

# Introduction to the Office of Grants and Sponsored Programs

Our office is committed to providing comprehensive support to faculty members engaged in grants and sponsored programs in support of their research, external impact, and curricular innovation efforts. We work with faculty across the grant lifecycle, from proposal development and submission to award management and close-out. As a small, primarily undergraduate institution, our faculty focus primarily on teaching. At the same time, many faculty maintain an impressive grant portfolio that supports their research, curricular change efforts, and External Impact activities while providing invaluable experiences for participating Olin students.

Susan is responsible for working with faculty to support proposal development and submission. Lori is responsible for working with faculty to manage their awarded grants.

## FY 23 Proposal Statistics

- 23 proposals submitted:
  - 10 pending proposals.
  - $\circ$  10 awarded.
  - 3 declined (one submitted in FY22).

#### **New Awards Received FY23**

PI	Project Title	Sponsor	Total Award
	Harmonic Propulsion System Development	•	
Barrett, David	and Control Project	Electric Boat	\$10,000
	Using Vortex Generators to Increase Lift		
Barrett, David	Effectiveness at Low-Speed	Electric Boat	\$10,000
Barrett, David	Explore new forms of warehouse robot	Hummingbird	\$86,000
		Gardiner, Howland,	
Graeff, Erhardt	Long Motion Data Tools Project	Shaw Foundation	\$28,292
	HAFTRAP - Home Air Filtration for Traffic-		
Hersey, Scott	Related Air Pollution – Renewal	NIH / Uconn	\$133,113
Johansen,	Early Hearing Loss Detection for Positive Life	The Peabody	
Elizabeth	Outcomes	Foundation, Inc.	\$38,525
		National Space Grant	
Lee, Chris	Nationwide Eclipse Ballooning Project (NEBP)	Foundation	\$16,500
	Quadcopter Fleet Technology for Warehouse		
Mbanisi, Kene	Fulfillment	Hummingbird	\$90,500
Pratt, J			
Townsend, J,	Developmental Learning Modules to Enhance	Davis Educational	
McCarthy, J.	Student Learning	Foundation	\$153,561
Vanasupa,			
Linda and	Just Energy Hub: A learning lab for thriving		
Goenka, Chhavi	together	VentureWell	\$30,000

# **Current Active Awards**

PI	Project Name	Sponsor	Total Award
••	Engineering Deans Forum on Broadening	5001301	Awara
Barabino, Gilda	Participation	NSF	\$68,624
Barabino, Gilda	EAGER: Quantitative Studies of Career Trajectories for African American Women in Engineering and Computing	NSF	\$141,382
Barrett, David	Indoor Flying Hummingbird Prototype	Hummingbird	\$183,000
Chachra, Debbie	Public Utility - Book writing grant	Alfred P. Sloan Foundation	\$36,442
Dabby, Diana	PFI-TT: Development of a Novel Audio Technology that Applies Dynamic System Variability to Create Musical Variations for Personal and Public Applications	NSF	\$250,000
del Rosario, Zach	NSF ERII: Towards Data-Capable Engineers with a Variability-Capable Mindset	NSF	\$186,861
Ferzoco, Alessandra	Pervasive Monitoring of Offshore Aquaculture Installations using Moored Profilers	US Dept of Commerce/NOAA (subaward from MIT)	\$190,128
Goenka, Chhavi	Just Energy Hub: A learning lab for thriving together	VentureWell	\$30,000
Hersey, Scott	HAFTRAP - Home Air Filtration for Traffic Related Air Pollution	NIH (subaward from University of Connecticut)	\$230,081
Hersey, Scott	East Boston AirProofing: Air Partners	Blue Cross Blue Shield of MA	\$92,800
Hersey, Scott	Grant to support community-driven air pollution reduction in Roxbury	Barr Foundation	\$715,000
Huang, Jean	Research for All (R4A): Expanding and Improving Undergraduate Participation in Research	Kern Foundation (subaward from George Washington University)	\$148,199
Lee, Chris	Nationwide Eclipse Ballooning Project (NEBP)	NASA (subaward from National Space Grant Foundation)	\$16,500
Lee, Chris	MIT Massachusetts Space Grant	NASA (subaward from MIT)	\$107,450
Linder, Ben	Native RE/ Sustainable Design	MIT	\$5,008
Linder, Ben	The Social and Environmental Entrepreneurship and Design Fund	Individual Donors	\$25,000

РІ	Project Name	Sponsor	Total Award
	CubeSat Ideas Lab: Space		
Lohmeyer, Whitney	Weather Atmospheric Reconfigurable Multiscale Experiment (SWARM-EX) CubeSats	NSF	\$330,956
Lohmeyer,	SII-Center: SpectrumX – An NSF Spectrum	NSF (subaward from	<i>3330,330</i>
Whitney	Innovation Center	Notre Dame)	\$482,785
	Olin Satellite + Spectrum Technology & Policy	Amateur Radio Digital	
Lohmeyer,	(OSSTP) Group and Olin Collegiate Amateur	Communications	
Whitney	Radio Club (OCARC) ARDC 2021	(ARDC)	\$671,878
Lohmeyer, Whitney	Lohmover MIT Massachusetts Space Grant	MIT	\$5,595
	Lohmeyer MIT Massachusetts Space Grant		562'5ځ
Mbanisi, Kenechukwu	Quadcopter flight control and simulation development	Hummingbird	\$90,500
	Social Technology Enterprise with Purpose		
Michalka, Sam	(STEP)	VentureWell	\$29,600
Millner, Amon	The MIRROR Project	Anonymous	\$100,000
	Collaborative Research: Using Culturally		
	Sustaining STEM+C Learning Environments to	NSF (subaward from	
Millner, Amon	Explore Computational Learning & Identity	Boston University)	\$98,915
Millner, Amon	MathWorks Olin Partnership - MIRROR Project	MathWorks	\$51,000
Nugent, Carrie	NEAT Revival: New Discoveries	NASA	\$326,194
Pratt, Joanne; McCarthy,			
Jessica;			
Townsend,	Developmental Learning Modules to Enhance	Davis Educational	
Jessica	Student Learning	Foundation	\$153,561
	CHS: Small: RUI: Creation of Assistive		
Ruvolo, Paul	Technology for the Blind Through Largescale Co-Design	NSF	\$343,842
,	Co-Designing Assistive Apps with Students Who		1
Ruvolo, Paul	Are Blind	Peabody Foundation	\$173,145
	Liltra Efficient Color Thermal Datch Deverse	LICED (cuboward from	
Tow, Emily	Ultra-Efficient Solar-Thermal Batch Reverse Osmosis with Novel Thermal RO Engine	USBR (subaward from Purdue University)	\$47,342
		Henry Luce	<i>\(\)</i>
Tow, Emily	CBL Research Fellowship Program	Foundation	\$256,000
	Bureau of Reclamation's More Water Less		
Tow, Emily	Concentrate Challenge	Common Pool	\$265,000
Vanasupa,	Transformative learning by doing - seeding a		
Linda	sea change across engineering education.	Kern Foundation	\$25,000
Woodard, Jason	KEEN 2022-23 Annual Support Package	Kern Foundation	\$25,000
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PI	Project Name	Sponsor	Total Award
		NSF (subaward from	
Zastavker,	Collaborative Research: Mixed Reality	Northeastern	
Yevgeniya	Transformation of Engineering Education	University)	\$282,096

# Academic Year and Summer Student Research Support from Sponsored Projects

In summer 2023, 66 summer student research positions are funded by grants across 23 sponsored projects. During the 2022-2023 academic year, 45 students had paid research positions in the fall and 49 students in the spring.

# **Overview of Support for Grant Seeking**

Resources and recent faculty support activities include:

- Launched updated Grants web pages to support Olin faculty and staff members engaged in grantseeking.
  - Includes resources from proposal development and submission to award management and close-out, and links to various funding resource databases, templates, policies, and more.

Website key elements include:

- A comprehensive guide to finding funding
- Proposal preparation guide
- Sponsored research policies and guidelines
- Host individual meetings with all faculty interested in submitting grant proposals and we meet individually with faculty once they receive an award.
- Starting in the AY22-23, as part of her Building and Sustaining the College portfolio, Carrie Nugent has served as a resource for faculty who are looking for grant opportunities. She will remain in this role in AY23-24, and we will try to find a replacement for her when she is on a Fulbright fellowship at the University of Aalborg in spring 2024.
- At the start of each new academic year, we host orientation sessions with new faculty about the Office of Grants and Sponsored Programs. This is part of the new faculty onboarding program.
- We have also held information sessions, such as a December 2021 faculty meeting Zoom session with several NSF Program Officers, and we will plan to do so again.

## **Centralized Student Research Application Website**

Funded via a KEEN grant, and led by Jean Huang, we launched year two of a centralized portal for hiring student researchers. Faculty posted open research positions for the academic year and summer 2023.

## **Community Research Seminar Series**

Led by Zach del Rosario and the Research committee, we hosted 11 research talks by Olin community members during the 2022-2023 academic year, including talks by faculty, staff, students, alumni, and a parent.

Zach del Rosario: The Myth of The Single Value Gati Aher '24: Using Large Language Models to Simulate Multiple Humans Chhavi Goenka: Why Care About Light in Healthcare? Callan Bignoli: Yes, You Can Find Way Worse Stuff Online: Why People Ban Books in 2022 Jessie Oehrlein '16: Math in the Sky: From Future Weather to Winter Climate Jon Adler: Our Stories, Our Selves: Why The Stories We Tell About Our Lives Matter Dave Platt P '23, P '25: Security Versus Usability: The Eternal Tension David Shuman: Signal Processing on Graphs: Extending High-Dimensional Data Analysis to Networks and Other Irregular Domains Kene Mbanisi: Towards a Safer and More Inclusive Society Bill Fan '24: Soft Robot Modeling - practice talk? Deb Chachra: Works: Energy, Networks, and Cooperation

#### Human Subjects Research at Olin

Since 2011, Olin College has contracted with the Institutional Review Board (IRB) of Brandeis University for oversight of human subjects research. The Brandeis IRB provides excellent service at a reasonable cost (reduced this year when our contract was renewed for the next five years). On June 6<sup>th</sup>, the Brandeis IRB director and staff came to Olin to meet with our faculty members to provide an overview of their services and to answer questions about best practices in the ethical treatment of human subjects.