

UNLV Research Goals and Objectives 2013 Progress Report

The Division of Research and Economic Development is working with key campus stakeholders on a new strategic planning process for research at UNLV. As an initial step, the division has produced a draft of goals and objectives with input from the Research Implementation Team. Additional input was sought from a number of other key constituent groups and units, including the Research Council and the associate deans for research. Once appropriate input has been obtained, it is anticipated that performance indicators and benchmarks will be developed, also with input from the campus.

While the strategic planning effort continues, the Division is documenting progress each year, utilizing the list of goals and objectives as a framework for reporting its progress.

It is recognized that the university's success in meeting these goals is dependent on the commitment and cooperation of the entire campus community. Many of these goals/objectives require support that reaches even beyond the campus; for instance, increasing academic and research faculty and building the campus research infrastructure will require funding support from the legislature.

It should be noted that the numbers below do not indicate priority order. Asterisks indicate goals associated with data used to identify Top-100 Research Institutions.

1. Continue building high quality of research, scholarship, and creative activity

Objectives

- **Establish research and creative activity productivity standards at the college level that align with the university's vision**

The Tier One Initiative is generating discussion on ways to develop these standards. As part of this discussion, initial data-gathering efforts are under way to determine publication productivity of the faculty across departments and in comparison with peer institutions. Identifying the current status of faculty scholarly publication productivity is the first step toward establishing standards at the college level.

- **Build a campus culture that emphasizes peer-reviewed and/or peer-recognized research and creative activity**

This year, the Division of Research and Economic Development (the Division) began holding monthly meetings with associate deans for research from each college with the goal of enhancing communication and building support for the research culture on campus.

The Division is exploring avenues to obtain the aforementioned data on faculty publication productivity using Web of Science data, emphasizing citation impact factors, including journal reputation and citation frequency. This project seeks to establish a baseline understanding of scholarly productivity that identifies excellence and emphasizes peer-review. It is anticipated that the outcome of this exploration will be shared with the campus community to engender discussion of enhancing the campus culture that supports research.

- **Increase academic and research faculty**

The university hired 89 new faculty members in CY2013.

In 2013, the Division evaluated the activities of the 14 “impact hires” who joined the university in 2012 in varied academic areas, including engineering, architecture, health sciences, nursing, chemistry, and hotel. To date, these researchers have submitted more than 60 research proposals.

- **Expand quality research space**

Very little capital improvement or construction has been funded in the past year. However, there has been a reprioritization of space in the Harry Reid Center for multidisciplinary research; also, a new engineering high-bay facility adjacent to the Science and Engineering Building (SEB) has been built out and opened.

- **Increase scholarly outputs with international recognition**

The aforementioned faculty publication productivity project will establish baseline data for the analysis of this variable.

- **Ensure that existing and new university processes minimize bureaucratic barriers while supporting an environment of compliance**

The Division has made continuing progress in streamlining business processes. For example, the Office of Research Integrity (ORI) has implemented changes for reviewing expedited protocols to streamline the approval process; utilized IRB chairs, co-chairs, and members to act as liaisons/mentors in their departments to help improve the quality of protocols before submission; and continued to emphasize mandatory training that must be current for PIs and research team members.

In 2013, 275 new human subjects research protocols were submitted electronically and processed by the Office of Research Integrity – Human Subjects: The average turn-around time across all levels of review was 28 days. This is below the national average of 33 days.

The Office of Research Integrity also utilizes a satisfaction survey for those who have submitted human subjects research protocols. Results from 2013 indicate that 92% of respondents were satisfied/extremely satisfied with the IRB process and that 89% were satisfied/extremely satisfied with protocol processing time.

The ORI has worked extensively with the Provost's office to develop improved online forms for conflict of interest reporting, including reports on compensated outside activity and annual disclosure. The ORI has also provided training on multiple occasions on the new COI reporting process with deans, chairs, and deans' support staff.

- **Develop a statistics support center to assist faculty with research projects**

The Center for Research, Evaluation and Assessment (CREA) was recently re-established by Dr. Gregory Schraw and offers statistical, research design, evaluation, and assessment development support to UNLV as part of grants and ongoing projects.

- **Increase the number of graduate research assistants and stipend funding**

Although GA funding has been flat, UNLV did increase its contribution to doctoral stipends (based on the previous year's doctoral stipend increase). Also, the institution is paying more to support GA health insurance now that mandatory coverage requirements have been instituted.

2. Increase research expenditures

Objectives

- **Reinvest F&A in research**

The Division utilized F&A for salaries for eight staff members; a veterinarian for animal cares services; Science and Engineering Building support; operations support for the offices of Research Integrity, Sponsored Programs, Technology Transfer, Economic Development, and Research Services; processing fees for three patents, all patent application filings, and annuity/maintenance fees; and funding for contracted grant writing services. In addition, \$900,000 is transferred to the Provost's office annually for faculty start-up.

OSP led the effort to implement a new F&A distribution process providing the full 40% to the colleges to provide increased control and flexibility to the deans while requiring PIs and departments to be more accountable to deans for how the F&A is utilized. OSP also shared best practices with deans to provide standardized, fair, and transparent distribution models across campus.

- **Increase sponsored program award funding**

This year, UNLV experienced its first positive growth in awards and research expenditures in quite some time, possibly indicating the university is recovering from its loss of federal appropriations and the severe impacts experienced during the economic downturn. Awards increased 2.5% and research expenditures increased 2.1% compared to FY12. Recovered F&A, which is used to reinvest in research, also increased nearly 5%. So far these variables are showing even greater promise for FY14.

- **Improve university processes to facilitate expenditure of funds**

OSP has encouraged deans and associate deans to share this need with principal investigators.

- **Ensure departments utilize accounts categorized as “research” for research-related activities so that expenditures get accurately classified as research for reporting and university ranking purposes**

The Division has encouraged the deans and associate deans to examine their processes for assigning and utilizing appropriate account numbers. Two colleges have set up separate F&A recovery accounts to manage their portion of the recovered F&A (40%), and they have been categorized as research so that future expenditures will be more accurately reported. OSP will continue to promote this option when communicating with deans and associate deans.

- **Establish dashboard on spending for each grant through PeopleSoft or other software**

NSHE is in the final stages of the Request for Proposal for this software, so implementation will be delayed until it is acquired.

3. Increase sponsored programs award funding

Objectives

- **Establish clear goals and metrics at the college/unit level regarding acquisition of research funding**

The Office of Sponsored Programs provides quarterly/annual performance reports to each college with award funding and expenditure data to facilitate evaluation and goal setting. However, there is no institution-wide, coordinated goal/metric setting process on research funding among colleges/departments; some units establish funding goals, and some do not.

- **Provide internal funding to help faculty increase the amount of research/scholarly and creative activity funded through competitive solicitations**

The Division managed the selection process for the Faculty Opportunity Awards in 2013. Eighteen awards totaling approximately \$395,000 were awarded last year in the categories of Individual Investigator and Innovation/Technology Development.

- **Establish teaching loads that accommodate research-productive faculty and allow campus units more flexibility in setting workloads to promote research productivity**
- **Provide other incentives for faculty to write quality, competitive proposals to external funding agencies**
- **Call for deans to conduct research productivity studies and establish standards for award funding acquisition**

Deans now receive quarterly sponsored program funding reports from OSP, enabling them to evaluate progress and set standards for funding acquisition.

- **Proactively identify high-profile, high-dollar institutional interdisciplinary grant opportunities and develop teams to pursue them**

In 2013, UNLV received two multidisciplinary \$20 million awards, one from NSF EPSCoR and one from the NIH IDeA-CTR.

UNLV applied for and received two Knowledge Fund grants totaling \$3 million for the Institute of Quantitative Health Sciences and the Center for Gaming Innovation.

The CoRE Initiative is being implemented with the goal of achieving this objective. Eight CoRE Fellows have been appointed and are meeting to establish teams and processes for pursuing this objective.

Additionally, the Division has hired a new proposal development manager to help identify grant opportunities and help form and guide the teams to pursue them. This position is set to be filled this spring, and one of the incumbent's first tasks will be to work closely with the CoRE Fellows and teams to develop a plan for achieving this objective.

- **Continue providing and better publicize funds for grant-writing assistance to improve the overall quality of proposals being submitted by faculty members**

The Division is focusing its financial resources for grant writing on the new position of proposal development manager; requests for future contract services for grant writing will be evaluated on a case-by-case basis.

- **Establish proposal development team with grant editors/managers**

The Division has hired a proposal development manager who will assist and serve individual faculty and staff members as well as interdisciplinary research teams in the identification of extramural grant opportunities and the development of competitive grant proposals. The colleges are being encouraged to hire their own grant writers/editors as well, and the new proposal development manager will work with them closely.

- **Publicize more widely OSP's services in helping PIs locate funding opportunities**

The new OSP website redesigned in 2013 does a better job illustrating the resources to locate funding opportunities and how to write better proposals. OSP has also distributed more campuswide notifications of limited submission and minority-serving institution grant opportunities; it also conducts targeted email marketing of training workshops on locating these opportunities.

- **Provide summer student support funds for including graduate and undergraduate students in funded research projects**

The Colleges of Engineering and Sciences have active summer research programs that are expanding.

4. Continue building infrastructure and services to support research

OSP finalized F&A rate negotiations which resulted in a 4 point increase to the university's F&A rate.

Objectives

- **Create and adequately fund core facilities (e.g., buildings and laboratories) to enable collaborative research**

This year, the Harry Reid Center was reorganized with the goal of transitioning it to become an SEB-like facility available for multidisciplinary research and for all of its research faculty to have an academic affiliation. New building management has been established and an inventory of space has been conducted. New teams are being placed in the facility.

Additionally, the Division continues to inventory core facilities and research space across campus.

The National Supercomputing Center is designing and building an advanced Research Visualization Facility (RVF). This initiative will provide the university with unique hardware, robust software, and essential infrastructure resources in support of the University research community. The RVF, to be located in the SEB, offers the UNLV research community and visiting researchers the ability to visually analyze and compare results of advanced computer simulations.

The National Supercomputing Center, in partnership with Switch Communications, is designing and building a Research Cloud Computing environment. This will provide a better test environment for software developers, smoother deployment for the research community, substantial reduction in costs, and an increase in service levels.

- **Create a university-wide research expertise database and develop necessary electronic applications to facilitate faculty efforts to identify prospective collaborators**

The Division of Research and Economic Development has established “UNLV Research Match,” a search engine that enables both the campus community and prospective external partners to identify faculty expertise through keyword searches. Beta testing on UNLV Research Match is under way, and the Division is currently updating faculty expertise data and refining the web interface.

- **Implement research-related electronic initiatives, especially protocol service for IRBs and grant routing for sponsored programs**

The new grant routing form for sponsored programs is in beta testing, and electronic IRB submission has been available for some time. ORI began review of new vendor for protocol service that would include IACUC and IBC protocols in addition to IRB. Additionally, conflict of interest disclosure reporting is now conducted through a Qualtrics survey format.

- **Strategically build administrative staff that supports research proportionate to faculty need**

The Division has hired executive directors of technology transfer and economic development this year; a proposal development manager is due to begin working soon; and a search is under way for an export control officer to meet faculty needs.

It should be noted that faculty needs have increased with respect to biomedical research: IBC protocols increased by 50% in 2013, and submissions to the Biomedical IRB increased by 10%. An increase in administrative staff has not yet addressed this need. In particular, a biosafety officer will be required by federal regulation as biomedical research expands.

- **Expand and enhance animal care facility**

The Division has hired an external consultant to provide plans for development of a new (or transitional) vivarium. The consultants visited the campus and met with key faculty users of the animal facility to better understand their needs both in the short and long terms.

- **Develop grant and proposal development resources for faculty with a network of college-level grant/proposal editors and a small centralized development team for coordination on large interdisciplinary proposals**

As previously mentioned, the new proposal development manager will provide centralized support; also, two colleges have hired grant editors, but there is no uniform support for these positions across the colleges. It is anticipated that a network of grant editors will be more formally organized once a centralized office is in place.

- **Begin a mentorship program for select undergraduate and graduate student scholars**

The Honors College seeks to place its undergraduate students with select faculty for mentoring in research/scholarly/creative activity.

- **Provide business managers or grant coordinators at the college/department level to monitor funding**

The Division has recommended sponsored program administrative support is necessary in all academic departments with significant sponsored program activity. So far, the Howard R. Hughes College of Engineering has hired a finance/ administrative specialist to assist faculty with proposal budgets and budget management.

5. Increase number of economic development outputs

Objectives

- **Define and reward development of intellectual property within existing faculty reward structures**

The Office of Economic Development has worked with the deans of the Colleges of Science and Engineering to implement a structure for considering patents as a faculty accomplishment in evaluation of tenure. In the College of Sciences, a patent is considered the equivalent of a published peer-reviewed journal article; in Engineering, a patent is the unofficial equivalent of a publication.

- **Facilitate collaboration with external research partners to increase applied and translational research**

The Office of Technology Transfer has facilitated research partnerships with the following companies to explore the given technologies/projects:

- NBD Technologies – Enhancing Condenser Performance technology development
- Elutin, Inc. – Sponsored research, product development, IP commercialization, and company resource identification
- XOil – SBIR/STTR grant funding
- Rechargeable Power Energy North America (RPE) – Advanced Polymer Batteries technology development
- NSTEC – Various engineering projects
- Varian – Accelerator research

The Office of Economic Development has contacted more than 300 companies within the economic sectors defined by the Governor’s Office of Economic Development to initiate collaboration efforts.

The National Supercomputing Center is collaborating with a number of external partners, including the following:

- The Cleveland Clinic on an NIH COBRE proposal entitled “Center for Neurodegeneration and Translational Neuroscience.”
- The Lou Ruvo Center for Brain Health/Cleveland Clinic on a new professional boxer study.
- The DOE’s “Advanced Simulation Capability for Environmental Management” (ASCEM), a state-of-the-art scientific tool and approach for understanding and predicting contaminant fate and transport in natural and engineered systems.
- The 2013 Cyber Operational Research and Extreme Cyber Test Bed Initiatives (collaboration between Oak Ridge National Laboratory and the Nevada National Security Site).

- **Actively pursue venture capital, seed investment, business incubation, and start-ups**

The Office of Technology Transfer has worked with the Las Vegas Global Economic Alliance in reaching out to the above companies, as well as to the Vegas Valley Angels for support.

The Office of Economic Development staff has attended several conferences to explore regional and national regulatory changes and options regarding new venture investments. The executive director has also met with local angel investing groups and became an investment committee member for the Battle Born Venture Fund.

- **Support the Office of Economic Development to ensure the university becomes a recognized partner in state and regional economic development, and a leader in entrepreneurial activity**

In the last year, an Executive Director of Economic Development has been hired (Robert Nielsen). He leads the UNLV Business Startup Center, which provides small business development assistance to the local community and surrounding region and serves the entrepreneurial needs of the campus community. In 2013, this center accomplished the following:

- Obtained a headquarters location in the Student Union to promote entrepreneurial student/faculty outreach;
- Hosted a number of inaugural events to assist the campus startup community, including Startup Weekend, Startup Grind, Lean Startup, and a speaker/mentor series;
- Promoted \$25,000 in SBIR/STTR grant opportunities to encourage UNLV faculty to partner with companies in commercialization of new technologies;
- Assisted clients in obtaining more than \$3 million in funding for their new businesses.

The Governor's Office of Economic Development has placed its representative Wes Harper on site at UNLV to help facilitate outreach to companies, advance technologies, and promote the cause of economic development.

The Technology Transfer staff has visited the UNR campus to meet with technology transfer staff network and coordinate university tech transfer efforts.

The Technology Transfer staff has attended national events such as the Biotechnology Industry Organization Convention and meetings of the Association of University Technology Managers and the Licensing Executive Society to develop commercialization contacts, to network, and to learn best practices.

- **Support the Technology Transfer Office in its effort to oversee and ensure faster development of technology commercialization**

A new Executive Director of the Office of Technology Transfer (Zach Miles) was appointed in December 2013 and assigned office staffing.

Thirty-two research disclosures have already been filed in the first half of FY14. Just eighteen were filed in FY13. UNLV has filed 35 patent applications in the last four years, and it has more than 170 research disclosures on file and 14 patents listing UNLV inventors.

Since January 2014, the university has acquired an exclusive license agreement, an inter-institutional agreement, an MOU, and a teaming agreement with various private- sector partners. The university is also in negotiations for an option, five non-disclosure agreements, and one inter-institutional agreement for patent sharing and commercialization.

- **Engage in outreach activities in the academic departments to encourage intellectual property development and completion of research disclosures to promote economic diversification**

The leaders of the Offices of Technology Transfer and Economic Development met with the faculty of the College of Sciences and the Howard R. Hughes College of Engineering. Future faculty meetings are planned for the Schools of Nursing and Dental Medicine, as well as the Boyd School of Law and the Lee School of Business. A campus-wide seminar is scheduled for March 27 to educate the university community on the entire intellectual property (IP) protection and commercialization process as well as start-up activities.

The Executive Director of the Office of Economic Development has met with impact hires to discuss IP disclosures.

- **Inventory current research partnerships**

Improved data is being gathered by the Office of Technology Transfer on all IP activities, including various agreements demonstrating active partnership with external entities.

- **Evaluate policies that may inhibit faculty development of intellectual property**

The Office of Technology Transfer is developing a new Intellectual Property Policy in cooperation with the system office.

- **Provide outreach and training to graduate students on tech transfer and IP development**

No official training has been offered, but discussions are under way to offer training segments at other events, such as graduate student orientation.

6. Continue building interdisciplinary research teams

Objectives

- **Encourage and reward development of interdisciplinary research teams and new units that address university, regional, and national needs**

The Collaborative Research and Education (CoRE) Steering Committee has announced the appointment of eight CoRE fellows who will lead efforts in the following areas: Sustained and Emergent Learning Technologies; Gaming and Hospitality; Health; Renewable Resources; Urban and Social Issues; and IT/Cybersecurity. These fellows will work with the campus on forming working groups to advance scholarship and obtain funding for research and education efforts; they will also help identify the strategic direction of CoRE.

- **Strategically increase clustered research hires to build critical mass in specific research areas that address university, regional, and national needs**
- **Facilitate networking among faculty through the development and support of CoRE**

In 2013, several open forums were held to bring together faculty interested in the CoRE initiative; out of those sessions, faculty groups were formed and CoRE fellows were selected. These fellows are now convening each of their groups regularly and expanding networking.

- **Encourage joint appointments to entice research faculty**
- **Create a campus culture that supports hiring faculty for research productivity**
- **Establish interdisciplinary and collaborative graduate programs and adapt policies to support them**

Three interdisciplinary graduate degrees were in development in 2013 (a master's in professional science, a master's in urban leadership development, and a doctorate in health sciences), but they have not yet been fully approved, and policies supporting such programs are being updated.

7. Increase fundraising for research and graduate education

Objectives

- **Increase the number of endowed chairs university-wide and increase private funds directed toward nationally competitive graduate fellowships and scholarships**

The Graduate College continues to work with the UNLV Foundation to increase fundraising for graduate fellowships and scholarships, but no new private funds for this purpose have been allocated. However, the Graduate College redirected scholarship funds to support two doctoral STEM fellowships (two students per year, for two years each).

- **Identify additional development priorities for research**

In 2013, the Division identified graduate fellowships as a fundraising priority and will identify additional development priorities this year.

- **Engage UNLV Foundation to facilitate fund-raising for research**

The UNLV Foundation is hiring a director of Foundation Relations who will focus on obtaining both gifts and grants from foundations. The position will be a dotted-line report to the Vice President for Research and work closely with OSP.

8. Engage faculty to enhance the campus research culture

Objectives

- **Continue to engage the UNLV Research Council and other faculty stakeholder groups to create a campus-wide culture of excellence in research and scholarship**

The Division holds regular meetings with the Research Council, the Intellectual Property Committee, and the Associate Deans for Research. Faculty also participate actively in compliance-oriented committees, such as the IACUC and the IRBs, and they lead Responsible Conduct of Research training.

- **Coordinate with the university-wide mentorship program to foster the professional development of junior faculty members**

The Provost's Office provides oversight of the universitywide mentorship program.

- **Encourage smaller mentorship initiatives at the unit level**
- **Encourage faculty mentorship of students on the responsible conduct of research**

The ORI has witnessed increased faculty participation in online and face-to-face RCR training.

- **Reward collaborative research and intellectual property development in promotion and tenure and/or annual review and merit**

The Office of Economic Development has worked with the deans of the Colleges of Science and Engineering to implement a structure for considering patents as a faculty accomplishment in evaluation of tenure. In the College of Sciences, a patent is considered the equivalent of a published peer-reviewed journal article; in Engineering, a patent is the unofficial equivalent of a publication.

- **Establish and promote annual outstanding undergraduate and graduate student research awards that recognize both the students and their faculty mentors**

The Graduate College created outstanding graduate student teaching awards and resumed offering the outstanding graduate faculty award.

- **Encourage the involvement of undergraduates in research**

The Division plans to develop an undergraduate research website that identifies resources and opportunities for research for undergraduates.

9. Enhance education about research both on and off campus

Objectives

- **Continue educating key constituent groups about the value of research and graduate education and publicize university research activities more broadly**

The Division of Research and Economic Development supported and sponsored “21,” the university’s first Pecha Kucha-type event at the Downtown Project, in which 21 speakers used a short-format presentation to share their research and explain its importance. The event was a success with more than 150 attendees.

The Division expanded its research magazine and enhanced its format, including adding a new Annual Report section. This year’s edition featured more diverse content, including a piece on graduate research fellowships, as well as a large section on the successful development of three intellectual property projects.

The Division co-produced “UNLV Research Files,” a television interview program hosted by former news anchor Gary Waddell. The program, which airs on UNLV-TV, features faculty from across campus discussing and promoting their research.

The Division also created “Research News,” an e-newsletter distributed to the campus community, which contains short items on important deadlines, funding trends, research-oriented events, new awards, and appointments.

- **Continue educating the campus on compliance requirements**

More than 1,800 UNLV faculty, staff and students participated in online training on research compliance (Human Subjects, Conflict of Interest, Export Controls, Responsible Conduct of Research) offered by the ORI through the Collaborative Institutional Training Institute (CITI) in 2013.

The Division revised and distributed the annual Research Responsibility Memo, which contains instructions a wide range of sponsored programs and compliance issues. This document was also posted on the Division’s website.

The ORI has made a number of enhancements in the human subjects area. The office has enhanced communication that provides assistance and services to PIs and graduate students; developed a new IRB policy and procedures, which were posted online; developed Standard Operating Procedures that are currently being posted online; invited campus participation in human subjects webinars provided by national organizations (e.g., PRIM&R’s webinar on Protecting Human Subjects in Qualitative Research: Ethical Considerations for IRBs and

Researchers); and conducted 16 in-person training sessions for individual departments, colleges, and research methods classes (e.g., Tips for Successful IRB Review).

- **Continue educating the campus about research integrity**

The ORI organized a series of on-campus Responsible Conduct of Research training sessions, conducted by respected faculty. Their PowerPoint presentations are posted on the research website as well.

- **Conduct strategic planning for research**

The Division developed a new approach for strategic planning for campus research and led strategic planning activities with a number of the campuswide groups, including the Research Implementation Team, the Research Council, and the Associate Deans for Research. A list of 10 goals with additional objectives under each was generated.

- **Improve and better integrate data gathering and analysis of the university's research enterprise**

OSP provides quarterly and annual research metrics for each unit, including data on proposals, awards, total expenditures, and research expenditures. OSP also developed and posted six-year historical performance measures on its website to illustrate research funding trends.

- **Improve quality of research protocols through department/college review process**

The Division is encouraging Associate Deans to develop IRB protocol and grant proposal mentoring and review in their colleges.

10. Provide financial resources and incentives to faculty for research

Objectives

- **Provide funding for research start-up; first-year grant development; travel; cost-share; and other resources and staffing (such as post-docs)**

Approximately \$900,000 is transferred to the Provost's office annually for faculty start-up. First-year grant development and travel are funded in part by the Faculty Opportunity Awards. Cost share provided in 2013 totaled approximately \$6 million.

- **Facilitate greater student research support**

Two STEM Fellowships were offered for the first time. Also, the Graduate College developed a plan for the Doctoral Graduate Research Assistants, and they will be distributed in 2014. The Graduate College provided an extra \$50,000 to support GPSA Research & Travel grants for graduate students.

- **Continue internal funding programs**

The Faculty Opportunity Awards will continue this year with approximately \$395,000 in funding for awards for individual investigators and innovation/technology development.

- **Provide merit/rewards for research**

Although merit has not been provided for the past six years, it will be offered for the first time in 2014 and will be used to reward faculty and staff for their work during the past half dozen years.

- **Encourage the State of Nevada to reinstate matching funds for research**

- **Provide internal funding to help support all research, including scholarly/creative activities in disciplines that do not traditionally secure sponsored funding**

The Individual Investigator Award is designed to fund investigators who are developing innovative and will collaborate with well-established investigators who will serve as mentors. The intent of this award is (1) to help catalyze a funded research program for new faculty, (2) to stimulate the development of a new research field for faculty further along in their career, or (3) to support the development of substantive scholarly/creative works by faculty in disciplines outside of engineering, allied health, and the physical and natural sciences. The investigator applying for this award must provide a Mentor Plan that addresses the development of their project.