A BRIGHTER WORLD THROUGH RESEARCH AND SCHOLARSHIP

Tufts University Strategic Plan for Research and Scholarship

Fall 2018

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A BRIGHTER WORLD THROUGH RESEARCH AND SCHOLARSHIP: TUFTS UNIVERSITY STRATEGIC PLAN

In January 2017, Tufts University launched a university-wide research and scholarship (R&S) strategic planning effort. Our goal was then, and remains, to build on our current strengths in research and scholarship, identify new insights, and chart our path forward as an innovative, civically engaged, student-centered, tier-one research university.

Under the guidance of a 24-member steering committee composed of faculty, staff, students, and postdoctoral fellows, our aim was to create the best possible conditions for R&S. That job began by identifying R&S priorities with the potential to solve pressing societal and global challenges—grand challenges—that build on Tufts’ core strengths as an institution. We coupled this aim with an effort to recognize and address structural impediments to success in all areas of research at Tufts.

The first phase of planning included extensive input from both internal and external stakeholders—faculty, staff, students, postdoctoral fellows, alumni, research collaborators, funders, thought leaders, and other sources. Through one-on-one interviews, focus groups, surveys, online feedback, and other data gathering methods, the steering committee identified potential research priorities and necessary areas for collaboration across disciplines.

The R&S thematic priority areas identified in the strategic planning process align with and complement Tufts’ 10-year strategic plan (T10) and those of the schools and centers within Tufts; build on Tufts’ existing strengths; have the potential for leading-edge innovation; provide avenues for cross-disciplinary collaboration within and outside of Tufts; and most importantly, have the potential to impact large numbers of people and societies. The improvements to critical infrastructure identified will enable and facilitate these breakthroughs.

As we move forward to accomplish what we believe will be a new phase in R&S at Tufts, we remain committed to seeking the input and support of the Tufts community, as well as worldwide leaders in these critical thematic areas. In fall 2018, with the official launch of the implementation phase of the Research and Scholarship Strategic Plan (RSSP), “A Brighter World Through Research and Scholarship,” we will again challenge our community to take part in this exciting new era for Tufts.

Anthony P. Monaco, President

Deborah T. Kochevar, Provost and Senior Vice President, ad interim

Simin Nikbin Meydani, Vice Provost for Research
I. INTRODUCTION

Tufts University is dedicated to producing the highest levels of research and scholarship (R&S). R&S at Tufts is about breaking down walls—between fields, between faculty and students, between what is and what could be. Tufts’ world-class researchers push boundaries and ask questions that will take our knowledge as a society to the next level.

Innovation and interdisciplinary collaboration are the foundations of discovery at Tufts, fueled by more than 1700 faculty. For Tufts’ researchers, scholars, students, and staff, the fruits of intellectual labor—to learn, produce knowledge, and contribute to society—define an abiding commitment to being a student-centered research institution. With research experience and strengths ranging from health to humanities, technology and the environment, population and food challenges, it’s clear this work produces knowledge and understanding, and impacts the greater good on a global scale.

This report details not only the results of Tufts’ R&S Strategic Plan, but the processes and community input required to develop it. The R&S strategic planning process serves to secure Tufts’ strengths and accelerate future growth and leadership in R&S, and affirms Tufts’ mission to provide meaningful opportunities for all members of the research and scholarship community. The planning process called forth ideas and efforts from all parts of the university and entailed a deep understanding of Tufts’ capabilities, as well as areas for improvement, in response to opportunities and challenges. It will take thoughtful planning to implement this vision for the future of Tufts’ R&S.

GOALS

Advance research and scholarship

Increase students’ transformational experiences

Enhance global and societal impact
II. EXECUTIVE SUMMARY

In January 2017, at the request of the president and provost of Tufts University, Simin Nikbin Meydani, vice provost for research, launched a research and scholarship (R&S) strategic planning effort to help guide future innovations at the university. Using a stakeholder-driven approach, the effort began by assembling a 24-member steering committee composed of faculty, staff, students, and postdoctoral fellows, with the goal of strengthening research and scholarship endeavors at Tufts, thereby upholding the University’s mission as a student-centered, top-tier research institution and making a positive impact on society in the years to come.

The Planning Phase
Commencing with an inclusive effort to pinpoint externally validated grand challenges which Tufts as an institution is well positioned to address, the planning team developed strategic recommendations based on extensive information gathering from within Tufts’ R&S community, from its leadership, students, postdoctoral fellows, alumni, and trustees, and from thought leaders, research collaborators, funders and other supporters outside the university. Data were derived from

- 95 one-on-one interviews
- 16 focus groups consisting of 91 participants
- online survey distributed to 1700 faculty members
- review of the T10, and school-based strategic plans and other sources
- online feedback via the RSSP website

Analysis of these data identified two key areas of focus needed to advance R&S at Tufts: **Priority Area** and **Critical Infrastructure** for which faculty and staff working groups were formed.

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Left: Mechanical Engineering Lab, Middle: Science and Engineering Complex (SEC), Right: Working in the simulation clinic at the School of Dental Medicine
Priority Areas
Priority area working groups built proposals that would make the best use of Tufts’ unique combination of expertise and resources in the five priority areas. Twelve research proposals were presented to the Steering Committee, and a total of eight proposals were selected for seed funding.

The first four proposals to receive seed funding over the next three years include
- Center for Integrated Management of Antimicrobial Resistance (CIMAR)
- Culture, History, and Translation
- One Health-y Aging
- Laboratory for Living Devices (L²D)

These are deemed the Phase I priority areas for their actionable qualities and are slated to receive funding for up to three years.

The Phase II priority areas selected for development are
- Climate and Energy
- Equity in Health, Wealth, and Civic Engagement
- Food and Water Nexus
- Global Obesity Collaborative

These proposals will receive planning grants for the first year; three of the Phase II proposals will be seed-funded for the following three years.

Critical Infrastructure
Cross-cutting, critical infrastructure working groups sought to improve the overall resources available to Tufts researchers and to remove barriers to research breakthroughs. In May 2018 the Resources, Barriers, and Facilitators of Research and Scholarship working group was formed to improve conditions for R&S across the university. This faculty-driven, 28-member committee analyzed interviews, focus groups, survey data, and reports on core facilities, global impact and engagement, and industry collaboration. Based on this input, the working group developed a set of actionable recommendations to better fuel research and scholarship for all at Tufts University. Funds have been set aside to support recommendations for this important work.
Recommendation 1: Implement policies that promote more frequent and effective communication between researchers and the various offices involved in research at Tufts.

Recommendation 2: Make changes to infrastructure and policies that facilitate frequent interactions between researchers at all Tufts’ campuses and allow them to collaborate with investigators from other institutions.

Recommendation 3: Create a centralized research portal that enables Tufts faculty, staff, and students to identify potential collaborators, resources, and core facilities that will advance their own research initiatives.

Recommendation 4: Implement policies that will allow more research time for faculty.

The Way Forward
Research and scholarship that rises to the top, has the greatest societal impact, and is published in the most prestigious peer-reviewed journals requires more than passive support from Tufts: it requires a proactive and robust commitment. In addition to a funding strategy to support priority areas, Tufts has earmarked resources to improve conditions for research and scholarship across all of its campuses.