotein hormone differentially act on the reproductive organs and the thyroid gland to control metabolism and metabolism development?
Research Integrity Services

Research Integrity Services (RIS) staff contribute to excellence in research and scholarship by providing services to the University community in the program areas listed below. Staff collaborate with units across the institution to promote and foster an institutional culture of integrity in research and scholarship. The Animal Resources Office (ARO) is a unit within RIS.

Accomplishments in FY 2013

Humane Care and Use of Vertebrate Animals Program

The UNH Institutional Animal Care and Use Committee (IACUC) reviewed 62 initial applications, a 7% increase from FY 2012. The portfolio of active protocols overseen by the IACUC was 132 at year end, a 1% decrease from the previous year end. Program highlights for the year included:

- Responding to new requirements of the 8th edition of *The Guide for the Care and Use of Laboratory Animals*, and new U.S. Department of Agriculture (USDA) contingency planning regulations; and
- A USDA annual inspection in June resulted in no findings.

Human Subjects Protections Program

The UNH Institutional Review Board for the Protection of Human Subjects in Research (IRB) reviewed 271 initial applications and 120 modifications to existing protocols, a decrease of 14% and an increase of 7% from the previous year, respectively. Regarding review levels for initial applications, 66% were at the Exempt level, 26% at the Expedited level, and 8% at the Full Board level. The number of active protocols that the IRB oversees was 843 at fiscal year-end, a 14% decrease from FY 2012 year end.

Responsible Conduct of Research and Scholarly Activity (RCR) Program

Accomplishments under the auspices of this program included:

- Offering one section of GRAD 930: Ethics in Research and Scholarship, with 10 enrollees;
- Developing and delivering seminars for the Graduate School’s doctoral student RCR training requirement, with approximately 90 participants;
- Offering three seminars to meet NSF’s RCR training requirement, with 83 participants; and
- Reaching approximately 1,100 faculty, staff, and students with presentations on RCR topics.
Financial Conflict of Interest in Research Program

The RIS Director and OSVPR Director of Finance and Administration jointly manage this program and operations of the UNH Disclosure Review Committee (DRC). The following were accomplished during the year:

- Implementing procedures to respond to the new Public Health Service (PHS) regulations; and,
- Obtaining institutional approval of a UNH policy on Financial Conflict of Interest in Research for PHS-Funded Projects and revisions to the UNH policy on Financial Conflict of Interest in Research.

Other

Other activities in which RIS staff were involved during the year included proposing changes to the UNH policy on Misconduct in Scholarly Activity, and helping to develop a compliance and training tracking database.

New and Continuing Initiatives Planned for FY 2014

- Complete review of RCR Web-based modules and update format.
- Complete work with OEHS and RCI on compliance tracking module.
- Develop and disseminate conflict of interest matrix.
- Pilot a weekly “Ask the IRB” session in Fall 2013 semester.
- Post on the Research Office blog at least 2 times per month.
- Obtain institutional approval of changes to UNH policies on Misconduct in Scholarly Activity, Institutional Conflict of Interest in Research, and Ownership and Management of Research Data.
- Evaluate sustainability of current RCR training program and develop recommendations.
- Transition Disclosure Review Committee.
- Start implementing Web-based submission of IRB and IACUC applications.
- Assist with development of a Research Foundation.
- Develop for the Web guidance on human subjects protections issues.
- Hire Compliance Officer.
- Obtain institutional approval of Health Insurance Portability and Accountability Act (HIPAA) policy.
- Implement institutional HIPAA compliance program.
- Develop data sharing contract template.
- Supervise a graduate student independent study to analyze incoming graduate student RCR survey data.
- Prepare RIS for and assume Export Controls responsibilities.
- Work with the UNH Associate Vice Provost for Engagement and Academic Outreach to incorporate into faculty development programs information on preventing research misconduct.
Research Computing and Instrumentation

Research Computing and Instrumentation (RCI) consists of three branches: the Research Computing Center (RCC), Research Information Technology (RIT), and the University Instrumentation Center (UIC). The mission of RCI is to provide information technology (IT) and instrumentation support to the sponsored research community at UNH and to collaborate with higher education, industry, and government to create innovative technologies designed to address important social, environmental, and economic needs.

RCI is directly involved in three of the ten programmatic initiatives of the UNH Strategic Plan, UNH 2020: Commercializing UNH’s Intellectual Capital; Independent Research, Scholarship, and Creative Activity; and the Research Leveraging Initiative.

Examples of how RCI’s staff works in support of the strategic plan are included in the highlights of RCI activities in FY 2013 that follow.

FY 2013 Achievements and Activities

Commercializing UNH’s Intellectual Capital

- RCI developed the UNHCEMS® chemical environmental management system that generates $100,000 in licensing revenues for UNH each year. In FY 2013 RCI began a new initiative to ramp up the marketing of this software by attending trade shows nationwide.
- RCI engages regularly with the private sector to collaborate on new initiatives. One current initiative involves working with a local company to develop a product for secure data destruction for computers being repurposed.
- In conjunction with the National Oceanographic and Atmospheric Administration (NOAA), RCI developed ERMA®, the common operating platform used by federal agencies in the 2010 Deep Water Horizon Oil Spill. The technology subsequently has been included in successful project proposals to the National Science Foundation (NSF). Efforts are underway to license this technology for use by state agencies.

Independent Research, Scholarship, and Creative Activity

- RCI provides information technology support to streamline proposal development, electronic proposal routing, post-award grants management, and effort certification. The goal is to simplify the process of submitting proposals and increase the efficiency of managing those proposals that are awarded funding.
- RCI provides assistance to principal investigators for the computing and instrumentation aspects of their proposals, including data management and sustainability plans, budgets for data systems, instrumentation, and computing support.

Research Leveraging Initiative

RCI developed a specialized network to secure sensitive and restricted data for the UNH Center for Health Analytics. The network architecture was expanded and continues to be available to the research community.

Efficiency

Financials  RCC generated 48% of its total operating budget of over $2.5M through cost recovery efforts in FY 2013 – including strategic initiatives to actively collaborate with industry and capitalize on UNH intellectual property and commercialization opportunities. The UIC continues to maintain a budget separate from the Research Computing/Research IT combined budget.
**Service**  Six staff members make up the RCC Operations group. Those staff members support approximately 400 desktop computers in Morse Hall, as well as 125 servers and a Cray supercomputer in the Lenharth Data Center. The UIC has five staff members who work with 17 outside agencies as well as 90 faculty and staff from more than 20 UNH departments.

**Effectiveness**

**Indicator 1: Annual Revenues**

RCC’s annual revenues dropped by 5% from 2011 to 2012, but recovered by the close of FY 2013.

![UNHCEMS® Royalty Revenue](image)

Royalty revenues were earned by licensing the UNHCEMS® product to other universities. As shown at the left, royalty revenues to RCC increased by 5%, from $51,300 in FY 2011 to $53,850 in FY 2012, but dropped to $50,850 in FY 2013 as a result of one school’s subscription cancellation.

![RCC External Revenue](image)

As shown on the right, RCC revenues from external sources (sources originating from off-campus) dropped by 7% between FY 2011 and FY 2012, mainly due to the conclusion of the Crash Report Management System project funded by the NH Department of Transportation. However, external revenues between FY 2012 and FY 2013 rose by 6%.

The UIC recouped 30% of its operating budget through revenues in FY 2013. Revenue from external sources increased by 15% compared with the average of the previous three fiscal years. Revenue from internal sources dropped to its lowest level in seven fiscal years.

**Indicator 2: Proposal Engagement, Number of Grant Proposals Submitted**

RCI engages in a process to proactively participate in development of research grant proposals. Because RCI works with principal investigators at the proposal development stage, support for RCC and the UIC can be included in the proposed project budget. In FY 2013, RCI was included in six major grant proposal submissions; one was awarded and three are pending.
**Indicator 3: Customer Satisfaction**

Ten out of eleven respondents to RCC’s customer service satisfaction survey indicated that, overall, they are “very satisfied” with their RCC customer service experience.

**Other Projects and Activities**

In FY 2013, RCI’s Lenhardt Data Center became the home of the first Cray supercomputer in the state of New Hampshire. Supported by funds from an NSF Major Research Instrumentation (MRI) grant awarded to Principal Investigator Jimmy Raeder, acquisition of the Cray included the construction of a special 22’ by 14’ room within the data center, with dedicated cooling and power. The Cray XE6m-200 is used by researchers for the simulation of space plasma and fluid flow.

RCI was chosen to provide data management for the DNA sequencer purchased by the Hubbard Center for Genome Studies with funds from an NSF MRI grant. The sequencer dramatically reduces the cost and time required for DNA analysis for bioinformatics research.

In October 2012, the new Scientific Instrumentation Inventory Database (SII) was released and instrument custodians on campus were asked to verify the data integrity. The SII is expected to be a valuable tool for researchers to locate acceptable existing equipment on campus, form collaborations, and share instrument techniques and usage.

RIT projects included:

**Proposal Development** This InfoEd software module facilitates creation of grant proposals. Key features include system-to-system submission and electronic routing of internal approval forms (“yellow sheets”).

**Effort Certification** This Ellucian (formerly SunGard HigherEd) software module automates the certification of effort on sponsored programs. Currently being tested, the software is anticipated to be in production in time for FY 2013 effort to be certified by all who received pay on UNH sponsored projects.

**Common Training Platform** This ongoing project addresses the training needs across the Research Office, including: a) creation of training modules, b) content delivery, and c) course management (recording who has taken which courses and when).

UIC activities included:

**Parsons Hall Renovation** After many years of planning and construction, renovation of Parsons Hall, where the main UIC office and many of its instruments are located, was completed in FY 2013. A day-long rededication of the building was held on May 31st, bringing together nearly 100 faculty, staff, graduate and undergraduate students, alumni, and business leaders to tour and celebrate the new facilities.

**Internal Marketing** The UIC staff focused on internal marketing in FY 2013, making presentations to faculty, staff, and students in the COLSA’s Department of Molecular, Cellular, and Biomedical Sciences and Department of Biological Sciences. The UIC manager also provided an update on the UIC resources to SPA staff so they may in turn help researchers know what resources are available on campus.

**NMR Upgrade** In accordance with its instrument upgrade plans, the UIC purchased a new computer and software for the 500 MHz Nuclear Magnetic Resonance spectrometer in FY 2013 (pictured on the right). Installation and testing of the components is expected to be completed early in FY 2014.
Staff Recognition and Additions

Four RCI staff members were celebrated by UNH this year for longevity: Robert Cinq-Mars, John Wilderman, Thomas Baker, and Scott Troy. In addition, Robert St. Lawrence and Philip Collins were honored with awards from NOAA for their work on the Environmental Response Management Application (ERMA®).

In FY 2013, RCI welcomed to its staff contract programmer Doug Larson and A.J. Lavoie, who filled a vacated software engineer spot. At the end of FY 2013, RCI was in the midst of a search to fill a Research IT support position. RCI also hired three new students in FY 2013. Two of those students joined the Operations group, which supplies IT support to Morse Hall and Sponsored Programs Administration; the third is writing documentation and analyzing the Google Analytics for the Research Office web site.

Upon recommendations from an internal UIC advisory panel, the SVPR started a search for a new UIC director in the summer of 2012. Several candidates were brought to campus to be interviewed by various faculty, staff, and UIC personnel during FY 2013, but a conclusion was not reached.

New and Continuing Initiatives Planned for FY 2014

RCI will support the Research Office’s goal to increase the number of proposal submissions by:

- Advocating for research analytics.
- Actively pursuing solicitations such as NSF MRIs, campus cyberinfrastructure, and similar opportunities.
- Enabling access to on-line training, tools, templates, and other resources for PIs.
- Assisting other Research Office units in implementing IT solutions to support proposal submissions.

RCI will manage its scope of work by:

- Implementing Team Dynamix for the Research Office IT plan.
- Developing individual project plans for all projects with effort exceeding 160 hours.
- Embedding student operators with staff in development group.
- Creating sustainability plans for all new projects.
- Improving the work environment.
- Assessing and deploying InfoEd Proposal Development modules for electronic routing, budget development, and system-to-system grant submissions.

In addition, RCI will:

- Develop RCC-Industry relationships to increase the number of collaborations.
- Develop an RCC infrastructure plan to preserve and protect the Morse Hall equipment and facilities managed.
- Assist the SVPR in the search for and selection of a new UIC director.
Environmental Health and Safety

Mission

The Office of Environmental Health and Safety (OEHS) works to assure safe and healthful environments for all segments of the campus population through programs of information and education, review and monitoring, technical consultation and provision of direct services. OEHS also is responsible for developing programs to ensure compliance with applicable state and federal health, safety and environmental regulations and campus policies on environmental health and safety. OEHS will be a valued partner in the creation and maintenance of a safe and healthy University environment and will achieve excellence through its provision of leadership, oversight, stewardship and services. OEHS has adopted a Code of Professional Conduct. These core values describe the standards of excellence to which we as a staff aspire. They guide our actions and help to assure accountability, responsibility, and trust as we interact with one another and our campus clients.

Major Accomplishments in FY 2013

Campus-wide Biohazardous Waste Program  A written biohazardous waste program was implemented to streamline the biohazardous waste processes for the Durham and Manchester campuses and the Jackson Estuarine Laboratory. The plan outlines handling procedures for solid and liquid biohazardous waste and sharps waste. Autoclave validation procedures, testing procedures and record-keeping requirements are outlined in the plan.

Parsons Hall Legacy Chemical Reduction Project  During the multi-year renovation of Parsons Hall, OEHS planned and implemented a major legacy chemical reduction initiative for the academic and administrative departments housed in the building. Over 16,685 chemical containers were removed from the Parsons Hall electronic hazardous material inventory.

Flammable Liquid Storage Refrigerators  OEHS addressed a long-standing issue of limited access to flammable liquid storage refrigerators and freezers in Parsons Hall. OEHS collaborated with researchers to identify their storage needs and purchase new refrigerators and freezers required for storage of flammable materials. This action was planned to coincide with laboratory relocation efforts associated with the Parsons Hall renovation project.

Campus-Wide Noise Assessment Project  OEHS coordinated the assessment of all campus buildings for locations where elevated noise levels may be present. The assessment included coordinating with an outside consultant to conduct building inspections and perform noise exposure monitoring. Eighteen building locations where noise levels exceeded the regulatory action level of 85 decibels were identified. Employees who access these locations received training on the proper use of hearing protection.

Parsons Hall Radiological Decommissioning  OEHS oversaw the radiological decommissioning of laboratory and office space in Parsons Hall where there was use of radioactive material historically. The State of New Hampshire supervised the project and reviewed all survey data.

Key Indicators for OEHS

<table>
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<tr>
<th>Category</th>
<th>Number</th>
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<tr>
<td>Pounds of chemical waste disposed</td>
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<td>Feet of fluorescent light tubes disposed</td>
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<td>Pounds of batteries disposed</td>
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<td>Active biological agents</td>
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<td>Active laboratory door signs</td>
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<td>Laboratory fume hood inspection reports</td>
<td>346</td>
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<tr>
<td>Active hazardous waste satellite accumulation areas</td>
<td>190</td>
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<td>Sealed radioactive material sources</td>
<td>155</td>
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<tr>
<td>Electrical transformer inspection reports</td>
<td>96</td>
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<tr>
<td>Biological safety cabinet inspection reports</td>
<td>80</td>
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<tr>
<td>Hazardous waste small quantity generator reports</td>
<td>48</td>
</tr>
<tr>
<td>Biosafety level 2 laboratories</td>
<td>43</td>
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<tr>
<td>Radiation safety laboratory inspections</td>
<td>164</td>
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<tr>
<td>Radioactive material sealed source leak tests</td>
<td>58</td>
</tr>
<tr>
<td>People trained</td>
<td>2757</td>
</tr>
</tbody>
</table>
### UNHCEMS<sup>®</sup> Flammable Liquid Inventory Report

OEHS responded to concerns from the State Fire Marshal regarding the volume of flammable liquids stored in newly renovated laboratories in Parsons Hall. OEHS worked with Research Computing and Instrumentation to create a custom report in UNHCEMS<sup>®</sup> that generates a warning when flammable liquid storage capacity in a lab unit approaches or exceeds regulatory storage limits. The report generates automatic emails that provide advance warning to researchers that they are approaching their storage limit. When storage limits are exceeded, researchers, OEHS and the Durham Fire Department are automatically notified.

### EH&S Mitigation Fund

The EH&S Mitigation Fund was used to complete 58 different health and safety projects in 2012. This represents a 190% increase in the number of projects funded compared with 2011.

### UNH Compliance Status as of December 2011 and December 2012:

<table>
<thead>
<tr>
<th>Program Elements</th>
<th>2011</th>
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<tr>
<td><strong>3.3.3.1.1  Injury and Illness Prevention</strong></td>
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<td>3.3.3.1.2.1  Industrial Hygiene</td>
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<tr>
<td>* Asbestos Abatement</td>
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<td>* Lead Abatement</td>
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<td>* Hearing Conservation</td>
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<td>* Indoor Air Quality</td>
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<td>* Personnel Exposure Monitoring for Toxic Materials</td>
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<td>* Respiratory Protection</td>
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<tr>
<td>* Hazard Communication</td>
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<tr>
<td>* Heat Stress</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>* Illumination</td>
<td>●</td>
<td>●</td>
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<tr>
<td><strong>3.3.3.1.2.2  General Safety</strong></td>
<td></td>
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<td>* Confined Space</td>
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<td>* Fall Protection</td>
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<td>* Ergonomic Evaluation</td>
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<td>* Lock-Out/Tag-Out</td>
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<td>* Laser Safety</td>
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<td>* Accident Investigation</td>
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<tr>
<td>* Dig Safe Program</td>
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<td>* Blood borne Pathogens</td>
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<tr>
<td>* Workplace Safety Inspections</td>
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<td><strong>3.3.3.1.2.3  Radiation Safety</strong></td>
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<td>* Radioactive Material License</td>
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<td>* Radiation Safety Committee</td>
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<td>●</td>
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<tr>
<td>* Radioactive Material Inventory</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>* Radiation Safety Manual</td>
<td>●</td>
<td>●</td>
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<tr>
<td>* User/Awareness Training</td>
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<tr>
<td>* Radiation Safety Laboratory Inspections</td>
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<tr>
<td>* Dosimetry</td>
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<td><strong>3.3.3.1.2.4  Fire Protection</strong></td>
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<td>* Fire and Life Safety Building Inspections</td>
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<td>* Fire Evacuation Drills</td>
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<td><strong>3.3.3.1.2.5  Occupational Health and Medicine</strong></td>
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<td>* Resperator Medical Questionnaire</td>
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<td>* Hepatitis B Vaccination</td>
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<td>* Animal Handlers Occupational Health</td>
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### 3.3.3.1.2.6 Disaster Preparedness

<table>
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<tr>
<td>* Campus Emergency Operations Plan</td>
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<td>* Emergency/Fire Evacuation Plan</td>
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<tr>
<td>* Aboveground Storage Tank Program</td>
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<td>* Underground Storage Tank Program</td>
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<td>* Integrated Contingency/Spill Prevention Control &amp; Countermeasure Plan</td>
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### 3.3.3.1.2.7 Biological Safety

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<tr>
<td>* Institutional Biosafety Committee</td>
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<tr>
<td>* Biosafety Manual</td>
<td>✔️</td>
</tr>
<tr>
<td>* Recombinant DNA Registration</td>
<td>✔️</td>
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<tr>
<td>* Biosafety Laboratory Surveys</td>
<td>✔️</td>
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<tr>
<td>* Inventory of Infectious Material</td>
<td>✔️</td>
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<tr>
<td>* FDA Food Biosecurity Application</td>
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### 3.3.3.1.2.8 Diving Safety

<table>
<thead>
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<th>Plan</th>
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<tr>
<td>* Diving Safety Control Board</td>
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<tr>
<td>* Diving Safety Officer</td>
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<td>* Diving Safety Manual</td>
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### 3.3.3.2 Hazardous Materials & Environmental Management

#### 3.3.3.2.2.1 Hazardous Waste Management

<table>
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<td>* Hazardous Waste Management Program</td>
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<td>* EPA Identification Number</td>
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<tr>
<td>* Faculty/Staff/Student Training</td>
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<tr>
<td>* Contingency Plans for Central Accumulation Area</td>
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<tr>
<td>* Satellite Accumulation Area Inspections</td>
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#### 3.3.3.2.2.2 Hazardous Materials Inventory and Reporting

<table>
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<tr>
<th>Plan</th>
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<tbody>
<tr>
<td>* Chemical Environmental Management System/Inventory System</td>
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<tr>
<td>• DEA Controlled Substances Inventory</td>
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<tr>
<td>• DHS Chemicals of Interest Inventory</td>
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<tr>
<td>• Community Right To Know/SARA Title III</td>
<td>✔️</td>
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<tr>
<td>• Material Safety Data Sheets</td>
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<tr>
<td>• Chemical Safety/Hygiene Plan</td>
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<td>• Chemical Laboratory Inspections</td>
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<td>• Chemical Safety Committee</td>
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<tr>
<td>• Title 5 Air Permit</td>
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<tr>
<td>• Stormwater Management Plan</td>
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<tr>
<td>• Refrigerant Management Plan</td>
<td>✔️</td>
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<tr>
<td>• Water Quality Permits</td>
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</tr>
</tbody>
</table>

### Plans for FY 2014

- Complete the five-year OEHS Strategic Plan and develop a new strategic initiative.
- Integrate UNH School of Law and Shoals Marine Lab into UNH EH&S management structure.
- Achieve renewal of the UNH Broad-scope Radioactive Material License with the State of New Hampshire.
- Continue hazardous materials building inspections of campus buildings.
- Complete structural renovations to the hazardous waste central accumulation area.
- Revise and update UNH Integrated Contingency Plan (ICP) and Spill Prevention Control & Countermeasure Plan (SPCCP) for response to chemical, biological, radiological and oil spills and releases.
- Work with UNH Facilities to achieve and maintain acceptable environmental conditions for research facilities.
New Hampshire Experimental Program to Stimulate Competitive Research (NH EPSCoR)

NH EPSCoR is a statewide program supported by targeted grants from federal funding agencies to increase research capacity in areas critically important to state economic growth.

The University of New Hampshire has received more than $30 million in three National Science Foundation (NSF) EPSCoR Research Infrastructure Improvement (RII) awards ($7.78 million, 2007-2011; $20 million, 2011-2016; $3 million, 2013-2016). UNH also has received grants from NSF EPSCoR and its National Institutes of Health counterpart program (IDeA) to build a high-speed internet network between the USNH institutions and Dartmouth College ($2.872 million to date). In addition, NSF EPSCoR has provided partial support (known as “co-funding”) to UNH investigators receiving awards from other NSF directorates ($3.8 million to date). The National Aeronautics and Space Administration (NASA), the Department of Energy (DOE), and the Department of Defense (DOD) EPSCoR programs also have awarded grants to UNH investigators, and UNH receives a subaward from Dartmouth under its NIH IDeA Networks of Biomedical Research Excellence (INBRE) project. The net total to UNH since New Hampshire became an EPSCoR state in 2004 through FY 2013 (total awards less subawards to partners) is $37.1 million in awards.

The Research Office is the administrative home for the NSF EPSCoR program; SVPR Jan Nisbet serves as principal investigator for the NSF RII awards.

NH EPSCoR Mission and Relevance to UNH Strategic Plan

The New Hampshire EPSCoR mission is to advance the state’s competitiveness in science and engineering by strategically investing in research infrastructure, promoting education in the STEM disciplines, and fostering partnerships with technology-based businesses that enhance job creation and economic development.

NH EPSCoR is aligned with the UNH Strategic Plan by partnering with the NH Inclusive Excellence initiative and by broadening representation in the sciences, mathematics and engineering through initiatives from kindergarten through faculty hiring.

NH EPSCoR also is focused on research competitiveness. It is building infrastructure across the state that is used by the research community, and is working to leverage the investment to make UNH and NH more competitive for federal research funding.

Efficiency

Run almost completely with federal funding, the NH EPSCoR program has leveraged these funds to increase awards to UNH and other NH institutions. The program also has been successful in building physical, human, and social capital and cyberinfrastructure for ongoing competitiveness for the state in its education, research and economic development missions.

Effectiveness

The NH EPSCoR program has laid the groundwork for a statewide effort to promote STEM education and recognize the importance of science and engineering to the state’s economic development, most notably through the development of the state’s first Science and Technology Plan. The program also has supported the development of a
statewide Inclusive Excellence Plan, an initiative to broaden participation in higher education, specifically in the STEM disciplines. NH EPSCoR has supported training of K-12 teachers in summer research opportunities and scholarships for students from rural, first-generation families to attend summer science camps.

**2011-2016 NSF Award Year 2 Outcomes:** The NSF RII “Track 1” project, *Interactions Among Climate, Land Use, Ecosystem Services and Society*, was funded as a cooperative agreement on September 1, 2011 for $20 million with an expiration date of August 31, 2016. A team of researchers from UNH, Dartmouth College, St. Anselm College, and Plymouth State University bring together expertise from the physical, biological, and social sciences to carry out this project, known familiarly as “Ecosystems & Society.” Environmental data is being collected from a statewide network of land-based and aquatic sensors, an aircraft remote sensing system to measure changes in the forest cover, and measurements made by citizen scientists and students monitoring water quantity and quality. Environmental data will be combined with data about housing and demographics; models based on this information will help policy makers determine the tradeoffs among different land uses, and will inform the development of strategies to adapt to the challenges of changes in land use and climate variability.

Now in its second year, Ecosystems & Society is a statewide project with multiple partner institutions. The research and education teams are led by UNH faculty, who in the past year collectively submitted or collaborated on 58 proposals for additional funding; of those, 21 were awarded, totaling $8.5 million for related research. UNH’s Leitzel Center for Mathematics, Science, and Engineering Education leads many of the Ecosystems & Society outreach and education initiatives which reached 139 teachers and students in FY 2012-2013. NH EPSCoR launched the Seacoast Science Café, offering nine sessions during which EPSCoR faculty described their research and discussed with the public the impact of climate change, land use, and society on ecosystem services. Podcasts from the Fall 2012 series and Spring 2013 series are available for download from the NH EPSCoR web site.

In Year 2, 75 personnel at UNH received support from this award, including 24 faculty, 19 technical support staff, 5 post-doctoral associates, 9 graduate students, 11 undergraduates, and 7 non-technical support staff.

**New project to begin in August 2013:** UNH and the University of Maine (UMaine) have received an award from the NSF EPSCoR RII “Track 2” program. The award will support a three-year collaborative research project studying coastal ecosystems to strengthen the scientific basis for decision-making by natural resource managers and to advance sustainability science. The project, known as the New England SusTainability Consortium (NEST), is managed by the EPSCoR programs at UNH and UMaine in partnership with Great Bay Community College, Plymouth State University, and Keene State College in New Hampshire, and the College of the Atlantic and the University of New England in Maine. Citizens interested in participating in the research will have an opportunity to join the New England Stewardship Network which will be developed by UNH Cooperative Extension to connect natural resource organizations, public agencies, scientists, and volunteers.
Conclusion

As a result of UNH’s leadership of the NH EPSCoR program, federal grants totaling more than $96 million have been received by institutions of higher education in the state to build on existing research strengths and broaden competitiveness through the development of human capital (a highly skilled science and engineering workforce), cyberinfrastructure (high-speed Internet and computing resources), physical capital (facilities and instrumentation for scientific experimentation and testing), and social capital (an interactive network between UNH and other NH institutions of higher education, NH stakeholders, policy-makers, and citizens).

EPSCoR projects, by virtue of their multi- and inter-disciplinary nature, catalyze new relationships between scientists and educators in the state, strengthening and building the academic research culture. A key component of the EPSCoR programs, to build the STEM education pipeline, should result in more articulation agreements and increased student enrollment at UNH by 2020.

Communicating NH EPSCoR Research

Across the state of New Hampshire, NH EPSCoR researchers are studying the environment in an effort to support better management of the state's natural resources, so that population growth and development proceed in a sustainable fashion, without threatening the quality of life that makes New Hampshire a desirable place to live and visit.

NH EPSCoR’s Facebook page, Research Blog, and Twitter feed are tapping into the power of social media to engage citizens of all ages and interests. Online videos are another tool NH EPSCoR is using to communicate the excitement and impact of the work being done by faculty, students, and citizen volunteers. NH EPSCoR’s YouTube channel has 6 videos so far:

Graduate Student Engineering Research: Snow Albedo and Climate Change in NH

EPSCoR Lamprey River Water Study

NH Stewardship Network

NH EPSCoR Albedo

Serita Frey

Rivers Act as “Horizontal Cooling Towers,” Study Finds

In April, UNH hosted NSF/EPSCoR’s Science: Becoming the Messenger communications workshop to teach scientists and engineers how to clearly, concisely, and convincingly express the importance of their work to key internal and external audiences. The workshop spanned two full days – a one-day session that provided approximately 150 attendees with a comprehensive, hands-on introduction to the strategies and tools communications professionals deploy in crafting and disseminating messages, and a more intensive, intimate second day for 15-20 hand-picked registrants that provided one-on-one coaching and mentoring in more advanced techniques for creating and delivering effective science- and engineering-based messages.
The Staff of the UNH Research Office

Central Office

Jan Nisbet        Senior Vice Provost for Research (603) 862-1948
Diana Couture     Senior Administrative Assistant
Kevin Gardner     Faculty Fellow
Tammy Goldberg    Director of Finance and Administration

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Michele Arista    Radiation Safety Officer
Ken Brown         Environmental Health & Safety Coordinator
Brian Cournoyer   Occupational Health and Safety Coordinator
Andy Glode        Laboratory Safety Coordinator
Margaret Houle    Administrative Assistant
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Maggie Trabeau    Biological Safety & Security Officer

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Angela Flanagan Software Engineer
Tucker Hurton   Software Engineer/Operations Manager
Christine Jamiol Software Engineer
A.J. Lavoie     Software Engineer
Mark Maciolek   Network Administrator
Benjamin Powers Software Engineer
Jennifer Sorrell Senior Program Support Assistant
Bob St. Lawrence Software Engineer
Mark Townley   Analytical Instrumentation Scientist
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Patricia Wilkinson Analytical Instrumentation Scientist
Allan Wright    Software Development Group Manager
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Lynnette Hentges  Senior Associate/UNH Research Webmaster
Michael Thompson  Associate

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Dean Elder  Director, Animal Resources Office
Melissa McGee  Compliance Officer
Elizabeth Skoglund  Laboratory Technician, Animal Resources Office
Kathleen Stilwell  Administrative Assistant

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Tristan Carrier  Licensing Manager
Maria Emanuel  Senior Licensing Manager
Christopher Lemming  Licensing Intern
Steve Marchand  Director of Corporate Relations
Gretchen Smith  NHIRC Program Manager
Paige Smith  Senior Program Support Assistant
Timothy Willis  Licensing Associate

Erica Johnson  Director, InterOperability Laboratory  (603) 862-0117
Andy Baldman  Senior Engineer, Storage, Mobile Technologies
Timothy Carlin  Project Manager, R&D IP Technologies
Craig Chabot  Manager, Mobile Technologies
Curtis Donahue  Technical Staff, Ethernet Technologies
Christina Dube  Manager, Bridging Technologies
Dave Estes  Manager, Ethernet Technologies
Jeff Lapak  Senior Manager, Ethernet Technologies
Lincoln Lavoie  Senior Engineer, Broadband Technologies
Kerry Munson  Operations Manager, Storage Technologies
Bob Noseworthy  Chief Engineer
Thomas Peterson  Technical Staff, R&D IP Technologies
Peter Scruton  Manager, Ethernet Technologies
Timothy Sheehan  Operations Manager, Broadband Technologies
Suzanne Snow  Marketing and Communications Manager
James Swan  Technical Staff, R&D VoIP Technologies
David Weingart  Web Development Manager
Timothy Winters  Senior IP Manager, IP Technologies
David Woolf  Senior Technical Staff, R&D
Kari Younisi  Business Manager
### Sponsored Programs Administration

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Victor Sosa</td>
<td>Director</td>
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<tr>
<td>Kristen Bellio</td>
<td>Administrative Assistant</td>
</tr>
<tr>
<td>David Browning</td>
<td>Manager, Financial Research Administration</td>
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<tr>
<td>Sharon Desjardins</td>
<td>Grant and Contract Administrator</td>
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<tr>
<td>Diane Gingras</td>
<td>Financial Research Administrator</td>
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<tr>
<td>Dianne Hall</td>
<td>Grant and Contract Administrator II</td>
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<tr>
<td>Karen Jensen</td>
<td>Manager, Research Administration</td>
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<tr>
<td>Pete Lester</td>
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<td>Kathie Lopez</td>
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<tr>
<td>Karen Maria</td>
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<tr>
<td>Diana Markham</td>
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<tr>
<td>Kelly Marti</td>
<td>Grant and Contract Administrator</td>
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<tr>
<td>Kathy Mason</td>
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<td>Cheryl Moore</td>
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<td>Noreen Norman</td>
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<tr>
<td>Amanda Pimentel</td>
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<tr>
<td>Marilyn Qua</td>
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<tr>
<td>Lisa Scigliano</td>
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<td>Erin Selner</td>
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<td>Susan Sosa</td>
<td>Senior Grant and Contract Administrator</td>
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### New Hampshire EPSCoR

<table>
<thead>
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<tbody>
<tr>
<td>Jan Nisbet</td>
<td>State Director</td>
</tr>
<tr>
<td>Kevin Gardner</td>
<td>Associate Director</td>
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<tr>
<td>Michelle Gregoire</td>
<td>Program Manager</td>
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<tr>
<td>Susan Higgins</td>
<td>Financial Coordinator</td>
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<tr>
<td>Evelyn Jones</td>
<td>Information Manager</td>
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</table>
For More Information

UNH Research
http://www.unh.edu/research

Reports and newsletters published by the OSVPR units and programs
http://www.unh.edu/research/newsletters-and-reports

Research at UNH. Innovation. Education. Impact.
http://www.unh.edu/research/sites/unh.edu.research/files/docs/OSVPR/Research_At_UNH_2011.pdf

NH EPSCoR
http://www.epscor.unh.edu/

Research Blog
http://ecosystemsandsoceity.blogspot.com/

Research Videos
http://www.youtube.com/watch?v=C-TFGEp2x5&list=PL19EC309A570236C0&index=6

NH EPSCoR Social Media Index
http://www.epscor.unh.edu/social

NH Innovation Research Center
http://www.nhirc.unh.edu/

UNH InterOperability Laboratory
http://www.iol.unh.edu/

Report of the President’s Blue Ribbon Panel on Research
http://www.unh.edu/research/sites/unh.edu.research/files/docs/OSVPR/Blue%20Ribbon%20Panel%20Report

Research and Engagement Academy
http://www.unh.edu/engagement/research/academy.html

UNH in 2020
The University’s New Strategic Plan: Breaking Silos, Transforming Lives, Reimagining UNH
http://www.unh.edu/strategicplanning/

Academic Initiatives:
http://www.unh.edu/strategicplanning/academic-initiatives

UNH Research Council
http://www.unh.edu/research/research-council

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∞ For electronic copies, go to http://www.unh.edu/research/newsletters-and-reports

∞ For printed copies, contact:
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k.cataneo@unh.edu
(603) 862-0357