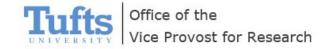
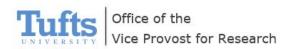
OVPR RESEARCH TOWN HALL

Caroline Attardo Genco, PhD Vice Provost for Research Friday, December 17, 2021



Overview

- Research and Scholarship Highlights
- Looking Ahead Continuing Research Support and Priorities
- A Coordinated Strategy Education & Research



Research and Scholarship

Community Impact



Societal Impact



Strategic Research Partnerships



Recruitment & Retention of Research Workforce



Transformative Educational & Training Experience



Strategic Enhancement of Research Profile





Federal Funding



Industry & Foundation Funding



Patents & Royalties



Core Facility Services (Internal & External Users)



New Courses / Programs (Tuition)



Leveraging Tufts' Research Strengths to Respond to the COVID-19 Pandemic

Research Study Project

COVID-19 School Re-Entry Research Study

Seed Funding Programs

- Tufts Medical Center/Tufts University COVID-19 Rapid Response Seed Funding Program (9 awards)
- Tufts Medical Center/Tufts University COVID-19 Seed Funding Program – Phase 2 Awards (8 awards)

COVID-19 Research Group

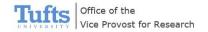
- Grown from 30 to 270 researchers from Tufts and TMC
- Strengths in animal hosts, immunity and disease, public health, social, economic and political impacts, technology and development, and virology

Events



Tufts Research Forums & Seminars

- Successes and Challenges of the COVID-19 Vaccine Rollout in the Global Context
- Transdisciplinary Methods in COVID-19 Research



Tufts Researchers Make a Difference in the World Around Us



EXPLAINER

Do masks hurt speech development? It depends on the child

As the pandemic continues, experts are divided over the potential risks and benefits of masks for preschoolers

By ALEX HAZLETT PUBLISHED SEPTEMBER 22, 2021 8:45AM (EDT)



Children playing in the park in face masks (Getty Images)

https://www.salon.com/2021/09/22/do-masks-hurt-speech-development-it-depends-on-the-child partner/



How the COVID Pandemic Made the Opioid Epidemic Worse, Even as Telehealth Helped

Oct. 1, 2021, at 8:00 a.m.



https://www.usnews.com/news/health-news/articles/2021-10-01/how-the-covid-pandemic-made-the-opioid-epidemic-worse-even-astelehealth-helped

ENERGY WIRE

Offshore wind grid woes may be worse than previously thought



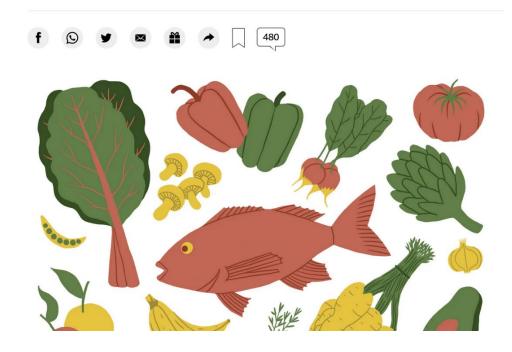
Deepwater Wind's turbines stand in the water off Block Island, R.I. Rodrique Ngowi/AP Photo

https://www.eenews.net/articles/offshore-wind-grid-woes-may-be-worse-than-previously-thought/

The New York Times

A Heart-Healthy Way to Eat

Aim for an overall healthful dietary pattern, the American Heart Association advises, rather than focusing on "good" or "bad" foods.



https://www.nytimes.com/2021/11/29/well/eat/heart-healthy-diet-foods.html

Tufts Researchers Make a Difference in the World Around Us





- Feed the Future Innovation Lab for Nutrition (Friedman School)
- Legacy Effects of CALERIE, a 2-Year Calorie Restriction Intervention, on Hallmarks of Healthspan and Aging (HNRCA)



• Integrated Approaches to Enhance Sustainability, Resiliency and Robustness in US Agri-Food Systems: Enabling Cellular Agriculture with Cross-Disciplinary Approaches (SOE & Friedman School)



- Functional Analysis of Cellular Diversity and Cell-Cell Interactions in Scleroderma 3D Skin-Like Tissues (TUSDM)
- Strategies to Prevent Spillover (STOP Spillover) (University-Wide)





- Synthetic Living Machines and the Emergence of Purpose (A&S)
- Digital Portfolios of the Poor (Fletcher School)
- Applied Brain and Cognitive Science Collaborative Effort (SOE)
- GEER Fund Early Literacy Tutors (Tisch)







Tufts Researchers Make a Difference in the World Around Us



- DuPage County RSA Democracy School Survey (Tisch)
- Supporting and Amplifying Local Organizations Engaged in Playful Engineering-Based Learning (PEBL) Post-COVID (SOE)







- Establishing a State-of-the-Art Comparative Infectious Disease Pathology Core to Accelerate Translational Research (Cummings School)
- Facility Upgrade for the New England Regional Biosafety Laboratory (Cummings School)





Tufts IRACDA (TUSM)



Leveraging Tufts Research Ecosystem to Build Strategic Partnerships

Growth in invention disclosures: >20%

Start-up companies: 17

Intellectual property Licenses: 40

Intellectual property revenue: >\$20M

Commercialization grants: 15 awards

Established robust company incubator facility







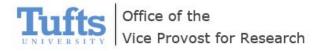
Tufts Launchpad Accelerator





LOOKING AHEAD

CONTINUING RESEARCH SUPPORT AND PRIORITIES



Investment for Growth and Sustainability in Research and Scholarship

Mission Based Support

Innovation-focused Interdisciplinary Research

- Priority Research Clusters
- Springboard
- Launchpad Accelerator
- Launchpad Biolabs
- Research Services
- Industry Collaboration
- High-demand core facilities



Increase in Extramurally Funded Programs and Initiatives

How We Get There

Existing Strengths



RSSP 2018



Outcomes

Off-Shore Wind

Climate Policy, Fletcher



Climate, Renewable Energy, Agriculture, Technology, and Ecology (CREATE) Solutions PhD Program in Off-Shore Wind

Tufts Institute for the Environment

Dept. of Microbiology Investment



Stuart S. Levy Center for Integrated Management of Antimicrobial Resistance (Levy CIMAR)

Jointly-Funded Center by Tufts University and Wellforce

Establishment of Mellon-Funded RCD Dept.



Comparative Race, Society, and Transformation (CRST)

Translating Race Lab

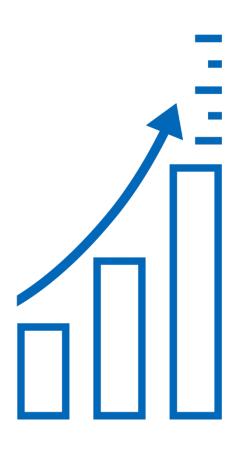






DedicatedSpace

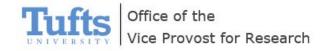
Operational Support to Scale Up Research



- COVID-19 pandemic support
- Enhancement of post-docs' benefits
- Team Science programming
- Central team to support large proposals
- Added capacity for award negotiation and subaward management
- Business Development
- Enhanced COI policy & procedure
- Enhanced safety network
- High-demand core facilities

EDUCATION AND RESEARCH

A COORDINATED STRATEGY



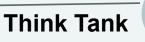
University-Wide Strategy

Education Research Scholarship



Post-Docs









COVID-19 Response

Research Initiatives



Seed Funding Programs



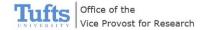
Infrastructure

Tufts/Wellforce Integration



Schuler Education Foundation \$25M Challenge Grant





Faculty Recruitment & Retention Faculty Development **DEIJ Efforts** Program **Evaluation**

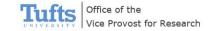
Tufts FIRST Cohort Program A University-Wide Strategy

- Coordinated hiring practices and recruitment strategies across schools
- Changes to tenure and promotion processes
- Innovative models for mentoring, development and leadership
- Evaluation of baseline and shortrange outcomes with a focus on continuous improvement
- Substantial institutional commitment and coordination

Think Tank

Advisory Group to support VPR major initiatives and long-term scholarship planning.

- Align our research enterprise with University Strategic Priorities.
- Drive forward-looking, innovative avenues.
- Initial Brainstorming
 - Limitations to innovation at Tufts?
 - Routine approaches that inhibit productivity and/or innovation?
 - Unique / new opportunities for strong, forwardlooking, innovative approaches?



Think Tank Members

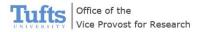
- Chris Economos (Friedman) Childhood obesity Behavior, policy, & environmental
- Pilar Alcaide (TUSM) Adaptive immunity
- Addy Alt-Holland (Dental) 3-D tissue models of cancer
- Adolfo Cuevas (A&S-Community Health) Health disparities
- Karen Freund (TMC) Women's health and health disparities
- Jonathan Rundstadler (Cummings) One health global infectious diseases
- Kelly Sims Gallagher (Fletcher) Energy and environmental policy
- Mike Levin (A&S-Biology) Regenerative medicine
- Peter Levine (Tisch) Equity and civic engagement
- Matthias Scheutz (SOE) A/I; Human/Robot interaction
- Ayanna Thomas (A&S-Psychology) Cognitive aging and memory



Tufts' Challenge & Reflections During the Pandemic Robust Discussion with the VPR Think Tank

How does Tufts:

- Transform itself from the Liberal Arts College model to propel our mission as a student centered R1 institution?
- Position itself to continue to <u>fulfill its mission and values</u>, relative to its core 21st century communities, considering the increasing regularity of pronounced challenges and opportunities?
- Overall
 - Integration of Education & Research across Schools
 - Faculty Diversity, Development, & Leadership



Goals & Desired Outcomes

Innovation Ecosystem

Education & Research for Community
Engagement & Societal Impact

Coordinating
Education, Research
& Training

Leadership & Mentoring Program

OVPR & Provost Support



