

# RESEARCH TOWN HALL

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**Caroline Genco, PhD**  
**Vice Provost for Research**  
**January 29, 2021**

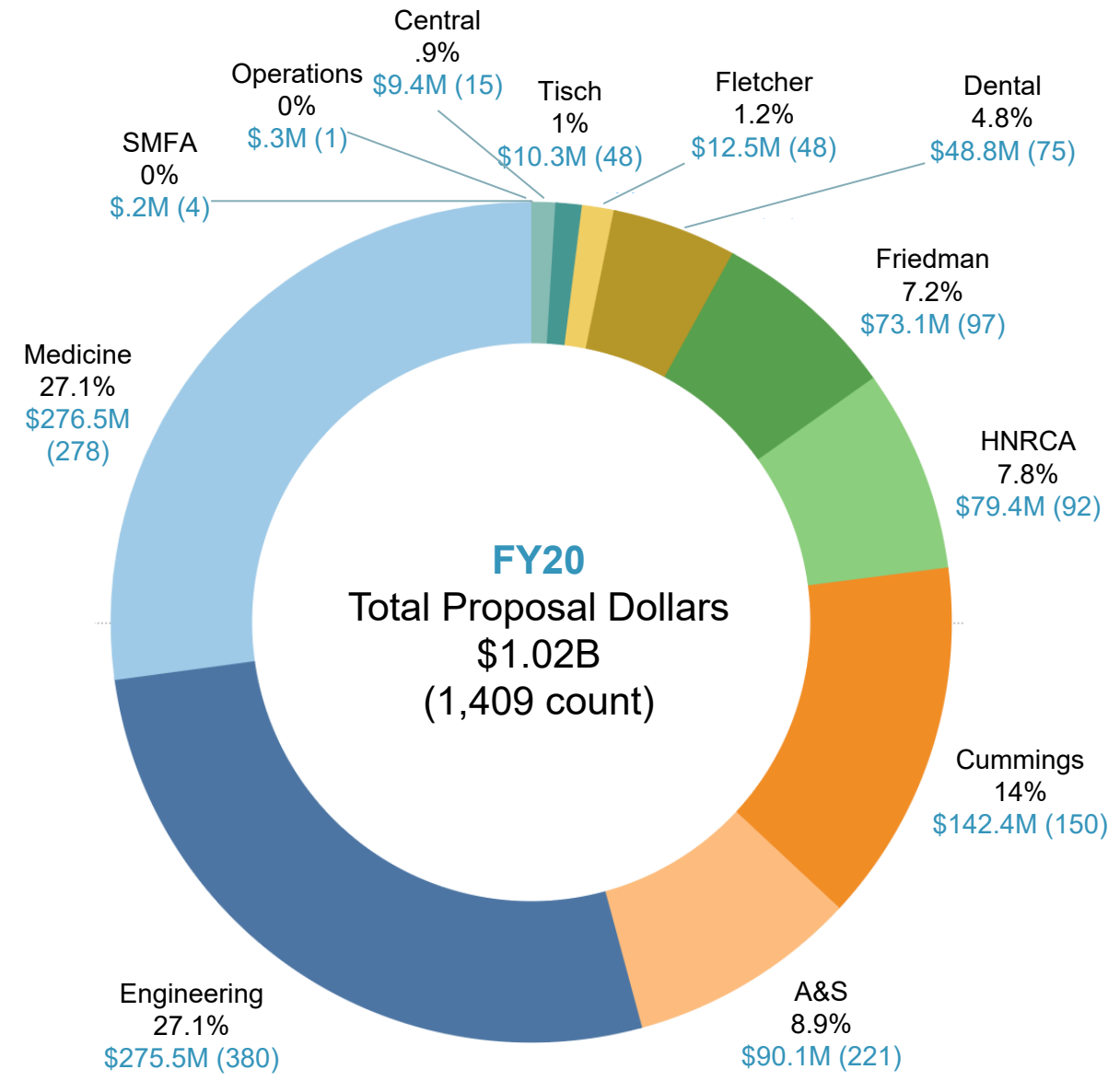
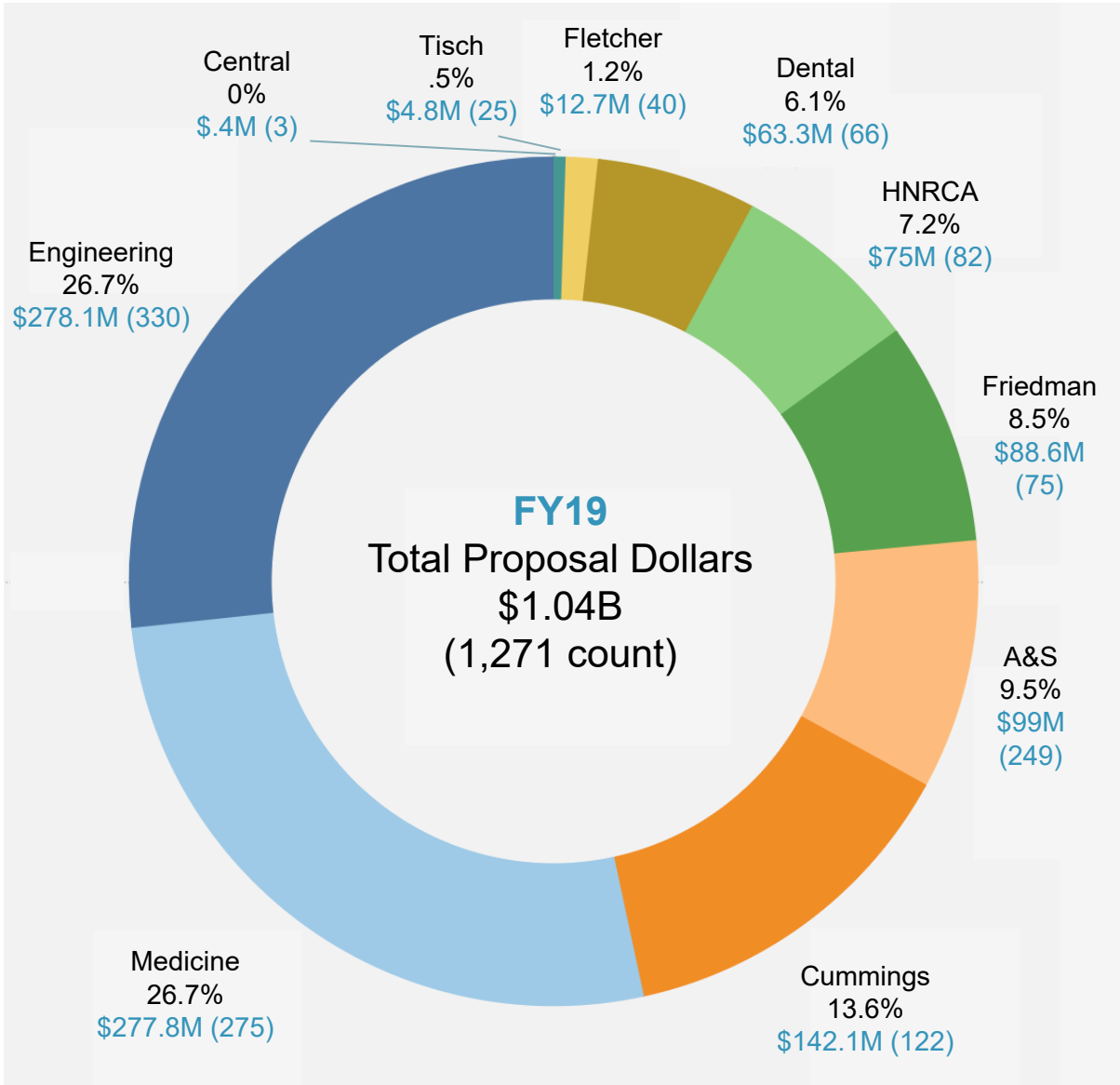


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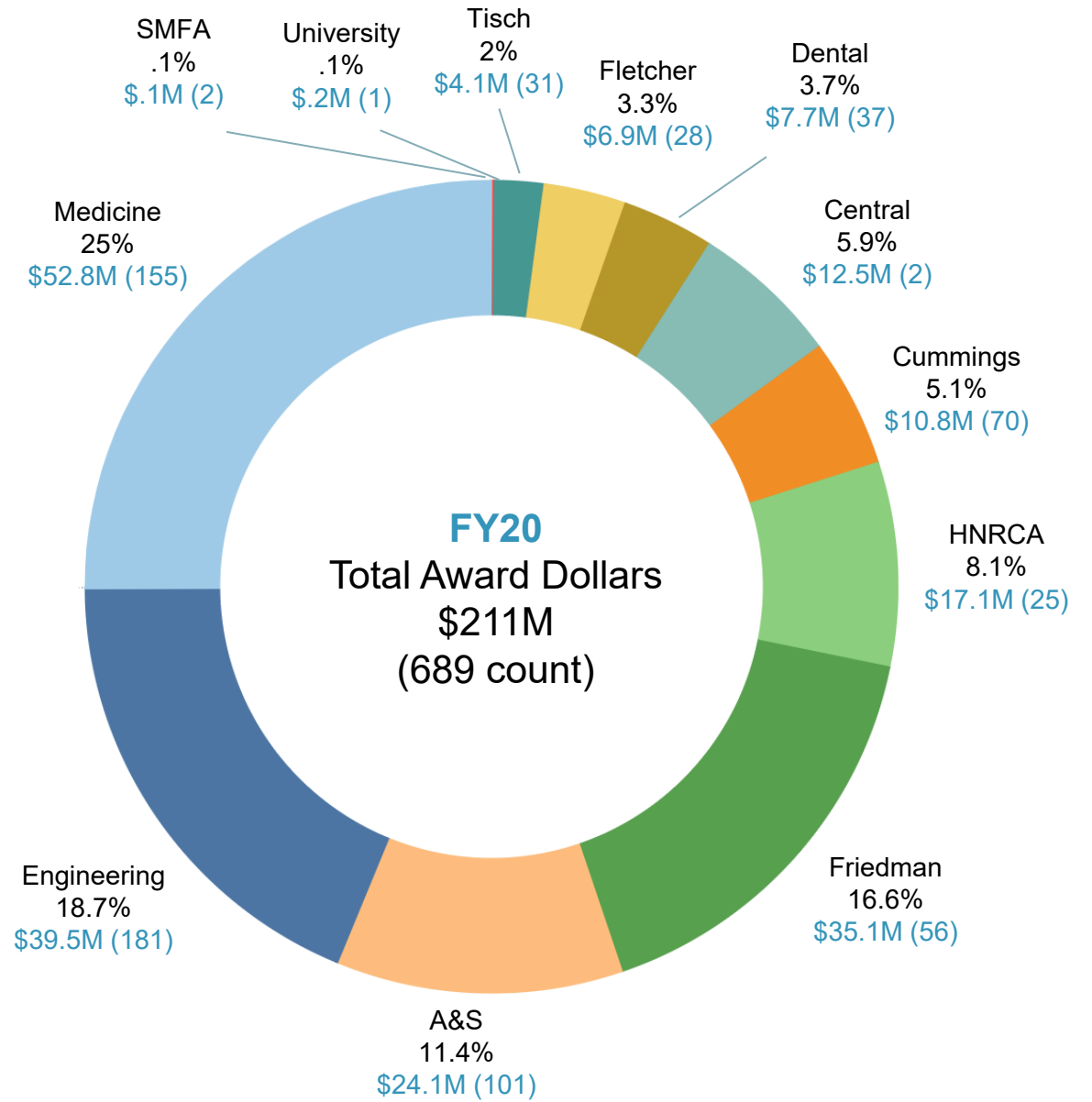
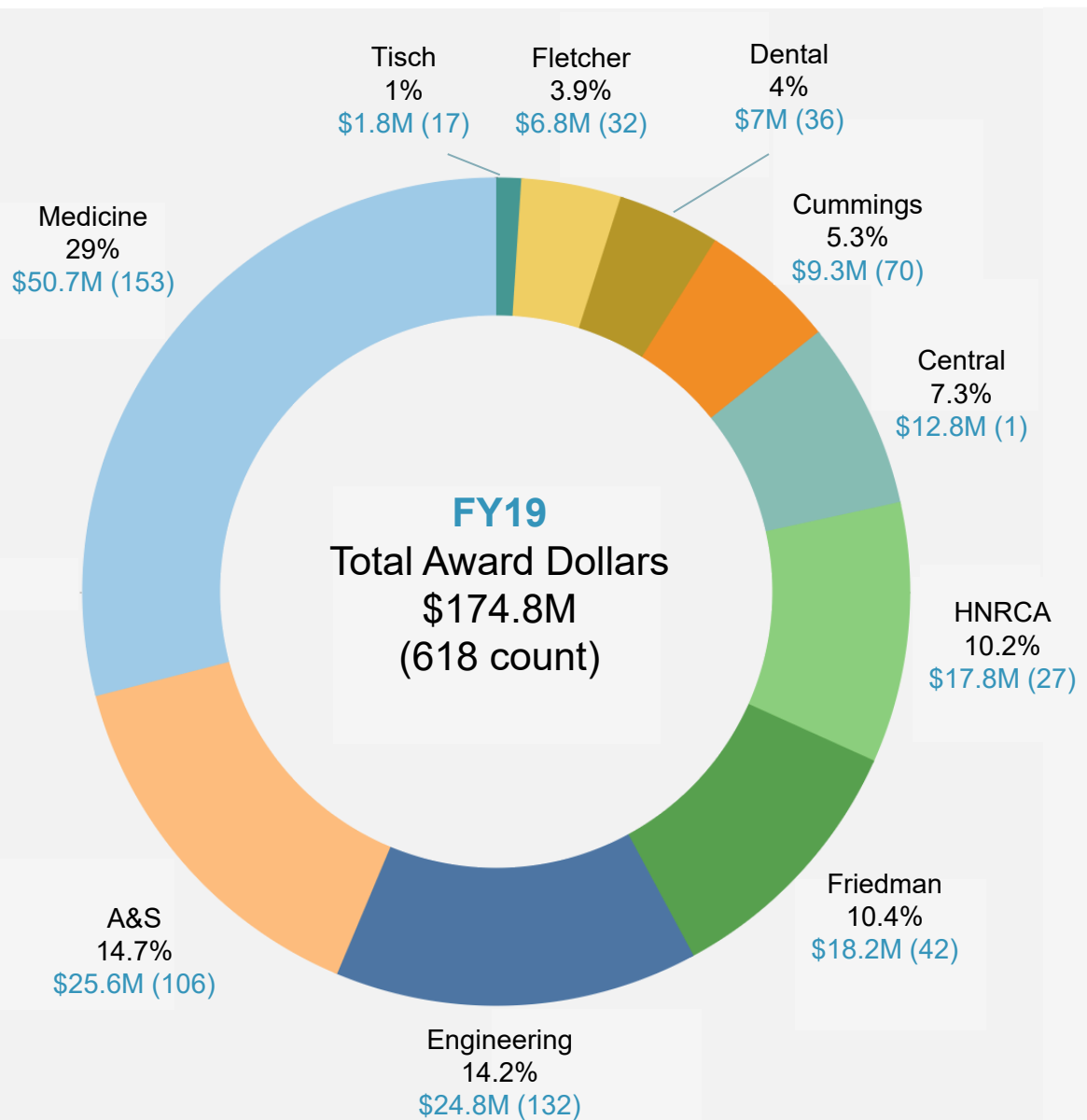
# Overview

- **VPR Strategic Priorities**
  - Overview
  - OVPR Team - Operational Capacity
    - Research Safety & Regulatory Programs – Heather Cosier
    - Research Compliance – Phil Hinds
    - Research Administration & Development – Zoya Davis Hamilton
    - Strategic Initiatives – Augusta Rohrbach
    - Technology Transfer & Industry Collaboration – Bill Shaw
- **Update on OVPR Support of University-Wide DEI Efforts**
  - NIH FIRST Application – Faculty Recruitment
- **Tufts COVID-19 Updates** – Melanie Marketon
- **Updates from the Biden Administration** – Lewis-Burke Associates

# FY19 & FY20 Proposals Submitted



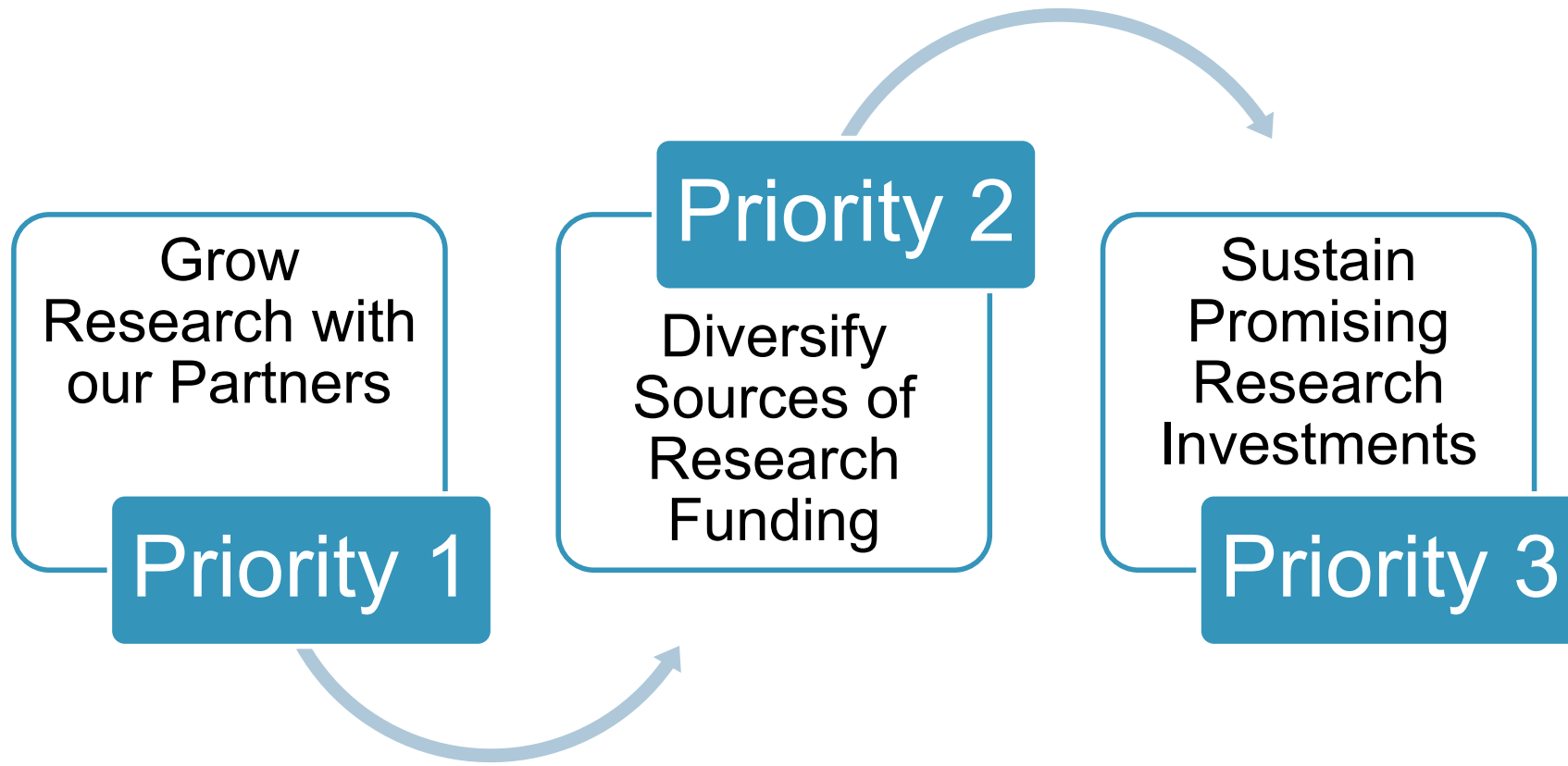
# FY19 & FY20 Awards



# OVP&R Historical Perspective & Outlook

Huron Organizational Assessment	2016 / 2017
Research & Scholarship Strategic Plan	2017
VPR Research Priorities	2019
Pandemic Response	2020
Post-Pandemic / New Normal	2021 & Beyond

# VPR Research Priorities



# Priority 1

Build on existing strategic planning efforts to grow research with our partners

- Build **broader partnerships** across and outside the University
  - CTSI
  - TMC
  - DISC
  - JAX
  - International
- Grow **new priority research areas**
  - COVID-19
  - Substance Use & Addiction
  - Mental Health
  - AI

## Priority 2

Diversify research funding by targeting large funding initiatives and industry partnerships

- Establish seed funding programs that **expand networks and promote DEI**
  - Tufts Launchpad | Accelerator
  - Tufts Springboard
- Establish a business development function that **builds strategic alliances with industry partners**
  - Bill Shaw - New Senior Director of Tech Transfer
  - Future Vision of Tech Transfer



# Priority 3

Build operational capacity to sustain promising research investments

- Reorganize research compliance and safety function to **increase operational efficiencies and mitigate risk**
  - COI, Export Controls, Research Integrity and Research Misconduct
  - Regulatory Committees
  - Research Safety
- Reorganize funding strategy and team science functions to **provide enhanced strategic support**
- Build research administration support and expertise for **large grants**, including international

# Operational Capacity - OVPR Team Updates

- Research Safety & Regulatory Programs
- Research Compliance
- Research Administration & Development
- Strategic Initiatives
- Technology Transfer & Industry Collaboration

# Tufts Launchpad Accelerator

## Due Date:

March 15, 2021

## Contact:

TLA Manager –  
Farnaz Bakhshi

[Farnaz.Bakhshi@tufts.edu](mailto:Farnaz.Bakhshi@tufts.edu)

The TLA is a program funded by the University to address the greatest challenge in academic technology transfer, which is the funding gap – often referred to as the “valley of death” – between where federal funding of basic research ends and commercial interest begins.

**Objective:** to accelerate research projects towards one of the following outcomes:

- Securing follow-on industrial funding for continued R&D
- Forming a start-up company
- Licensing technology to an established company

Awards will be up to \$75,000 per project

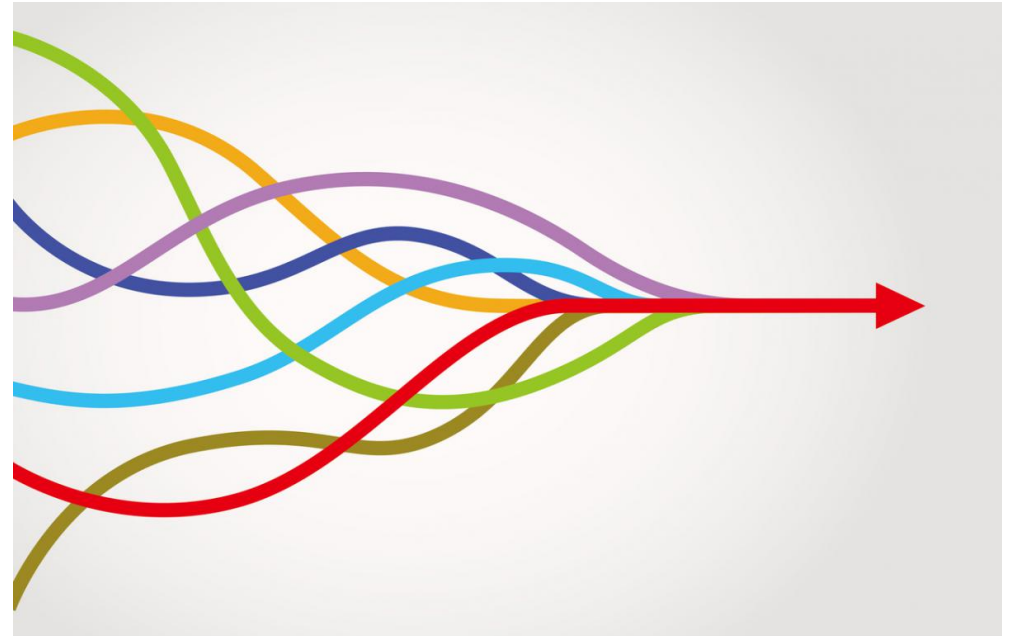
<https://viceprovost.tufts.edu/tufts-launchpad-accelerator>

# **UPDATE ON OVPR SUPPORT OF UNIVERSITY-WIDE DEI EFFORTS**

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# Update on University-Wide DEI Efforts

- **NIH Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Application**
  - **Focus on health-related research priority areas**
  - Leverage **Tufts unique strengths** in Health Sciences across Schools and Centers/Institutes
    - Medicine, Nutrition, Engineering, Arts & Sciences, Veterinary, Tufts Medical Center, Clinical Translational Science Institute, and Human Nutrition Research Center on Aging
  - Leverage areas which may historically lack diversity
  - Submission Deadline: March 1, 2021



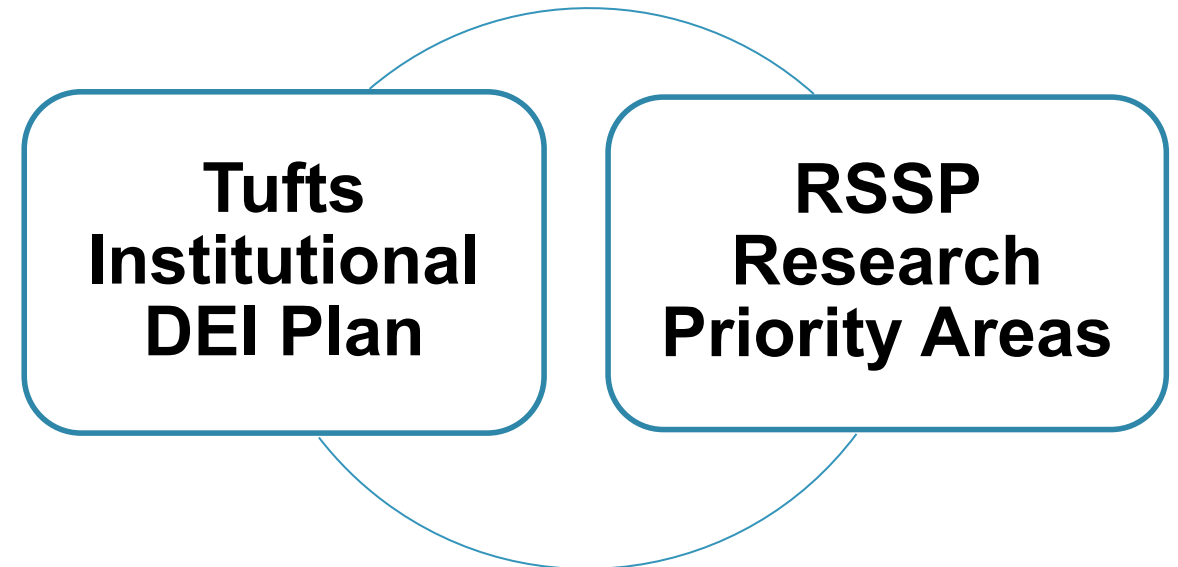
# Tufts Institutional NIH FIRST Application Strategy

## Hypothesis

- A cohort and cluster model of **faculty hiring, sponsorship, continual mentoring, and professional development**, embedded within an institution **implementing evidence-based practices** to create academic cultures of inclusive excellence will achieve significant improvements in metrics of institutional culture.

A&S, Cummings, Fletcher, Friedman, HNRCA, SOE, TUSM, TMC, CTSI

## Transformative



# TUFTS COVID-19 UPDATES

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Melanie Marketon

# COVID-19 Guidelines for Spring Semester

- You are **required** to continue to complete the [COVID-19 screening survey](#) before coming to campus
- If you have any COVID-19, flu-like or respiratory symptoms, **you must stay home**
- If you test positive for COVID-19 from an outside entity, tell us:
  - [jumbohealthcenter@marathon-health.com](mailto:jumbohealthcenter@marathon-health.com) or 617-627-0467
  - [CummingsCovid@tufts.edu](mailto:CummingsCovid@tufts.edu) (Grafton campus only)
- The [Tufts Travel Policy](#) put in place in October 2020 remains in effect
  - Out-of-region travel- **must quarantine for 14 days** or until you have received a negative result from a COVID-19 test
  - Some schools may have enacted stricter policies



## COVID-19 Screening

To promote the safety of the community and reduce the impact of COVID-19, anyone visiting or returning to a Tufts facility is required to complete the screening survey on a daily basis.

For a better user experience, we recommend that you download the [Mobile App](#) to complete your COVID-19 Screening Survey.

Are you affiliated with Tufts?

- Yes - I am a Tufts employee, student, post-doc, or faculty member.
- No - I am a visitor or vendor.



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# COVID-19 Surveillance Testing

- **Routine/surveillance testing for employees is either weekly or on the date of your visit**
  - Frequent close contact with students on the Medford/Somerville campus requires testing twice a week
- **If you currently work remotely** and need to come to campus for any reason, you must have approval from your supervisor to do so
- **If you are currently working in a research lab** you should continue to follow guidelines established for research labs
- If you are not working in a research lab and plan to be on campus **fewer than five times** during the spring semester and **will not be in close contact** with others when on campus, you are **not required** to be tested on the days of your visits

Dashboard	Testing	Academic Year 2020-2021	Healthy@Tufts	Messages
Veterinary students, residents and PhD students		Required	1x/week	
<b>Faculty, Staff, and Researchers</b>				
In the surveillance/routine testing program ▾				
Not in the surveillance/routine testing program ▾				
Faculty, Staff, and Researchers (including student researchers and post-docs)				
Who	Testing Requirement	Testing Frequency		
Medford/Somerville & SMFA campuses				
All Tufts faculty, staff, researchers, research assistants, and post-docs who are accessing Tufts facilities and affiliates who are physically present in Tufts research facilities at least once a week	Required	1x/week		

See more on [surveillance testing](#) protocols at Tufts

# Avoiding Workplace Transmission of COVID-19

- **Avoid close contacts**
  - Close contact = less than 6 ft for more than 15 min
  - New strains are circulating which are more contagious
  - Stagger work schedules and use alternate methods of communication (virtual meetings, etc)
- **Close contacts must be approved**
  - On campus, there should be no unapproved close contacts
  - Close contacts must be approved by the ISC and will have specific safety protocols
- **N95 Re-use**
  - Avoid re-using N95s if possible
  - If you **MUST** re-use N95s, follow the steps outlined in the [GUIDE FOR N95 RESPIRATOR RE-USE](#)
- **If you have a positive COVID test**
  - Share your contact info with the contact tracers
  - Failure to cooperate with contact tracing puts us all at risk for workplace transmission
- **If you are identified as a close contact**
  - **You MUST stay quarantined** and not come to campus until you are cleared
  - You will be notified if you are a close contact and will be given instructions about testing and quarantine based on public health guidelines

# UPDATES FROM THE BIDEN ADMINISTRATION

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Jesse Poon, Lewis-Burke Associates

Nicole Parker, Lewis-Burke Associates

# Federal Outlook

- **Elections Create Dramatic Shift in Federal Focus, Agency Personnel, and Regulatory Outlook**
  - Unified Democratic control of Congress- first time in a decade –narrow majorities will curtail most sweeping legislative agenda
  - Biden Administration will reverse many Trump immigration, environment, and health initiatives
- **Research and Innovation in a post-COVID-19 world**
  - New research areas of interest - pandemic response/preparedness
  - Environment and climate change will be Biden Administration priorities
  - Health disparities, education and workforce impacts, effects of pandemic on minority and women researchers
  - Shift to on-line learning and continued uncertainty on modalities
- **Global Engagement**
  - Science and security focus likely to continue
  - Likely increased opportunities for international collaboration
- **Addressing Racism and Building Racial Equity in Science and Engineering**

# Biden Administration Research Priorities

- **Several New Priorities - Some Continuing**

- Top priority to contain and subside **COVID-19 pandemic** – new approaches to testing and public health
- Much greater emphasis on **climate change, renewable energy, and environment**
- Big focus on **manufacturing and economic development**
- Continued focus on **Industries of the Future** given **competition with China** (AI, quantum, wireless, biotech)
- Major priority on **racial equity** and reversal of Trump policies

- **New and Returning Approaches to Harnessing Innovation**

- President-elect Biden loves **moonshots** and framing research as big challenges (e.g. cancer moonshot)
- Attempt to create **new ARPAs** for Health (ARPA-H) and Climate (ARPA-C)
- Emphasis on vehicles that promote public-private partnerships, prize competitions – **technology hubs**
- Building research capacity at **MSIs** and promoting collaboration with R1s

- **New Personnel**

- New leadership coming to many agencies: DOD, DOE, ED, USDA, NEH, NASA, NOAA, EPA
  - Interest in diversity, push for more science-oriented leadership, choices likely constrained by divided Congress

# Funding Update and Outlook

- **At end of 2020, Congress passed enormous package, including FY 2021 funding and COVID relief, National Defense Authorization Act, as well as:**
  - Energy Act of 2020
  - Creating Helpful Incentives to Produce Semiconductors (CHIPS) for America Act
  - National Artificial Intelligence Initiative Act
- **Modest increases for research agencies in FY 2021 – NSF, NIH, and Department of Defense basic research all up 2.5-3%**
  - Major investments across agencies in AI, data science, microelectronics, and quantum
- **FY 2021 is last year of sequestration - potential for major investments in near term but expect push for deficit reduction coming**
- **\$908 billion COVID package provides higher ed relief but very limited research money**
  - Likely further stimulus in 2021 and potential for infrastructure package

# New or Expanded Areas on the Horizon

- **Diversity, equity, and inclusion**
  - **Health Disparities Research**
  - **STEM workforce**
  - **Title IX/Harassment/Assault/Free Speech**
- **Renewable energy, energy storage**
- Technology for Climate, Environment
- AI-as-a-Service
- Data and privacy
- Practical Cryptocurrency
- **Synthetic Biology / Engineering Biology**
- Plastics
- Critical Minerals
- Metamaterial Optics
- DNA Data Storage
- Beyond GPS/PNT
- Collaborative Telepresence
  - Computer Vision
  - Extended Reality
- Nano scale printing
- Next Gen Wireless
- Low Earth Orbital Satellite Systems
- **Humanities / dialogue / future of democracy**
- **Biomedical technology, modeling, computation**
- **Infectious disease**
  - **Modeling and prediction**
  - **Pandemic preparedness**
- Minority and rural health
- **Mental Health**
  - **School Safety and Campus Culture**
- Workforce Pathways – community colleges, veterans, new industries
- China Concerns/Domestic S&E pathways
- Intellectual Property Security
- **Social and Behavioral Science + X**
- **Public health innovation**

# Biden Administration NIH Priorities

- **Pivoting on Pandemic Response**
  - Public health infrastructure; more testing; contact tracing; treatment; research
- **Biomedical Research**
  - Big ideas to address grand challenges (e.g. Cancer Moonshot)
  - ARPA for health/biomedicine (“ARPA-H”) focused on delivering more cures for more diseases
    - Translational medicine
  - Cancer; Alzheimer’s Disease and aging; heart disease; diabetes
  - Big data and computation (data sharing)
  - Infectious disease and pandemic preparedness
- **Diversity in Biomedical Research** (e.g participation in clinical trials, workforce diversity)
- *Francis Collins remaining as NIH Director for now (new director possible, but likely not until the pandemic is better under control)*



# Mass. exodus: A flurry of figures with Boston ties are heading to Washington. Here's a look at who's been tapped

By [Brittany Bowker](#) Globe Staff, Updated January 23, 2021, 1:25 a.m.

