University Update

December 2024

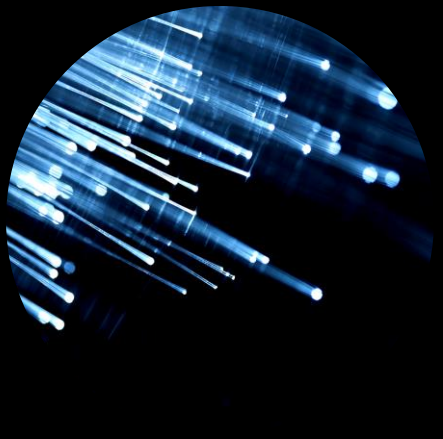
Experience Unleashed

Activate the Global Network

Personalized, Experiential Learning

High Impact Research

Diversity, Equity and Inclusion



Technology and Service Excellence

Office of the Provost Key Appointments

Akram Alshawabkeh
Senior Vice Provost

Javed Aslam
Chief of Artificial Intelligence

Institutes, Centers, and Impact Engines

New Institutes in 2024:

- **The Institute for Nanosystems Innovation (NanoSI)**
  Located on the Boston and Oakland campuses, NanoSI aims to reshape "the landscape of chip-level technology advancements and applications."

- **The Institute for Mechanobiology (IfM)**
  Advancing human medicine and health by providing the critical link between a variety of pathologies and their root causes, leading directly to the development of effective therapeutics and prevention strategies for debilitating medical conditions.

- **The Quantum Materials and Sensors Institute (QMSI)**
  Developing the next-generation of quantum materials and sensing technology for impactful real-world applications.

Impact Engines 2024:

iSUPER | Intelligent Solutions to Urban Pollutions for Equity and Resilience

C2C | Community to Community: Finding Equitable Solutions to Local Policy Problems

HEA(RT) | Healthcare Enabled by AI in Real-Time

C2P | Cradle-to-Prison Pipeline

New Impact Engine in 2024:

STARMed | Strengthening Training and Regulatory Manufacturing for Equitable Distribution

Office of the Provost

Dean Reviews

Elizabeth Mynatt
Dean of Khoury College of Computer Sciences

Dean Searches

College of Arts, Media, and Design

College of Science

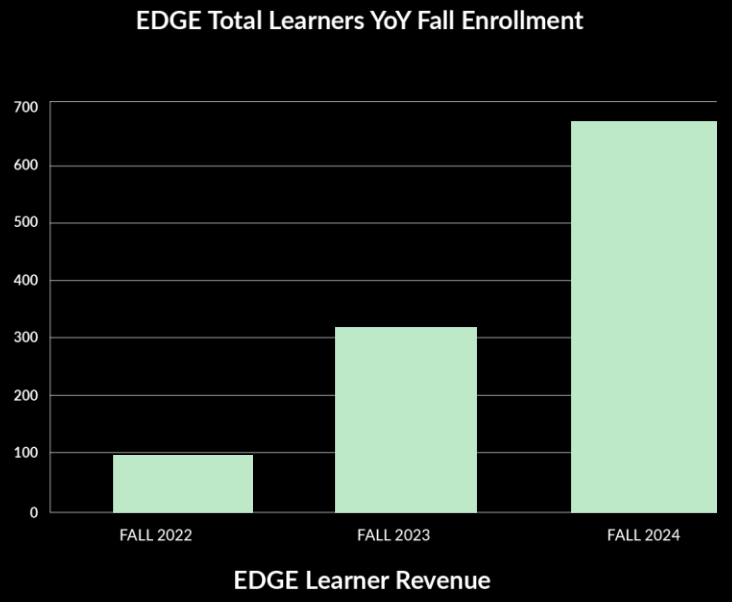
Office of the Chancellor
Key Appointments and Current Searches

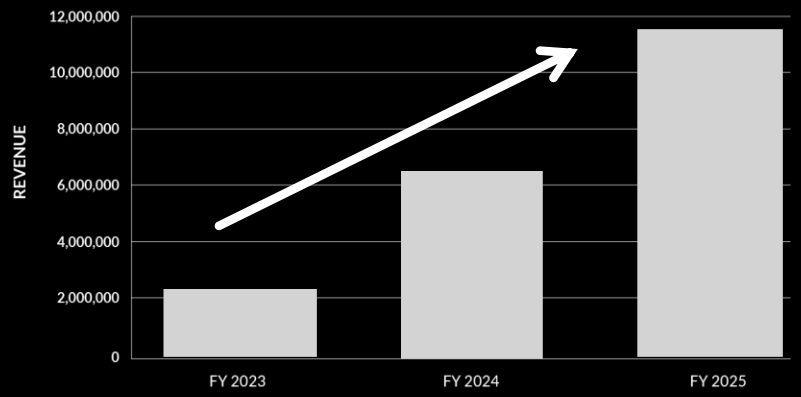
Liz Zulick
Senior Vice Chancellor –
Education Innovation

Richard O'Bryant
Chief Belonging and
Inclusion Officer

James Genone
Senior Vice Chancellor –
Learning Strategy

EDGE Now and the Future





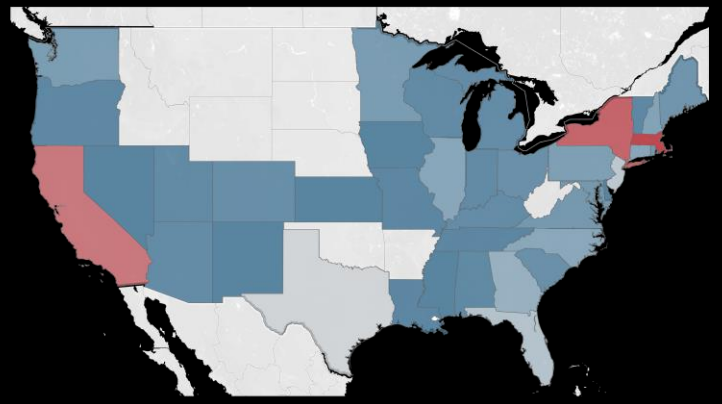
Fall 2024 ~700 learners
Fall 2025 ~2000+ learners
85% Student Retention

Revenue growth 175% over 2 years
Expense growth 28% over 2 years
Margin ~ 50%.

Projecting 250+ credits over 2 years = $70M+ EDGE portfolio over 3 years.

** Removes grants from Coursera and Pearson and FY 25 Revenue is current projection*

The EDGE



Advantages

- Modular and stackable smaller credentials
- Multi-use content
- Domestic market pricing
- B2B Partnership Strategy

Differentiators

- Performance-based admissions
- Place-based immersions
- Hiring consortium

Global Experiential Learning

1554 NU in Students

9 Partner Locations

Czech Republic, France, Germany, Ireland, Italy, Northern Ireland, Portugal, Scotland and Spain

811 Global Scholars

Oakland and Boston

733 London Scholars

1377 Students participated in Dialogue of Civilization

91 Faculty

74 Programs

40 Countries

957 Students participated on Study Abroad and Exchange

261 Fall

415 Spring

281 Summer

Personalized, Experiential Learning

5078 students on co-op

Academic Year for UG and Grad Total Hires: **13,418**

Academic Year for UG only Total Hires: **9,879**

5193 students on XN Projects

- 604 projects
- 332 sponsors
- 354 courses

Experiential Learning Programs in Development:

- Professional Practicum
- NU StEP
- NExT Lab

Enrollment Management Key Metrics

98,373	54%	23.5%	660%
Total Applications	Yield Rate	Underrepresented Minorities	Early Decision Growth since 2015*

*772 in 2015
5872 in 2023

Enrollment

2024

23,783

Undergraduate students

2024

23,985

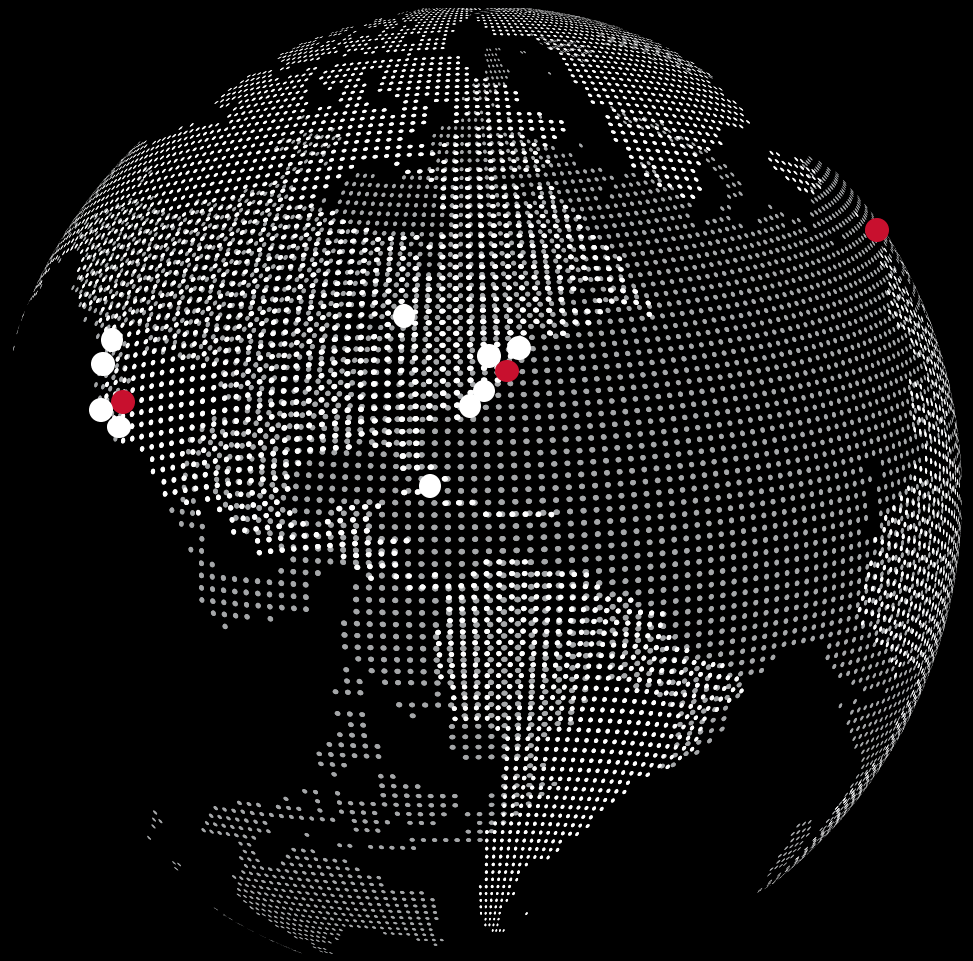
Graduate students

Towards a More Inclusive Community

- Senior Leadership Listening tour
- New Leadership
- 90 day evaluation and planning period
- Inclusive Innovation Fund Request for Proposals yields 69 submissions and 4 teams selected for recognition

PhD Education

- **100+** Partnerships
- **70+** LEADERs Fellows
- **$7.5M+** PhD Fellowships vs. **$1.5M** in FY20
  - **66** National Science Foundation (NSF) Graduate Fellowships Awarded
  - **32** Active NSF Fellows vs. **1** in 2006
- New Global Doctorate available to Northeastern PhD students and visiting students



The Global University System

Comprehensive

Boston

London

New York City*

Oakland

Research

Arlington

Burlington

Nahant

Graduate

Charlotte

Miami

Portland

Seattle

Silicon Valley

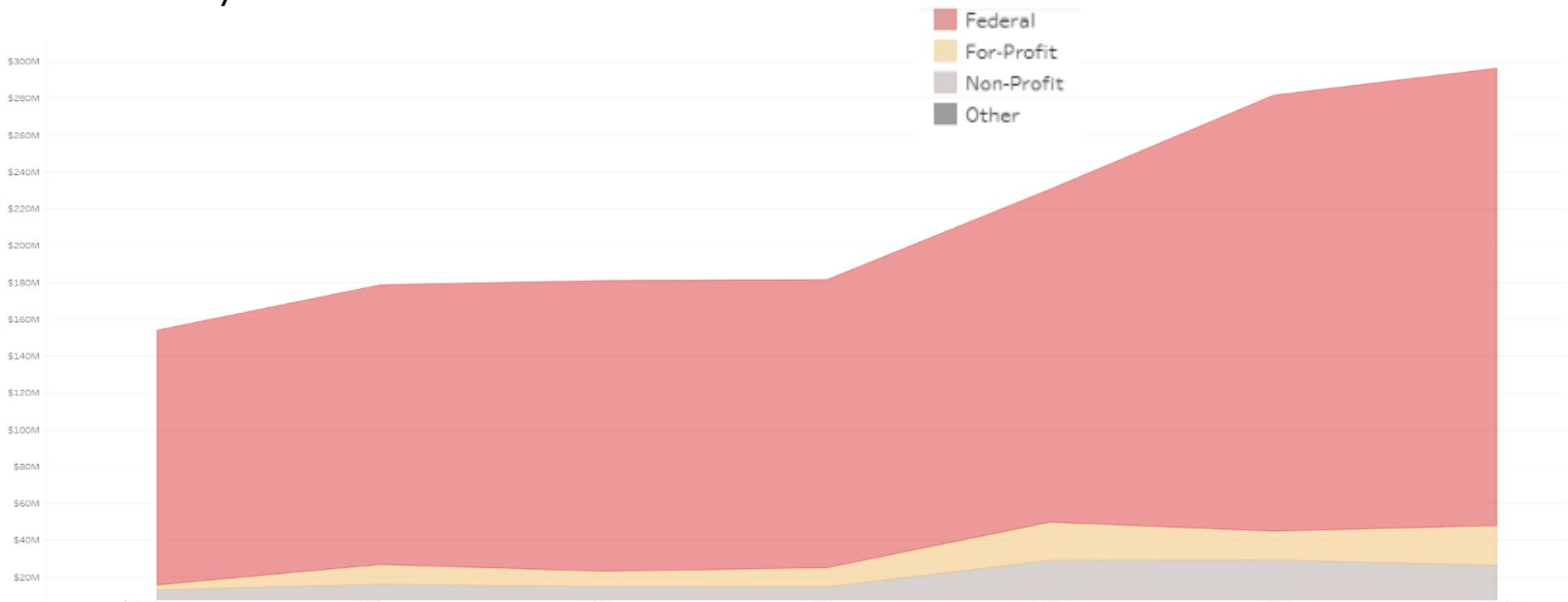
Toronto

Vancouver

*Coming Soon

Research: Awards by Agency Type ($millions)

Northeastern University & KRI LLC



Funding Breakdown

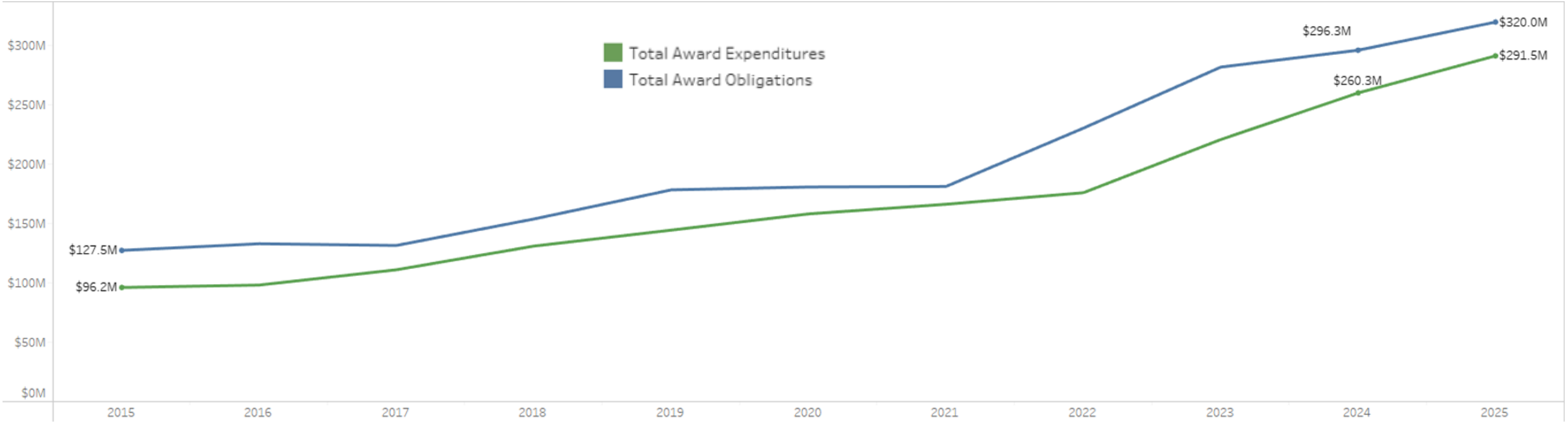
	2024
Federal DHHS/NIH	$88.3M
Federal NSF	$67.6M
Federal DOD	$53.7M
Federal Other	$32.7M
Federal DoEnergy	$6.0M
Grand Total	**$248.3M**

		2018	2019	2020	2021	2022	2023	2024
Federal	Federal DHHS/NIH	**$40.9M**	**$49.5M**	**$48.2M**	**$56.1M**	**$57.5M**	**$75.0M**	**$88.3M**
	Federal DOD	**$38.4M**	**$34.1M**	**$30.9M**	**$22.5M**	**$45.2M**	**$66.3M**	**$53.7M**
	Federal DoEnergy	**$3.9M**	**$4.7M**	**$4.6M**	**$3.5M**	**$5.0M**	**$10.6M**	**$6.0M**
	Federal NSF	**$43.9M**	**$44.1M**	**$59.4M**	**$56.0M**	**$54.3M**	**$61.6M**	**$67.6M**
	Federal Other	**$11.2M**	**$19.3M**	**$14.7M**	**$18.2M**	**$18.8M**	**$23.2M**	**$32.7M**
	Total	**$138.3M**	**$151.8M**	**$157.8M**	**$156.3M**	**$180.8M**	**$236.7M**	**$248.3M**
For-Profit	Industry	**$2.7M**	**$10.8M**	**$8.3M**	**$10.4M**	**$20.8M**	**$15.6M**	**$21.7M**
	Total	**$2.7M**	**$10.8M**	**$8.3M**	**$10.4M**	**$20.8M**	**$15.6M**	**$21.7M**
Non-Profit	Foundation	**$10.6M**	**$14.2M**	**$12.6M**	**$13.0M**	**$27.6M**	**$25.7M**	**$23.6M**
	Total	**$10.6M**	**$14.2M**	**$12.6M**	**$13.0M**	**$27.6M**	**$25.7M**	**$23.6M**
Other	Other	**$2.4M**	**$1.8M**	**$2.1M**	**$1.6M**	**$1.4M**	**$3.6M**	**$2.7M**
	Total	**$2.4M**	**$1.8M**	**$2.1M**	**$1.6M**	**$1.4M**	**$3.6M**	**$2.7M**
Grand Total		**$154.0M**	**$178.6M**	**$180.9M**	**$181.4M**	**$230.6M**	**$281.5M**	**$296.3M**

Source: University Warehouse
* The FY 2024 data is preliminary and rounded up. Report does not include ORS Funding
Data as of: 09/24/2024

Northeastern and KRI

Obligations and Expenditures



Source: University Data Warehouse
**New Award Obligations are the total funding increments received in the Fiscal Year (FY) . FY 2024 data is preliminary.*
***Report excludes ORS funding FY17 and forward*
****Sum of Fund Type 28 (Fund hierarchy grouping for NU Research Grants & Contracts) activity by Fiscal Year, filtered by Division (less Cost Share and Core Facility activities)*
*****Excludes payments between NU-KRI*
******KRI LLC data reflects corrected totals for FY21*

Please note FY25 numbers in the chart are projections.

Run Date : 2024-09-24

A Successful Year for NSF CAREERs: **7 New FY24 Awards**

CAREER: Semiconductor on Nitride PhoXonic Integrated Circuit (SONIC) Platform for Chip-Scale RF and Optical Signal Processing

Siddhartha Ghosh (COE)

CAREER: Understanding how hierarchical organization of growth plate stem cells controls skeletal growth

Andreia Ionescu (COS)

CAREER: Decoding the Code of Glycan-Collectin Interactions: Computational Engineering of Surfactant Proteins for Tailored Glycan Recognition

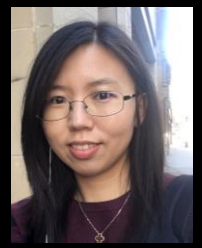
Mona Minkara (COE)

CAREER: Dynamic Locomotion with Plasticity for Remote Sensing in Crawlspaces

Alireza Remezani (COE)

CAREER: Enabling Computer Supported Collective Action Systems for Gig Knowledge Workers

Norma Saiph Savage (Khoury)



CAREER: Strengthening the Theoretical Foundations of Federated Learning: Utilizing Underlying Data Statistics in Mitigating Heterogeneity and Client Faults

Lili Su (COE)

CAREER: Theory-driven methods for designing more representative, inclusive interactive narratives

Alexandra To (CAMD/Khoury)

Early Career Winners from NIH, DOD, & Other Funders

DARPA Young Faculty Award

Siddhartha Ghosh (COE)

Research Corporation for Science Advancement Scialog Fellow

Damilola Daramola (COS)

NIH Maximizing Investigators' Research Award (MIRA)

Dapeng “Max” BI (COS)

DARPA Young Faculty Award

Aatmesh Shrivastava (COE)

Research Corporation for Science Advancement Scialog Fellow

Sijia Dong (COS)

NIH Maximizing Investigators' Research Award (MIRA)

Srirupa Chakraborty (COE)

Research Corporation for Science Advancement Scialog Fellow

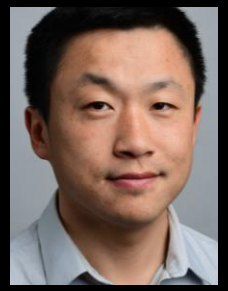
Diego Alzate Sanchez (COS)

Inter-American Photochemical Society Young Investigator Award

Steven Lopez (COS)

Electrochemical Society (ECS) Young Investigator Fellowship

Juner Zhu (COE)



Kabiller Rising Star Award in Nanoscience and Nanomedicine

Ke Zhang (COS)

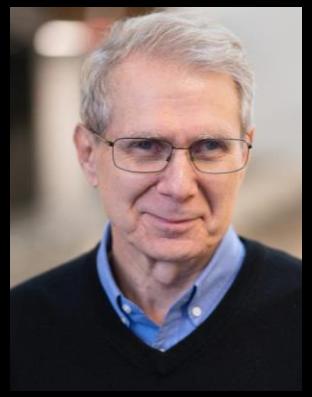
SAGE Emerging Scholar Award

Analia Albuja (COS)

NIH Pathway to Independence Award

Briony Swire-Thompson (CSSH)

Notable Research Award Successes



Defeating Antibiotic Resistance through Transformative Solutions (DARTS)

Kim Lewis (COS) ARPA-H

Computational Framework for the Mechanistic Studies and Physics-Informed Prediction and Design of Photoenzymes

Sijia Dong (COS) NIH

Elucidating the mechanisms that enable translation in bacterial and eukaryotic ribosomes

Paul Whitford (COS) NIH

ARPA-H SPOKE SITE

Eugene Buff (BCHS) ARPA-H

Elena Brondola (Roux)

Institute for Higher Education Faculty on Native American, Indigenous, and Land-Based Social and Political Philosophy

Candice Delmas (CSSH) NEH

Exploring Officer Patrol Behaviors Using Automated Vehicle Locator and Body-Worn Camera Data in Kansas City, Missouri

Eric Piza (CSSH) NIJ

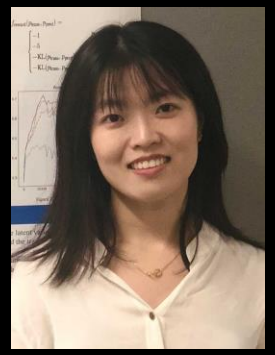
Notable Research Award Successes

A New Clinical Device to Enable Informed Prosthesis Prescription Decision-Making

Max Shepherd (BCHS) NIH NIBIB

Selective Positive Allosteric Modulators of a4b2 Nicotinic Receptors

Ganesh Thakur (BCHS) NIH NIDA



35 Innovators Under 35 Award

Weiyan Shi (COE) MIT Technology Review

Forecasting Emotional Disorder Symptoms: A Dynamical Systems and Time-Series Machine Learning Approach

Joshua Curtiss (BCHS) NIH NIMH

The Power of Our Stories: Testimonios from Boston's Immigrant Women

Julia Garrett, Isabel Sobral Campos, Christopher Ayala (CSSH)

Massachusetts Foundation for the Humanities

Enhancing Breastfeeding Outcomes through Digital Phenotyping

Aarti Sathyanarayana (BCHS) NIH NICHD

Notable Research Awards

Establishing the Digital Transgender Archive at Mills College at Northeastern University

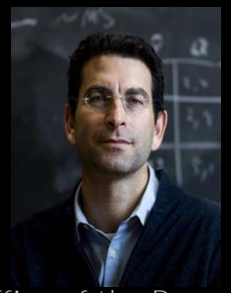
KJ Rawson (CSSH) — Andrew W. Mellon Foundation

Using Mobile Technology and Real-World Vocalization Samples to Generate Quantitative Metrics of Vocal Communication for Minimally-Speaking Individuals

Kristina Johnson (BCHS) — NIH NIDCD

Poisoned: The Dirty Truth About Your Food

Darin Detwiler (CPS) — Emmy Awards - Outstanding Current Affairs Documentary



The Ethics of Conservation Biotechnology: A Conceptual Engineering Approach

Ron Sandler (CSSH) — NEH

Understanding immigrants' cardiovascular disease utilization: An epidemiological and system dynamics approach

Danielle Crookes (BCHS) — NIH NHLBI

2024 Shannon CSI Statewide Youth Violence Research

Megan Denver (CSSH) — Massachusetts Executive Office of Public Safety and Security

Fellow of the American Society of Metals International

Krassimir Marchev (CPS)

Microphysiological Platform for Analyzing Multiple Myeloma's Tumor Microenvironment, Enabling Immunotherapy Assessment and Drug Screening

Tali Konry (BCHS) — NIH

New Collaborative & Convergent Research Awards

IHBEM: No One Lives in a Bubble: Incorporating Group Dynamics into Epidemic Models

Babak Heydari (COE), Gabor Lippner (COS), Silvia Prina (CSSH), Dan O'Brien (CSSH)

NSF

Green New Deal Workforce Needs Assessment Study

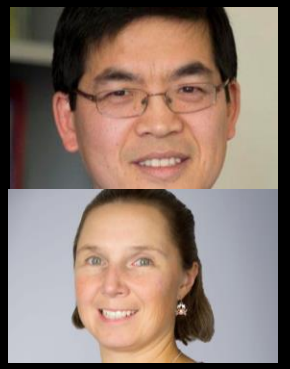
Alicia Sasser Modestino and Joan Fitzgerald (CSSH)

US Dept. of Commerce - Economic Dev. Administration

PAIL: PhotoAcoustic Imaging Technology for Diagnostic Lung Assessment

Soner Sonmezoglu (COE)

ARPA-H



PIPP Phase II: Center for Pandemic Insights (CPI)

NSF

Nian Sun, Jennifer Love (COE)

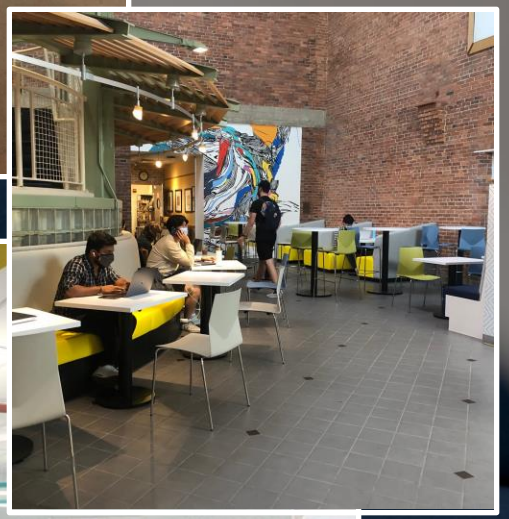
Cognitive Foundations of Environmental Science Education: Exploring Impacts of Human Exceptionalism on Marine Social-Ecological Systems Thinking

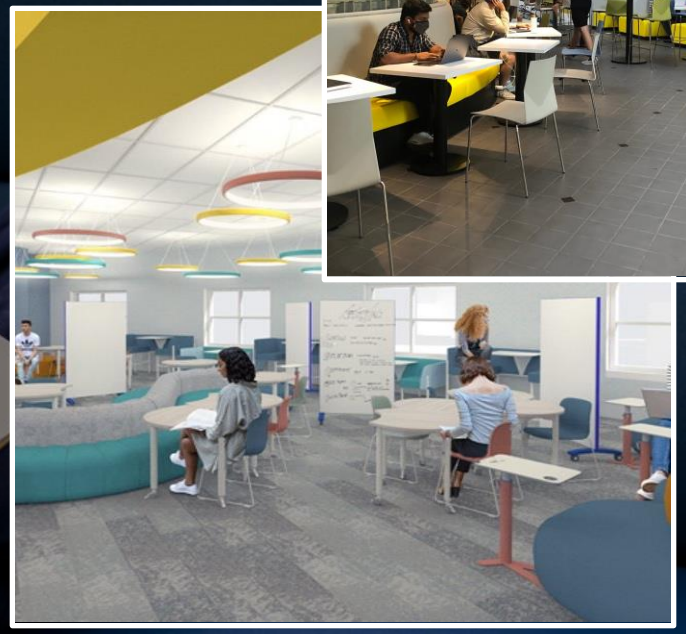
John Coley, Brian Helmuth, Catie Nielson (COS)

NSF

Study Spaces

- Over **36,000** sf of space was allocated for bookable student study space
- New flexible furniture is being added to 8 lobby locations
- Flexible furnishings allow for various of sizes of groups and types of study
- Spaces are bookable via Robin platform





Classrooms

Boston:

- 15 classroom renovations
    - Dodge Hall, Robinson Hall, Snell Library

Oakland:

- 1 new maker classroom & associated makerspace
- 4 Oakland teaching spaces received Global Learning System AV technology
- ADA accessibility, addition of elevator in CPM academic building

Snell Library

- Phased Renovation of 140,000 SF completing in Fall 2024
- Renovation is complete including:
- Level 4 student study
- Level 3 student study; faculty & staff research space
- Level 2 teaching & learning hub, student study
- Level 1 new entry and event space
- Basement Archives and student study






Faculty Profile – Fall 2024

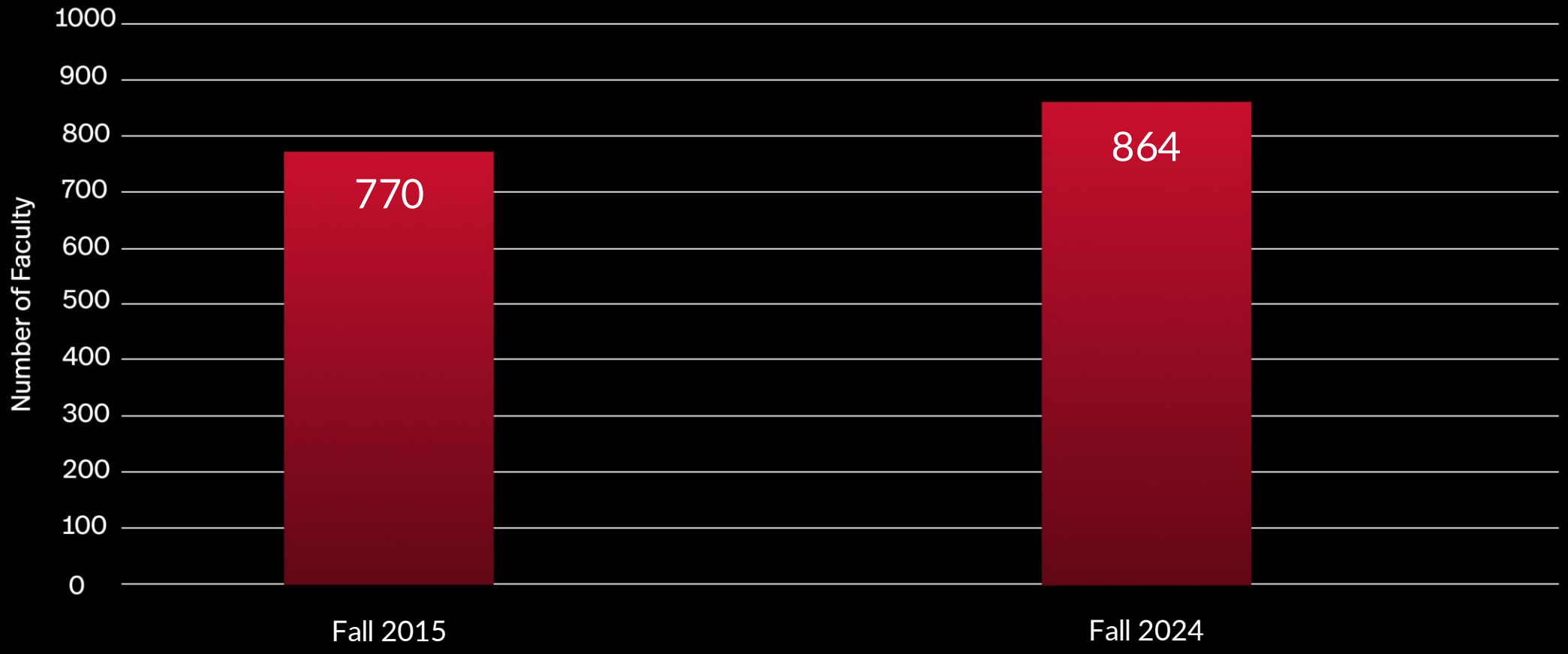
2,095

T/TT/FTNTT

147

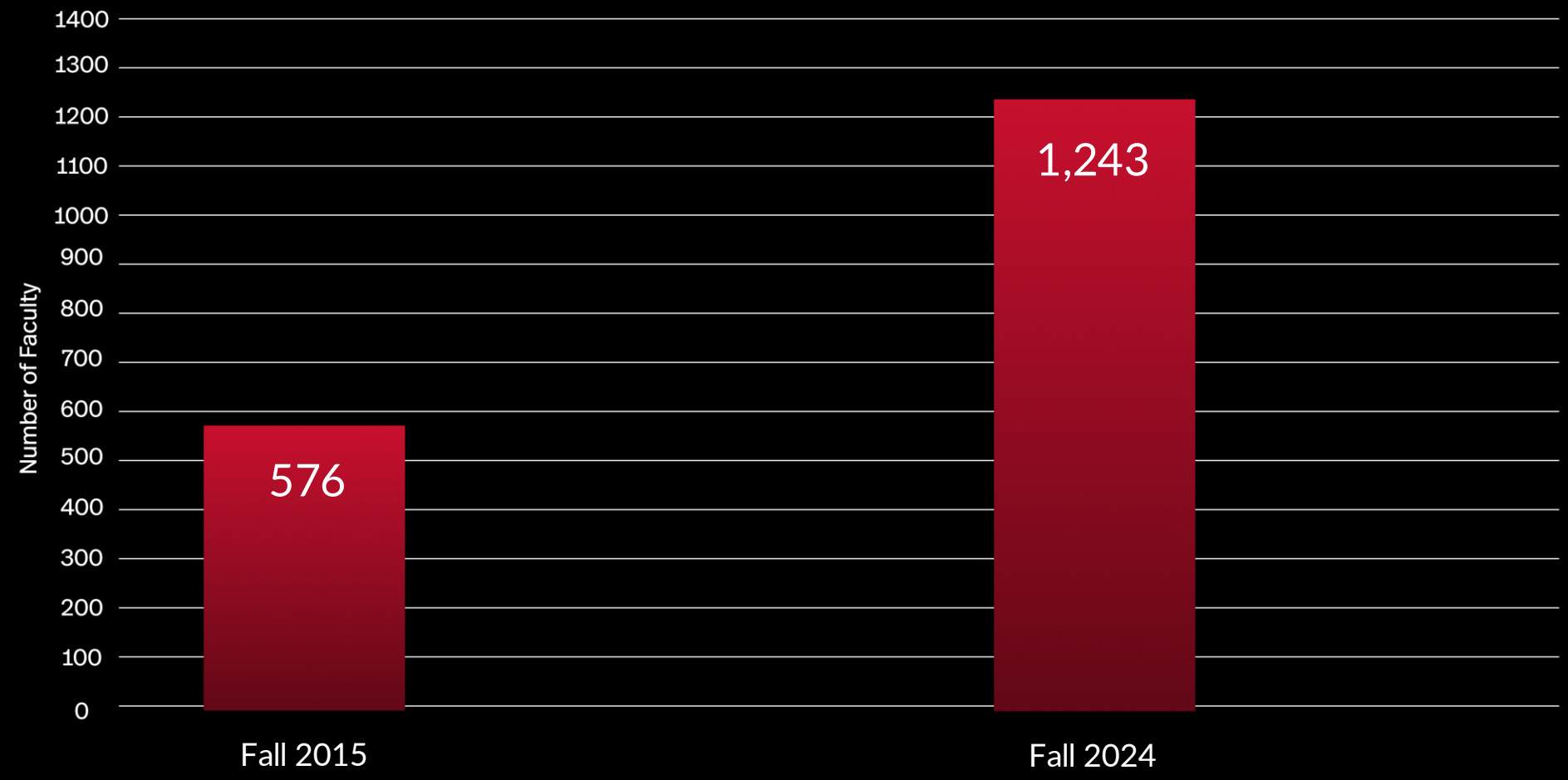
New Faculty for Fall 2024

Faculty: Full-Time T&TT Faculty Growth



Includes both Oakland and Boston campuses.

Faculty: Full-Time NTT Faculty Growth



Includes both Oakland and Boston campuses.


Thank you!