

## Strategic Plan for the Office of the Senior Vice Provost for Research and Strategic Initiatives

### Mission

The mission of the Research Office is to

- Advance the University's research enterprise
- Build leading edge research programs from existing strengths
- Develop new strengths aligned with the University's Strategic Plan
- Promote the application and awareness of UD research and creative endeavors

The Senior Vice Provost for Research and Strategic Initiatives is the "Chief Research Advocate", charged with advancing the level, capability, and impact of the University's research activities.

### Principles

Advancement along the University's Path to Prominence as one of the Nation's leading research universities will require significant enhancement of our research competitiveness across a broad front. It will require significant institutional and state investment in laboratories, infrastructure, core facilities, faculty and students in strategic signature initiatives and areas of disciplinary and cross-disciplinary emphasis. It will require significant improvement in our pursuit of external sources of research support, including government, industrial and foundation sources. But increasing financial resources is only one part of the equation. We must strive for operational excellence, not only in the contract and grant administration functions of the Research Office, but in all units on campus that serve the research enterprise. We must alter institutional and cultural barriers to the research collaborations and partnerships that are becoming a defining characteristic of how research is carried out in this century. We must build the intellectual infrastructure by cultivating a strong portfolio of disciplinary points of excellence and by focused hiring and investment targeting multidisciplinary initiatives. In short, we must create opportunities for University of Delaware researchers, not only to compete for resources with their peers in other institutions, but to carry out world-leading research and to promulgate the results and applications of that research in ways that enhance its impact and the University's reputation and attractiveness to other scholars, students and supporters.

### Initiatives

#### ***Improve the growth rate of funded research***

Over the past decade, the level of research expenditures at the University has grown steadily at approximately 7% per annum. While current economic conditions and patterns of Federal funding are likely to present an even more challenging environment in the near future, accelerated growth of sponsored research activity is essential if we are to achieve recognition of the University of Delaware as a premier research institution and to join the company of our aspirational peers in organizations such as the American Association of Universities (AAU). This will require significant efforts to improve our pursuit of and competitiveness for external funding. It will depend on, but will also drive, significant growth of research capacity on campus and as leveraged by external partnerships.

Increasing access and success in external funding will incorporate the following elements:

- Improvement of dissemination of funding opportunity information to faculty in all disciplines, including those which have not previously been the recipients of significant external funding
- Training and assistance in grant development, proposal writing, and organization of related outreach, education, and human capital development activities
- Development of seed funding and support programs to encourage faculty in the pursuit of new scholarly directions, and in application and competition for external fellowships such as Sloan, Guggenheim, Fulbright, etc.
- Collaboration with colleges and departments in the development and seed funding of multidisciplinary teams for formation and successful pursuit of funding of research centers in areas of strategic importance or opportunity
- Advocacy and cultivation of access for faculty networking and service with funding agencies and other policy-making entities at all levels
- Teaming with the Office of Economic Innovation and Partnerships to create new cooperative agreements with industry, government agencies, and non-governmental organizations

### ***Build research capability***

Future success as a research university depends on creation of an environment that supports the continuum of activities between individual faculty scholarship and large multi-disciplinary programs. This challenge has many facets. It clearly involves the identification, organization, financial and administrative support of multi-investigator centers and institutes throughout their life cycle – from provision of initial seed funding and flexible incubator space to development of appropriate facilities to house successful, ongoing ventures. It also involves providing an array of shared resources such as sophisticated instrumentation and facilities, including research computing, that will enable faculty to conduct cutting edge research and encourage their continuing exploration of the frontiers of human knowledge. Critical actions include:

- Building support infrastructure and resources needed to successfully compete for large, multi-investigator, multidisciplinary grants
- Facilitation of planning, organization and management of shared facilities such as research instrumentation centers and research computing capacity

### ***Nurture interdisciplinary research institutes identified in our Path to Prominence***

The University of Delaware has a long and successful tradition of building large multi-disciplinary research centers with strong external connections and funding. The Center for Composite Materials and the Institute of Energy Conversion were early models for centers of excellence programs by Federal agencies, and they remain research leaders today. More recently, the dramatic growth of the Delaware Biotechnology Institute has attracted internationally renowned researchers and significant funding to the University of Delaware, and has nucleated important regional partnerships in life and health sciences. It has provided outstanding opportunities for faculty and students at the university. As we move forward, it is essential not only to help these centers of excellence achieve the levels of success to which they aspire, but to create new ones across the full range of faculty scholarship that will advance the University along the Path to Prominence. Strategic initiatives such as the University of Delaware Energy Institute and the Institute for the Environment, as well as human health initiatives such as the Delaware Health Science Alliance and the Center for Translational Cancer Research, are still in the formative stages, and will require continued investment, academic leadership and

organizational support. We will work closely with the leaders of these initiatives and with their supporters and stakeholders to develop successful new centers of excellence. As articulated by the Strategic Planning Committee, it will be essential to reach beyond science and engineering and distinguish our scholarship by engaging faculty and students from the social sciences, humanities, and the broader community in understanding and guiding technology's impact on society. Indeed, achieving recognition of such integration as the hallmark of major research initiatives at the University of Delaware will be a key ingredient of future success. We must also create sustainable financial models for cross-disciplinary centers and institutes across the campus to enhance their prominence, scholarly productivity, and value to the University's missions of research, education, and service.

### ***Cultivate operational excellence***

As the principal unit supporting research and scholarship at the University, the Research Office has the critical leadership role in setting the standard of service excellence. Improvement of operational efficiency and reduction of administrative drag are key goals for all members of the office. The morale of faculty and student researchers can also be sapped by inefficiencies and bureaucratic hurdles in other units that support the execution of research. The Research Office will be an advocate for and exemplar of best practices and service excellence in support of research. The participation of faculty researchers is critical to the process of crafting informed policies and procedures and to identifying need and roadblocks. Continued development of an active Research Council will be a priority.

The Research Office is also the nexus of activities to ensure compliance with Federal regulations that govern nearly all aspects of funded research. In an increasingly decentralized university environment, oversight and training functions are critical to ensuring that our institutional responsibilities are met, and that the larger research enterprise is not jeopardized. Increased oversight and training will be only partially effective if we do not also foster a "compliance culture" in which faculty, staff, and students are sufficiently committed, educated, and empowered to make consistent, informed, and responsible decisions about their conduct of research. Increased education and training of researchers and support staff, and increased involvement of faculty in shared oversight functions and improvement of financial reporting will be priorities.

### ***Advance the visibility and impact of University of Delaware research and researchers***

Prominence will be measured in the end by our accomplishments rather than by the resources garnered or expended along the way. We must not only support the highest levels of accomplishment, but ensure their visibility and their impact, whether on future scholarship or on practical applications. Key elements include the following:

- Development, with the Office of Communication and Marketing, of new vehicles to publicize UD research and researchers
- Collaboration, with the Office of Economic Innovation and Partnerships, to publicize and apply UD research and intellectual property, to leverage cooperation with Delaware industries to increase the University's impact as an engine of economic growth, and to cultivate and support faculty entrepreneurship
- Strategic membership, involvement, and leadership in national organizations that are representative of our aspirational peers