



THE UNIVERSITY OF
MEMPHIS®

FEDEX INVESTMENT IN THE UNIVERSITY OF MEMPHIS

Partnership Report | November 2021

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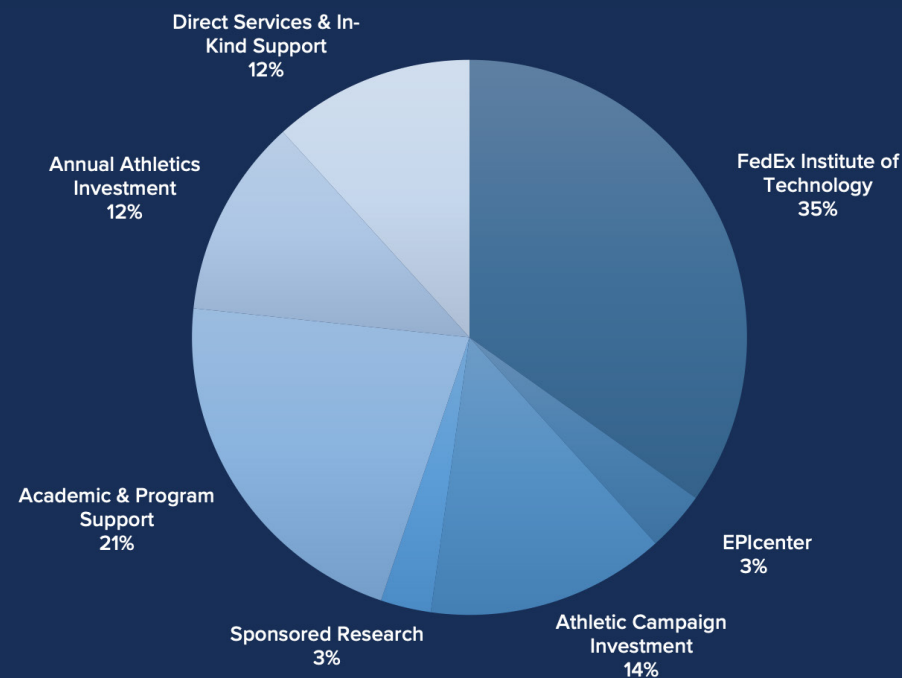
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FEDEX – UOFM PARTNERSHIP REPORT

FedEx’s total Investment since 2015: \$21,538,772

With the support of the FedEx Institute of Technology, members of the clusters work together to submit research proposals, seek external research partners, undertake common research projects, and create training and certification programs for the community.



Note: FedEx funding for two programs: Memphis Symphony Orchestra and EPIcenter flowed through UofM but activities and outcomes were managed exclusively by program staff without UofM oversight or input.

*Commitments include outright gifts, pledge payments and pledge balances

Corporate Contributions Committee Commitments

- FedEx Institute of Technology, \$7,500,000 (35%)
- UofM Athletics Campaigns, \$3,000,000 (14%)

Investment in Sponsored Research & Academic Program Support

- FedEx-funded research, in addition to projects coordinated through FedEx Institute of Technology, \$631,594 (3%)
- Academic & Program Support, \$4,633,385 (21%)

Annual Investment in Tiger Athletics, combined 12% of investment

- Tiger Sports Properties (Sponsorships), \$1,945,735
- Tiger Scholarship Fund Support, \$549,900

Direct Services & In-Kind Support, combined 12% of investment

- FedEx employee support for EMBA and CDMBA programs, \$2,227,653
- Use of UofM Facilities & Conference Services, \$145,578
- Includes use of corporate jet and shipping services, \$154,927

EPIcenter, Logistics Innovation Accelerator, \$750,000 (3%)

5-YEAR FINANCIAL INVESTMENT IN UOFM BY FISCAL YEAR

Actual Cash & In-Kind Gifts Received

	Start/End Dates:	6/1/17-5/31/18	6/1/18-5/31/19	6/1/19-5/31/20	6/1/20-5/31/21	6/1/21-5/31/2022	Pledge Balance	FY18-FY22 COMMITMENT
FedEx Institute of Technology ¹		\$750,000	\$750,000	\$750,000	\$750,000	\$0	\$3,000,000	\$6,000,000
Athletic Campaign Investment ²		\$500,000	\$500,000	\$500,000	\$0	\$0	\$1,000,000	\$2,500,000
Sponsored Research		\$50,000	\$80,234	\$199,000	\$0	\$0	\$0	\$329,234
Academic & Program Support ³		\$103,500	\$657,140	\$728,395	\$865,000	\$227,500	\$1,947,500	\$4,529,035
Annual Athletics Investment		\$340,916	\$383,800	\$387,500	\$341,600	\$41,290	0	\$1,495,106
Tiger Sports Properties (sponsorship)		\$276,416	\$280,000	\$285,000	\$290,000	\$9,990	\$0	\$1,141,406
Athletics Tiger Scholarship Fund & Other Support		\$64,500	\$103,800	\$102,500	\$51,600	\$31,300	\$0	\$353,700
Direct Services & In-Kind Support		\$578,081	\$397,836	\$423,990	\$102,438	\$0	\$0	\$1,502,345
FedEx-Funded EMBA and CDMBA Tuition for Employees		\$485,580	\$377,836	\$403,990	\$102,438	\$0	\$0	\$1,369,844
Use of UofM Facilities and Conference Services		\$73,188	\$0	\$0	\$0	\$0	\$0	\$73,188
Gifts in-Kind (e.g. one-time use of corporate jet, shipping services)		\$19,313	\$20,000	\$20,000	\$0	\$0	\$0	\$59,313
TOTAL PER FISCAL YEAR:		\$2,322,497	\$2,769,010	\$2,988,885	\$2,059,038	\$268,790	\$5,947,500	\$16,355,720

¹ Includes \$3M pledge that is in contract phase.

² Athletic Campaigns = \$2M Completed for Time to Shine; \$1M in contract phase for FedExPark

³ Includes African American Male Academy = \$255K pledge/\$127.5K balance; Key Leadership Fund pledge = \$100K pledge/\$20K balance; Memphis Symphony Orchestra = \$2.5M pledge/\$1M balance; Mike Rose Natatorium = \$500K pledge/\$300K balance; Purple Runway Scholarships = \$500K pledge/\$200K balance; STEM Research Classroom Building = \$500K pledge/\$300K balance, Hooks Institute for Social Change



FEDEX INSTITUTE OF TECHNOLOGY

The FedEx Institute of Technology is the **applied research** arm of the University of Memphis and the home for **emerging technologies innovation** in the Mid-South.

Through FIT, FedEx leads our campus in advanced research efforts, functions as a catalyst for new ideas and guides the future of **workforce development**.

UOFMPACT: OUR PARTNERSHIP CREATES A BETTER MEMPHIS

Every dollar invested in FIT during this last year yields a **14x** ROI.

APPLIED RESEARCH

- National Flight Academy STEM Week w/ FedEx
- 15th Annual State of Freight Conference
- DoD Award - E. Jacob, \$2.7 Million; “Multi-UAS Multi-Sensor Intelligence, Surveillance and Reconnaissance”
- NSA Award - D. Dasgupta, \$2 Million; “Cybersecurity Education for Critical Infrastructure Protection Through Regional Coalition,” and \$250K for “Developing Application-Specific Shared Trust Framework for Accessing Sensitive Information”
- U.S. Dept. of Labor - K. Berisso \$1.01 Million; “Workforce Opportunity for Rural Communities (WORC) / DRA: Automation and Advanced Robotics Center”
- NASA Project - F. Sabri’s flexible reusable temperature sensors currently on board the International Space Station; Patent # U.S. 11,047,747

EMERGING TECHNOLOGIES

- FRONTIERS Partnership Program has five (5) ongoing pilot projects
- Cluster in Electric Vehicles added in 2021
- Blockchain Speaker Series: a partnership with Blockchain901 to bring both national and international speakers to Memphis with expertise in blockchain
- *Technology Serving Humanity* National Speaker Series
- 10 U.S. and Foreign Patents Issued or Allowed

THE FUTURE OF WORKFORCE

- Power BI Bootcamp & Advanced Power BI Training
- Expanded SAFe training portfolio
- IIM-Nagpur Alignment: agreement to provide tech training in India
- UMRF Ventures
- Patents2Products (P2P) Deep Science Entrepreneur Postdoc Program (launched five new start-ups)
- Fast Lane U.S. Training Partnership

IMPACT HIGHLIGHTS

The funding received from FedEx supports FIT efforts to help research fellows access additional grant funding, build on research efforts for the UofM to achieve Carnegie R1 status, and the launch of **5 new tech start-ups** in Memphis. In addition to **research cluster grants**, the Office of Technology Transfer (OTT) has awarded **32 technology development grants** over the last five years and has **doubled the number of patents** in the same time frame, receiving more U.S. patents issued to the UofM than in the previous 20 years.

FY19 \$5,706,100.96 → **FY20** \$7,095,799.93 → **FY21** \$10,132,760.50

Over the last year, FedEx’s dollars have supported a 14x return on investment on research. As a result, FedEx’s investment is creating a broad impact on a local, national and international level.

CLUSTER FOR THE ADVANCEMENT OF CYBER SECURITY & TESTING (CAST)

Working on the front lines of the cyber war to provide new solutions to software testing expertise

BIOLOGISTICS RESEARCH CLUSTER

The first research group in the country dedicated to solving the challenges of this emerging and dynamic field

DRONES ROBOTICS & NAVIGATION ENABLED SYSTEMS (DRONES) RESEARCH CLUSTER

Provides proactive leadership in the emerging field of unmanned systems to bring new technologies to commercial markets

ELECTRIC VEHICLE INFRASTRUCTURE INNOVATION RESEARCH CLUSTER

Focuses on research addressing readiness of infrastructure to support the rising demand for electric vehicles. In 2020, Deloitte forecasted that demand for electric vehicles will increase by 29% annually for the next ten years and that by 2030 we would see 31.1 million EVs on the road in the United States.

ADDITIVE MANUFACTURING RESEARCH CLUSTER

Using cutting-edge facilities at the UofM, cluster is investigating metallic additive manufacturing and business processes

DATA SCIENCE RESEARCH CLUSTER

Projects are dedicated to exploring ways to help industry use big data and analytics to solve problems and create new opportunities

SMART CITIES RESEARCH CLUSTER

FedEx Institute of Technology and the City of Memphis partner on challenges facing our city, utilizing cutting-edge emerging technologies

AGRICULTURE & FOOD TECHNOLOGIES RESEARCH CLUSTER

Brings together a core group of scientists from Biology, Chemistry, Computer Science, Engineering and Health Sciences to work on theoretical, experimental and applied approaches to contemporary food and agriculture challenges



**COLLABORATIVE
INTERDISCIPLINARY RESEARCH**



**FEDEX
CONNECTIONS**



**PARTNERING
FOR UoIMPACT**



**UNITING THE MEMPHIS
TECH COMMUNITY**



**WORKFORCE
DEVELOPMENT**



**BUILDING THE
FOUNDATIONS OF IT**

MULTI-DRONE MULTI-SENSOR: CREATING SOLUTIONS FOR THE EDGE

Multi-Drone Multi-Sensor is a collaboration between UofM, University of Arizona, and UCF to help better identify targets correctly and ensure more accurate delivery of ordnance in GPS-denied environments.

Faculty Member

Dr. Eddie Jacobs

Department

Electrical and Computer Engineering

FIT Cluster

DRONES

Funding Agency

Department of Defense

Amount

\$2,700,000

Collaborators

University of Arizona, UCF,
Army Research Lab

FEDEX IMPACT

As unmanned systems continue to increase in applications, understanding the challenges of their deployment in remote environments to ensure accuracy every time is critical to long-term scaled application of drone delivery.



DIGITAL INCLUSION IN SOUTH CITY: ADDRESSING DIGITAL LITERACY AND BROADBAND ACCESS ACROSS MEMPHIS DURING COVID-19

The purpose of this project is to begin to bridge the digital divide – a problem that has been exacerbated by the impact of the COVID-19 pandemic. Phase I includes:

- 1. Provision of broadband internet to selected households
- 2. Provision of “digital literacy” training to selected households
- 3. Provision of advanced “digital education” training to selected youth participants

Faculty Member

Dr. Charlie Santo, Dr. Greg Washington

Department

City and Regional Planning, Social Work

FIT Cluster

Smart Cities

Funding Agency

City of Memphis Housing
and Community Development

Amount

\$575,537

Partners

Startco, Knowledge quest,
Code Crew, Urban Strategies

FEDEX IMPACT

FedEx’s commitment to Memphis will require a workforce that is able to rise to future job requirements that bring the company into the future. By improving digital literacy across the city, we can ensure a workforce that is responsive to these needs.

THE DIGITAL DELTA

In response to the vision of Fred Smith, the University of Memphis is partnering with the Memphis Chamber, Startco, Epicenter and over 50 other key partners to establish the Digital Delta - an inclusive urban-rural engagement for West Tennessee that seeks to help our region build back better.



THE NEXT FRONTIER OF LOGISTICS: MOVING RESEARCH INTO THE STRATOSPHERE

PHOSPHOR THERMOMETRY OF REUSABLE POLYMER TEMPERATURE-SENSING DEVICE

The University of Memphis is growing our space-based research in order to respond to the increasing access of opportunity in the hypersonics space. The University is conducting experiments on the international space station, establishing research clusters to investigate hypersonic applications, and bringing new astronomy faculty into our team of researchers.

Faculty Member

Dr. Firouzeh Sabri
Dr. Francisco Muller Sanchez

Department

Physics and Materials Science

FIT Cluster

Biologistics

Funding Agency

International Space Station
US National Laboratory

FEDEX IMPACT

Space is the last frontier, and space-based logistics will continue to grow in interest over the next few decades. Having a research resource exploring this area is critical to continuing competitive advantage.

HYPERSONICS RESEARCH CLUSTER

Drs. Daniel Foti, Amir Hadadzadeh, Jeff Marchetta, and Ranga Gopalakrishnan (all Mechanical Engineering Faculty) have formed a research to explore hypersonics research at the intersection of aerothermodynamics and material science. The is group will explore the challenges of high speed and low-orbit flight.



CREATING IMPACT

The FedEx Institute of Technology continues its strategic approach to building corporate, community and research engagement in our region and abroad.

REGIONAL PRESENCE

- **Lightning Talks:** Kick-off event to familiarize researchers and the Memphis community of the research focus
- **Monthly Meetings:** Interdisciplinary cluster fellows discuss their progress and stay abreast of the latest trends in the cluster of research
- **Progress Reports:** Written and verbal evidence of research progress throughout the funding period
- **Research Workshops:** Forum for cluster fellows, the academic community, and corporate partners to discuss the work of the clusters
- **Community Engagement:** Events and workshops to provide the Memphis community with opportunities to interact with world-class researchers in emerging technologies and see that Memphis is on the forefront of innovation

NATIONAL PRESENCE

- **Research Impact:** The University of Memphis was awarded \$36.1 million in federal research funding in FY21, including the establishment of major national centers and initiatives in emerging technologies aligned with FIT research priorities
- **Collaborations:** UofM faculty have established and led research consortia and partnered with major U.S. corporations such as Smith & Nephew, Northrop Grumman, Microsoft and FedEx. These collaborations are enhanced by a dynamic approach that emphasizes not only research but also workforce development and applied solutions utilizing cutting-edge emerging technologies.

INTERNATIONAL PRESENCE

- **FedEx EMEA & APAC regions:** expanded ETT portfolio internationally
- **IIM-Nagpur** agreement to provide training to India
- **FRONTIERS** project with Europe
- **Czech Academy:** collaborative research grants

FRONTIERS PARTNERSHIP PROGRAM

The FedEx Institute of Technology uses research to solve big challenges facing FedEx. Launched by the FIT in 2021, the FRONTIERS program enables emerging technologies research engagement that aligns with FedEx goals and priorities by focusing on emerging technologies in major areas as outlined in the FedEx Investor Report and/or via direct engagement with specific requested areas. This program directly supports FedEx's innovation agenda by having faculty-led teams of UofM students tackle key challenges for FedEx team members.

5

ASSIGNED A FEDEX LIAISON UNDER ROB CARTER'S LEADERSHIP TEAM TO IDENTIFY CHALLENGES AND PARTNER WITH UOFM FACULTY/STUDENTS FOR SOLUTIONS. CURRENTLY WORKING WITH FEDEX TEAMS ON 5 PILOT PROJECTS.

PROJECTS CURRENTLY UNDERWAY

Project Scope: Pricing Strategy & Automation
FedEx Op-Co: FedEx International (EMEA)
Leadership: Nik Puri, SVP-International IT

Project Scope: Optimizing Trailer Loading
FedEx Op-Co: FedEx Freight-Business Operations
Leadership: Tracci Schultz, SVP-Strategic Planning, Engineering & Operational Solutions

Project Scope: Machine Learning & RFID Tags
FedEx Op-Co: FedEx Freight-IT Operations
Leadership: Michelle Epps, SVP-IT & CIO FedEx Freight

Project Scope: Unloading Trailers Using AI
FedEx Op-Co: FedEx Ground-IT Operations (U.S.)
Leadership: Cisco Sanchez, SVP-IT & CIO FedEx Ground

Project Scope: Temperature Sensing Technology
(Note: Recent UofM Patent for FedEx Use)
FedEx Op-Co: FedEx Services
Leadership: O.P. Skaakrud, Vice President Operations Technology Innovation



FISCAL YEAR ENDING JUNE 30, 2021

- Audited Revenues of \$5.51M (vs. \$4.86M in 2020)
- Payroll of \$4.06M (vs. \$3.63M in 2020)
- Majority of revenue going to student wages to cover their tuition

KEY METRICS AS OF FISCAL YEAR ENDING JUNE 2021

- 240+ student employees currently on UMR Ventures payroll; 525+ student employees since August 2017
- \$330,000+ per month wages to student employees (\$7+ million since startup)
- Exceeding performance expectations for customers
- 45 Ventures' graduates are in full-time roles with partner companies
- Second \$50k Dividend paid to UMR Research Foundation in 2020, with third in 2021; funding more than 10 UMR Venture Professorships to UofM faculty
- InfoSec implemented new pending investigation workflow (reported via QBR to FedEx in April 2021)
- Maintained strong first-call resolution (FCR) of nearly 80%
- From the Service Desk, the 25-second timer saved more than 3,000 Express/Services calls
- 14-Minute average handle time to resolution
- 16,300 Calls Answered per month to Level 1 call centers
- 1,700 Hours per month to Level 2 call center

EXPANDING OPERATIONS

- Creating More Jobs for UofM Students
- Students employed by Ventures are working remotely and are also housed in the FedEx Institute of Technology, the Student Hub on the Park Avenue Campus and on the Lambuth Campus.
- Current FedEx operations handled by UMR Ventures:
 - ECS Level 1 IT Help Desk and Tech Support
 - ECS Level 2 Tech Support
 - Information Security (InfoSec)
 - IT Command Center: Systems Analytics

OTHER COMPANIES AND OPERATIONS HANDLED BY UMR VENTURES:

- Sedgewick Claims Services
- Raymond James Financial
- Banded Holdings
- City of Memphis
- Chimes Solutions
- YMCA of the MidSouth



ECONOMIC IMPACT

- Over 55 companies have engaged with the research park since its inception in January 2019
- Received **Soft Landings Destination** designation in 2021 from the International Business Innovation Association (InBIA). The InBIA Soft Landings network ensures that businesses entering or expanding into new countries are provided with an accelerated introduction to that country's business practices, regulations and culture. Soft Landings designees help make contacts in a new country more quickly and efficiently while providing access to the resources necessary to meet their business goals.
- Recruited publicly traded Seattle-based tech company, Ookla, to relocate their HQ to Memphis—over \$436,000 investment into building improvements (construction will start November 2021)
 - 30 full-time high paying jobs moving to the Research Park
 - Average wage: \$93,000
 - UofM Ookla Internship created with Computer Science Department
 - 3 Interns to start with plans to continuously grow this program to all departments
 - Helped Ookla secure a \$70,000 Tennessee Valley Authority (TVA) grant

BUILDING WORKFORCE PIPELINES:

- Participant companies have hired/engaged with over 60 UofM students
 - \$750,000+ (FTE, intern, contract, consulting)
- Projected employment growth
 - **Ookla:** 30 employees over the next five years
 - **Prospero Health:** 530 net new jobs in Memphis over the next five years
- Highlighting MiCare Path collaboration
 - Collaboration success stories
 - The UofM's Health Science College Internship Program:
 - Successfully been able to collaborate with four interns during the 2020 – 2021 semesters
 - These interns have supported their needs around medical educational content creation, patient outreach, survey generation, and interface usability efforts
 - One of the interns was brought on to support their business on an ongoing basis following the internship; she is now a strong member of their customer success team
 - The UofM's new class around Business Consulting:
 - They collaborated with four MBA students around a project-based effort
 - They worked on a critical topic of business valuation justification during a Series A raise
 - The team was able to collectively gather information across subjects
 - >80 hours of effort
 - They have successfully justified their valuation moving into this Series A raise round
 - Plan to leverage one of these MBA students as a consultant moving forward



ENHANCING UOFM GLOBAL FOOTPRINT

- Applied for InBIAs La Idea Incubator Project funded by U.S. Department of State
 - Selected as a finalist – waiting to hear if we were selected as a host site
- Selected for the 2019 U.S. Department of State Global Innovation Through Science and Technology program
 - Hosted three international start-up companies for one month

GROWING RESEARCH CAPACITY

- SweetBio given FDA clearance (technology born out of UofM labs)
 - \$5K in lab space expenditures
 - \$2,740 to UMR Research Foundation in royalties
- Supporting UofM/Epicenter Patents2Products with space use and services
- Applied for the EDA Build Back Better grant
 - If awarded, Phase 1 Technical Assistance Grant would be \$500,000 and, if awarded the Phase 2 part of the grant, it would be up to \$100 Million
- Applying for EDA University Center grant with Crews Center for Entrepreneurship
 - If awarded, would be \$200,000 per year for five years (\$1,000,000)

CITIZENS

- | | | |
|------------|----------------------------|-------------------------------------|
| • Ookla | • Preteckt | • Patents2Products (UofM Start-ups) |
| • CodeCrew | • Focus Investment Banking | • PicoWasp (Part of Project Palos) |
| • SweetBio | • Diatech Diabetes | |
| • Devcon | | |

COLLABORATORS

- | | | |
|-------------------|--------------------------|---------------------------|
| • Prospero Health | • Good Shepherd Pharmacy | • IMC Companies |
| • New Memphis | • Remedichain | • Paradox Pharmaceuticals |
| • Blockchain901 | • HORNE Cyber | |
| • Storm Analytics | • Edesia | |
| • Tech901 | | |

COMMUNITY

- | | | |
|--|--|-------------------------------|
| • University Neighborhoods Development Corporation | • Tennessee Department of Economic and Community Development | • Greater Memphis Chamber |
| | | • The Digital City Consortium |

TECHNOLOGY SERVING HUMANITY SERIES

The Fed Ex Institute of Technology at the University of Memphis has launched a new speaker series, free and open to the public, focused on the broader impacts of technology on individuals and communities. The *Technology Serving Humanity* series will explore the social, political, philosophical and humanistic aspects of technology and technological change.

The goal is to help our regional community understand and navigate the challenges and opportunities arising from the rapid development of technological innovations. Leading scholars in the humanities, fine arts and communication, and the social sciences, have been invited to the University of Memphis to present a monthly public talk as part of the series during the fall 2021 and spring 2022 semesters.

Welcomed:

- Tuesday, Sept. 7 | Dr. Kathleen Thelen, **MIT** | **“Platform Power”**
- Tuesday, Sept. 14 | Dr. Moya Bailey, **Northwestern University and current MLK Visiting Professor at MIT** | **“Can we have an ethical internet?”**
- Tuesday, Oct. 5 | Dr. Michael Lynch, **University of Connecticut** | **“Social Media and Bald Face Lies”**
- Friday, Nov. 12 | Dr. Clinton Castro, **Florida International University – Miami** | **“Egalitarian Machine Learning”**

Scheduled:

- Tuesday, Feb. 8, 2022 | Dr. Christian List, LMU Munich, visiting professor at **London School of Economics and a Fellow of the British Academy** | **“Group Agency and Artificial Intelligence”**
- Friday, Mar. 18, 2022 | Dr. Andrew Ferguson, **American University Washington College of Law** | **“Surveillance and the Tyrant Test: How to Respond to the Thread of Big Data Policing”**
- Friday, Mar. 25, 2022 | Dr. Elaine Ecklund, **Rice University** | **“Understanding Interactions Between Religious and Scientific Communities to Increase Diversity in Science”**
- Friday, Apr. 8, 2022 | Dr. Craig Watkins, University of Texas – **Austin and current MLK Visiting Professor at MIT** | **“Designing Artificial Intelligence for Racial Justice”**

FEDEX EXCLUSIVE EVENTS & TRAINING FOR FEDEX TEAM

The FedEx Institute of Technology holds many on-campus and virtual training programs, meetings workshops and collaborations for the FedEx team.

EVENTS & TRAINING

- FedEx Express - Air Traffic Operations FedEx - AIRNAV Meeting
- FedEx Express - Air Traffic Operations FedEx Air Operations Meeting
- FedEx Freight FedEx Action Learning Workshop
- FedEx Services FedEx Freight Meeting
- FedEx Services FedEx Global Segmentation Phase 2 PI 2 Planning Meeting
- FedEx Services FedEx Platinum Business Agility Leadership Meeting
- FedEx Services Inner City Capital Connections Executive Education Seminar
- FedEx Services-Infrastructure & Ops Tech Security Endpoint Security Palo Alto Test Planning
- FIT-FedEx EBAS Team Meeting (SAFe/Agile Trainings)



EMERGING TECHNOLOGY WORKFORCE DEVELOPMENT

Working to introduce emerging technologies and training to our region to attract and retain technology organizations, innovators and talent to the Mid-South.

FEDEX INSTITUTE OF TECHNOLOGY EMERGING INNOVATION AND TRAINING

November 2020

- FIT Emerging Tech Training: Implementing SAFe (SPC)
- FIT Emerging Tech Training: Agile Coaching
- FIT Emerging Tech Training: DevSecOps
- FIT What's Next Series: Autonomous Delivery Robots/Dr. Sabya Mishra

December 2020

- FIT What's Next Series: Talk with Dr. Ranganathan Gopalakrishnan
- FIT-Blockchain901 Series (Kickoff): Radical Decentralization: The Key to Realizing the Vision of the Internet's Founders/Yorke Rhodes
- FIT Emerging Tech Training: SAFe Architecture
- FIT Emerging Tech Training: PowerBI Bootcamp
- FIT What's Next Series w/Ryan Hughes (Nuvelus)

January 2021

- FIT Emerging Tech Training: PowerBI Bootcamp
- FIT Emerging Tech Training: Training From the Back of the Room

February 2021

- FIT What's Next Series: Identifying Areas of Geographical Inequalities in COVID-19 Morbidity and Mortality through Mapping of Spread of Confirmed Cases and Deaths across Disadvantaged Areas in Tennessee /Dr. Anzhelika Antipova
- FIT Emerging Tech Training: DevSecOps
- FIT What's Next Series: Host Genes, Immune Response and Susceptibility/Resistance to SARS-CoV2/Dr. Xiaohua Huang
- Research and Innovation Talk: NSF Funding Opportunities/Dr. Deborah Olster (NSF)
- FIT What's Next Series: Determination

of inflammatory and fibrotic markers in SARS-CoV2 infected macrophages and fibroblasts/Dr. Brandt Pence

- FIT Emerging Tech Training: Business Agility Strategist
- Research and Innovation 2021 Research Celebration
- GiveCamp Hackathon 2021

March 2021

- FIT Emerging Tech Training: Business Architecture
- FIT Emerging Tech Training: PowerBI Bootcamp
- Research & Innovation Presents Machine Learning for Everyone w/Dr. Ebrahim Asadi
- FIT What's Next Series: The Impact of the COVID-19 Pandemic on Racial, Gender, and Socioeconomic Disparities in Access to Care and Health Outcomes Among Patients with Ambulatory Care Sensitive Conditions/Dr. Aram Dobalian

- FIT Emerging Tech Training: DevSecOps
- FIT What's Next Series: Epigenetic association with lung function impairment and proposed study on epigenetic causality / Dr. Yu-Sheng Lee
- 2021 Memphis Data Conference (presented by the Data Science Research Cluster at the FedEx Institute of Technology)
- FIT What's Next Series: Materials Science and Nanophotonics/Dr. Thang Hoang

EMERGING TECHNOLOGY WORKFORCE DEVELOPMENT

April 2021

- FIT Emerging Tech Training: Business Architecture
- FIT & School of Public Health Telehealth Webinar: Breaking Barriers to Literacy across the Lifespan: Perspectives from Audiology, Education, Optometry, and Speech/Language Pathology
- FIT What's Next Series: Quantitative Imaging; Magnetic Resonance Imaging; Image Processing & Analysis; Data Modeling & Extraction; Medical Imaging and Physics; Iron & Fat Quantification/Dr. Aaryani Sajja
- FIT Emerging Tech Training: Organizational Change Management
- FIT Emerging Tech Training: PowerBI Bootcamp
- FIT & School of Public Health Telehealth Webinar: Amblyaudia: How to Diagnose and Treat it with a Short-term Intervention
- FIT & School of Public Health Telehealth Webinar: How Are Your Boys and Men Doing
- FIT-Blockchain901 Talk: NFTs beyond

digital art and collectibles/Mike McCoy (Talk 1 of 2)

- FIT What's Next Series: Analysis and characterization of bioactive lipids (lysophosphatidic acid, sphingosine 1-phosphate, and phosphatidic acid) and their roles in human biochemistry and disease/Dr. Daniel Baker
- FIT What's Next Series: Phylogenomics and population genetic study of *Centropomus pauciflorus*, a potential novel industrial oilseed crop/Dr. Ramhari Thapa

May 2021

- FIT What's Next Series: Organometallic Chemistry, Catalysis, Organic Chemistry, Synthesis /Dr. Timothy Brewster
- FIT-Blockchain901 Talk: Decentralized Identifiers, Verifiable Credentials and Blockchain-Based Healthcare /Mike McCoy (Talk 2 of 2)
- FIT What's Next Series: Continental lithosphere formation and evolution, Intraplate Seismicity, Induced Seismicity, Rupture Dynamics/Dr. Erin Cunningham

- FIT What's Next Series: Conditions that affect heavy metal uptake in drinking water systems and assesses the risks to recommend corrective actions/Dr. David DeSimone

June 2021

- FIT-Blockchain901 Talk : Blockchain Business Models: From Private Clubs to the Token Economy/Andy Martin
- STEM Hub Conference

July 2021

- FIT Emerging Tech Training: PowerBI Bootcamp
- FIT Emerging Tech Training: Business Agility Strategist
- FIT-Blockchain901 Talk: Blockchain: Enterprise Applications /Thomas Cox & Kirsten Pomales (3 talks scheduled-July 13, July 20, July 27)

August 2021

- FIT & School of Public Health Training: Data Analysis & Presentation using Excel

- FIT & School of Public Health Training: "R" Programming for Beginners
- FIT & School of Public Health Training: Epidemiology of Emerging Infectious Diseases
- FIT Emerging Tech Training: Impactful Training & Speaking (formerly Training From the Back of the Room)
- FIT Emerging Tech Training: Mastering DAX (Advanced PowerBI)
- FIT-Blockchain901 Talk: Decentralized Finance (DeFi) – A Quantum Leap Into A Self-Sovereign Financial System/Alim Khamisa
- FIT Emerging Tech Training: Business Architecture

EMERGING TECHNOLOGY WORKFORCE DEVELOPMENT

September 2021

- FIT Emerging Tech Training: Implementing SAFe (SPC)
- FIT Emerging Tech Training: PowerBI Bootcamp
- FIT What's Next Series: AI & IoT in Patent Law /John Hocker
- FIT-Blockchain901 Talk: dexFreight: A Blockchain Powered Solution for the Logistics Industry/Rajat Rajbhandari
- FIT Emerging Tech Training: Business Agility Strategist
- *Technology Serving Humanity* Speaker Series: Platform Power /Dr. Kathleen Thelen
- *Technology Serving Humanity* Speaker Series: Can we have an ethical internet? /Dr. Moya Bailey, Northwestern University and MLK Visiting Scholar at MIT

October 2021

- FIT What's Next Series w/Travis Humble (Oak Ridge National Laboratory)
- FIT Emerging Tech Training: Impactful Training & Speaking (held in APAC Region)

- FIT Emerging Tech Training: Organizational Change Management
- FIT-Blockchain901 Talk: Blockchain Standardization Landscape /Ramesh Ramadoss (Talk 1 of 2)
- *Technology Serving Humanity* Speaker Series: Social Media and Bald Face Lies/ Dr. Michael Lynch

November 2021

- FIT Emerging Tech Training: Business Architecture
- FIT-Blockchain901 Talk: Blockchain Ecosystem Overview/Ramesh Ramadoss (Talk 2 of 2)
- FIT Emerging Tech Training: Business Agility Strategist
- *Technology Serving Humanity* Speaker Series: Egalitarian Machine Learning/Dr. Clinton Castro

200+

200+ FEDEX EMPLOYEES ATTENDED MEETINGS,
WORKSHOPS, TRAINING PROGRAMS, CONFERENCES
AND OTHER EVENTS

NOVEMBER 2020 - NOVEMBER 2021

29

OF TRAINING PROGRAMS OFFERED ANNUALLY AS PART
OF WORKFORCE DEVELOPMENT INITIATIVES

EMERGING TECHNOLOGY WORKFORCE DEVELOPMENT

The FedEx Institute of Technology continues to work with community partners to build, attract and retain a talented workforce to the Mid-South.

FEDEX INSTITUTE OF TECHNOLOGY ADVANCED TECHNICAL SKILLS SERIES:

- Python; Game Developers/Unity
- Machine Learning/Data Sciences/R
- WordPress
- WebWorkers
- Data Management Association (DAMA)
- MEMPass/Power BI
- Memphis Game Developers
- PHP
- Memphis Agile
- MemphisDevOps
- NetSquared
- Code Connectors



GROWING TECHNOLOGY WORKFORCE IN OUR REGION

The FedEx Institute of Technology is committed to developing and retaining the technology workforce in Memphis by providing nationally recognized training opportunities in critical-need skills and emerging technologies for corporate and public partners.

\$25M

CURRENTLY WORKING WITH FEDEX SERVICES’
JONATHAN MELUGIN, VP IT, TO SUBMIT A \$25M EDA
GOOD JOBS GRANT APPLICATION FOCUSED ON BUILDING
WORKFORCE SOLUTIONS FOR THE FUTURE OF LOGISTICS.

TRAINING TARGETS CORPORATE & PUBLIC AUDIENCES

Programming Languages

- PHP
- Python
- Java
- SQL
- R Immersion (Data Science)
- SAS

Digital Transformation

- Enterprise Business Agility
- DevSecOps
- BI: Advanced Power BI (Mastering DAX)
- CAST (Cybersecurity)
- Systems Testing Excellence Program (STEP)

Team Building/Process Improvement

- Design Thinking (2.0)
- Impactful Training and Speaking
- Hackathons
 - HackMemphis
 - GiveCamp
 - Athena{Techne} All Women’s Hackathon
 - ETHMemphis
- SQLSaturday

SAFe/Agile Training

- Agile Finance (2.0)
- Agile Release Mgmt
- Agile Software Testing
- Agile User Experience
- Agile Coaching
- SAFe for Teams
- SAFe Architecture
- Implementing SAFe

SYSTEMS TESTING EXCELLENCE PROGRAM (STEP)

STEP, founded in 2006 as a joint venture of the University of Memphis and the FedEx Corporation, has trained many hundreds of corporate personnel in Memphis and other U.S. cities and has engaged in state-of-the-art research projects to advance the science of software testing. Research outcomes are the foundation of newly created training modules and have offered many corporate and government solutions. STEP's relationship with federal agencies began in 2011 and has included training hundreds of Department of Defense and Department of Homeland Security personnel as well as performing smaller student-focused and larger faculty-led research projects.

- For the last four years, STEP research professors have conducted one-week training classes for DHS Headquarters personnel on the critically important topic of software testing. Topics have included testing techniques, testing in the agile development environment, testing for security, interoperability testing, and more.
- STEP researchers annually participate as a major leadership partner in the International Test and Evaluation Association's (ITEA) Annual Symposium, which was held virtually each Fall. ITEA is the premiere professional association for Federal Agencies testing and evaluating new software-intensive systems. ITEA offers the Certified Test and Evaluation Professional exam of which STEP provides oversight as a one of its Board of Examiners.



STEP RECEIVES U.S. DEPARTMENT OF HOMELAND SECURITY AWARD

Has received an award from the U.S. Department of Homeland Security (DHS) for the second year in a row. This award was given by the DHS Under Secretary in the category of Science and Engineering.

THE OFFICE OF TECHNOLOGY TRANSFER (OTT)

10 U.S. and foreign patents either issued or allowed; **10 new U.S./PCT/foreign applications** and received **8 invention disclosures**.

Housed in the FedEx Institute of Technology, OTT works closely with faculty researchers to identify commercially valuable inventions being developed in their labs.

FOR RESEARCHERS

We invest in and protect promising innovations and huge breakthroughs by University researchers.

FOR INDUSTRY

We license valuable intellectual property (patented and copyrighted inventions) to local and national companies.

BY NUMBERS

New Invention Disclosures: **8**
Provisional Applications filed: **3**
U.S. Utility and PCT patent applications filed: **10**
U.S. and Foreign Patents issued or allowed: **10**

IP COMMERCIALIZATION ACTIVITIES:

We have been in license discussions with:

1. Halo Bioventures for various UM technologies.
2. Vestas and Siemens Gamesa for Dr. Ali's wind turbine technology.
3. Dr. Palakurthi for his Commencement Software .
4. Devcon for Dr. Dasgupta's IP on Share Trust Technology.
5. Nutriquest for Dr. Jennings' IP on fatty acid for treating biofilm.
6. Makescope for Dr. Preza's IP on high resolution microscope.
7. Our Global Services for Dr. Dasgupta's IP on AI-Powered Advanced Malware Detection System (AIMaD).
8. Archimedes Control for Dr. Kozma's compact radar IP.
9. Sirab Tech for Dr. Banerjee's IP related to sensors applications in IoT. First Capital continues to help market our IT technologies to its network of contacts.
10. RTI Wealth was engaged to explore opportunities in IP marketing or startups formations as well as assistance in funding for P2P.
11. We continue engaging a technology marketing specialist to market our life-science technologies/patents.
12. We are also in communication with other companies or venture groups that have interest in early-stage technologies for collaborative development and/or technology license.
13. Our joined IPs are also actively marketed by other institutions including UTHSC and Mayo Clinics.

PATENTS2PRODUCTS

DEEP SCIENCE ENTREPRENEUR POST-DOC FELLOWSHIPS

The University of Memphis FedEx Institute of Technology and Epicenter partnered to create a new program to give enterprising PhDs the opportunity to turn research-based intellectual property, developed both in Memphis and across the United States, into local startup companies. A collaboration to strengthen deep science entrepreneurship in Memphis.

- Dr. Ryan Hughes (Nuvelus) completed his product safety study and expects product launch in Q1 2022.
- Dr. Erika Dillard (PopCheck Technologies) has won several pitch contests including first place (\$50,000) in the National Black MBA Association (NBMBA) Scale Up Pitch Contest.
- Dr. Leta Nutt (Nutt Bio) is conducting research on chemically modifying sterilant for better distribution.
- Dr. Cong Van (MakeScope) completed automatic detection of malaria with 3D-printed microscope.
- Dr. Rohan Isaac completed submission of full patent application and will launch his company—phasemat—this month.
- All P2P fellows are actively working on grant applications and/or fund raising efforts.

5

THE FEDEX INSTITUTE OF TECHNOLOGY HAS LAUNCHED FIVE NEW START-UPS OVER THIS LAST YEAR.

PATENTS2PRODUCTS (P2P)

DEEP SCIENCE ENTREPRENEUR POST-DOC FELLOWS

Company Name: MakeScope
Postdoc Name: Cong Van, PhD
Faculty Mentor: Drs. Chrysanthé Preza and Ana Doblas

Company Name: Nutt Bio
Postdoc Name: Leta K. Nutt, PhD
Faculty Mentor: Drs. Karyl Buddington, Gary Bowlin and Amy Curry

Company Name: PoP Check Technologies
Postdoc Name: Erika Dillard, MD, PhD
Faculty Mentor: Dr. Amy Curry

Company Name: Nuvelus
Postdoc Name: Ryan Hughes, PhD
Faculty Mentor: Dr. Gary Bowlin

Company Name: phasemat
Postdoc Name: Rohan Isaac, PhD
Faculty Mentor: Dr. Ann Doblas

ADDITIONAL RESEARCH CENTERS SUPPORTED BY FIT

- **Systems Testing Excellence Program (STEP)** – Advancing the science and industry best practices of software testing through work with FedEx and the Department of Defense (Dr. Robin Poston)
- **Center for Applied Earth Science and Engineering Research (CAESER)** – Transforming and strengthening communities by improving social and environmental conditions through research and collaboration. (Dr. Brian Waldron)
- **Center for Smart Biomaterials** – Developing implantable materials to release drugs with an external signal (e.g., a magnet) allowing clinicians to better time - and target - local drug delivery (Dr. Joel Bumgardener)
- **Center for Information ASSURANCE** – Providing world-class research, training, and career development for Information Assurance professionals and students by organizing community events, special purpose conferences, and vendor-specific training programs (Dr. Dipankar Dasgupta)
- **SENSORIUM** – Delivering the next generation chemical sensors through multidisciplinary, fundamental discovery combined with early stage development. (Dr. Erno Lindner)



- **Mobile Data to Knowledge (MD2K)** – A National Institutes of Health Center of Excellence Developing new strategies to analyze and leverage the increasingly complex biomedical data sets, often referred to as Big Data. One of only 12 Centers of Excellence across the country, each tackling a different, specific data science challenge (Dr. Santosh Kumar)



Institute for Intelligent Systems
THE UNIVERSITY OF MEMPHIS

- **Institute for Intelligent Systems (IIS)** – Advancing the state of knowledge and capabilities of intelligent systems, including psychological, biological, and artificial systems. Researchers from the cognitive sciences, biology, communication sciences & disorders, computer science, education, engineering, linguistics, philosophy, physics, and psychology are involved. (Dr. Art Graesser & Dr. Alistair Windsor)



MEMPHIS ATHLETICS

The UofM is a driven by doing kind of university. Being in this city of doers, means we're the University that also knows how to do.

And with 400 student-athletes competing in 19 different intercollegiate sports, there's a lot of room for doing. The UofM is a charter member of the American Athletic Conference and our athletic programs compete at the highest level as an NCAA Division I institution.

MEMPHIS ATHLETICS

Program	6/1/20-5/31/21	6/1/21-5/31/22	Remaining Pledge Balance
Time to Shine Athletics Campaign - FedExPark	\$0	\$0	\$1,000,000
Tiger Sports Properties (sponsorship)	\$290,000	\$9,990	\$0
Athletics Tiger Scholarship Fund & Other Support	\$51,600	\$31,300	\$0
TOTAL:	\$341,600	\$41,290	\$1,000,000

TIGER SCHOLARSHIP FUND

The Tiger Scholarship Fund, the most critical component of Memphis Athletics, provides funding for over 400 student-athlete scholarships. These dollars directly impact the lives of Tiger student-athletes, providing them the opportunity to earn their college degree while competing for championships at the highest level of intercollegiate athletics.

3.52

ATHLETIC DEPARTMENT GPA RECORD

- 14 consecutive terms above 3.0 GPA

92%

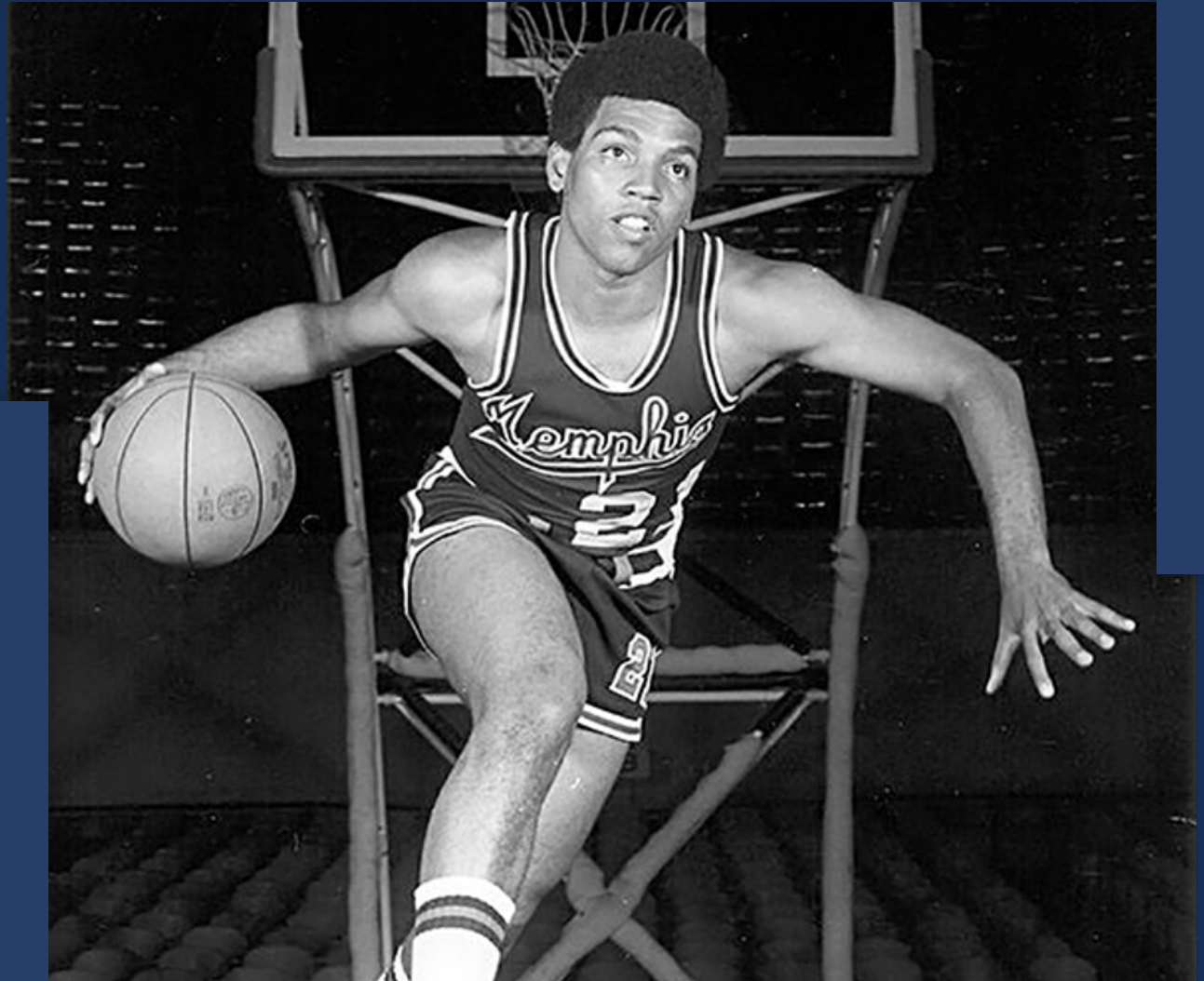
GRADUATION SUCCESS RATE

- Ranked 2nd in AAC
- NCAA Average GSR was 89%



LARRY FINCH PLAZA

- The legacy and impact of Larry Finch Plaza will be an integral part of UofM history.
- Sculptor William Behrends is the selected artist.
- Plaza was dedicated on Thursday, October 28, 2021.





ACADEMIC & PROGRAM SUPPORT

Together, FedEx and the University of Memphis are creating opportunity! The UofM is committed to focusing on programs that provide our students with real life experience and hands on learning. Our top priority is to provide students from all backgrounds with the opportunity to excel. FedEx's investment in scholarships and high-impact programs is an investment in the University's most valuable resource, our students. The return on your investment is immeasurable and upholds the future of our university, state and nation for generations to come.

ACADEMIC AND PROGRAM SUPPORT

Program	6/1/20-5/31/21	6/1/21-5/31/22	Remaining Pledge Balance
African American Male Academy	\$0	\$127,500	\$127,500
FedEx Purple Runway Aviation Scholarship	\$100,000	\$0	\$200,000
Hooks Institute for Social Change	\$25,000	\$0	\$0
Memphis Symphony Orchestra Endowment Fund	\$500,000	\$0	\$1,000,000
Natatorium Renovation Fund	\$100,000	\$0	\$300,000
STEM Research and Classroom Building	\$100,000	\$100,000	\$300,000
University Key Leadership Salary Supplement Fund	\$40,000	\$0	\$20,000
TOTAL:	\$865,000	\$227,500	\$1,947,500

AFRICAN AMERICAN MALE ACADEMY: FEDEX GRADUATE STUDENT FELLOW

FedEx Fellow: Provides support for this initiative in collaboration with leaders across campus by synchronizing successful programs and coordinating future strategy.

- Champions equity and inclusion for African American male students, working with various campus offices to ensure AAMA participants have access to the resources they need to complete
- Works across our supportive programs to ensure they are communicating and operating efficiently so that we may identify any gaps in programming and address them



JAMES BEASLEY,
FEDEX AFRICAN AMERICAN MALE ACADEMY FELLOW

AFRICAN AMERICAN MALE ACADEMY

COMPLETION SCHOLARSHIPS

Completion Scholarships: FedEx's investment will help AAMA Scholars cross the finish line. These efforts are simple, but the most effective way to secure completion. FedEx's funds provide completion scholarships for senior level students.

Immediate Impact

- Fall 2021: Awarded approximately \$18,000 to 8 students.
- Spring 2022: 3 students confirmed for spring 2022. 12 additional students are being considered.

“Despite the hardships over the past 18 months, by working together, we saw our 6-year graduation rate grow to our institutional high of 54.3% (our goal was 55%), and equity gaps continue to shrink across all groups. What used to be a graduation rate differential of 20% has been cut to 5% across students of color and first-generation graduates in just six years. Although any gap is unacceptable, we have been making remarkable progress. Please know the work you are doing is making a tremendous difference in the lives of our students and community. “

Dr. M. David Rudd

MIDDLE SCHOOL INITIATIVE

Middle School Initiative: FedEx funds support the 8th grade cohorts as they matriculate through the program.

- Activities are designed to develop the cohort's leadership skills, prepare them for careers and develop self-efficacy through mentorship and education.

Middle school activity update:

- Saturday workshops
- One-day campus residencies
- Online individualized tutoring sessions led by UofM Honors students
- Test preparation classes

FEDEX PURPLE RUNWAY: PROGRAM SNAPSHOT

- 81 students are currently enrolled in the aviation program.
- College of Professional & Liberal Studies (CPLS) in partnership with Crew Training International (CTI) Professional Flight Training, launched a Commercial Aviation program in Fall 2018.
 - CTI is an FAA Part 141-approved flight school located just minutes from the University's Millington campus.
 - With the CTI partnership, students will have seamless access to both flight training and curriculum support.
- **Dedication Wall:** The wall reflects photos for all scholarship recipients. Dr. Joanne Gikas is working with the current scholarship recipients to add them to the Recognition Wall.
- **Aviation Take Over Day:** Occurred on October 26, 2021 at the University of Memphis campus.
- **FedEx Volunteers:**
 - Nate Eisenman, remains a tremendous asset in organizing the Aviation Take Over Day for UofM students at FedEx.
 - Many FedEx volunteers are actively engaged with this program. Thank you!

GOAL #1:

AWARD AVIATION SCHOLARSHIP TO 20 DESERVING STUDENTS

In 2021-2022, awarded scholarships to five deserving Commercial Aviation students:

- Warren Hallum
- Jennifer Joyner
- Bailey Peden
- William Hudson
- Douglas Keplinger

GOAL #2:

AWARD 20% SCHOLARSHIPS TO WOMEN AND MINORITIES

- In 2021-2022, 40% of students engaged in program were underrepresented students.
- We are very excited at the growth of this program.

LIFE PROGRAM IN REVIEW

- Express and UofM Global launched LiFE in 2018 at the Memphis, Indianapolis, Los Angeles, Oakland, and Newark hubs.
- In 2021, UofM Global has expanded to 16 locations across the US.
- 2000+ LiFE students engaged in the program
- More than 300 Express employees engaged

LIFE PREP ACADEMY BY THE NUMBERS

Prep Academy Explained

- Self-paced, three module academy:
 - Academic Success
 - Career Planning and Development
 - Personal and Career Success
- Enables students to demonstrate mastering in 77 unique competencies

Successes for 2020

- 70 FedEx Express Employees remain actively engaged in the prep academy
- 6 months average completion time
- 64% who complete successfully transitioned to coursework



LIFE PROGRAM IN REVIEW

LIFE EXPERIENTIAL LEARNING BY THE NUMBERS

Experiential Learning Explained

- FedEx employees award students experiential learning credits (ELC) for college-level learning occurring outside the classroom.

Successes for 2020

- 59 Life Students awarded ELC
- 642 total credits awarded
- 11 average credit hours awarded

Successes since 2018

- 146 employees have been awarded 1,563 credits toward completing their degree, an average of 11 credits per person.

LIFE CREDITS BY THE NUMBERS

Credit Accumulation for 2020

- 216 LiFE students have earned 2,429 credits eligible to be applied toward a degree program

Credit Accumulation since 2018

- 339 students earn 5,265 credits eligible to be applied toward a degree

LIFE DIVERSITY AND INCLUSION

The UofM provides a quality education to every student and ensures that every student is included and given the opportunity to excel.

- 62% underrepresented minorities
- 55% women
- 36 average age of LiFE student
- 40% first generation

BENJAMIN HOOKS INSTITUTE FOR SOCIAL CHANGE

- The Hooks African American Male Initiative (HAAMI) was created in 2015 to enrich the collegiate experience and improve graduation outcomes for African American undergraduate male students at the University of Memphis (UofM). The program's pillars are academic achievement, personal development, and career readiness.
- The Hooks Institute is proud of HAAMI member successes in a year with unexpected disruption and transition to all-virtual learning.
 - 42 HAAMI members
 - 87% of members were in academic good standing at the end of the Spring 2021 semester
 - Dean's List status: 9 members in the Fall 2020 semester and 11 in the Spring 2021 semester
 - 6 HAAMI members graduated
- "HAAMI has put me in a great position in college. It feels good to have a team of people behind you that genuinely want you to succeed."
 - Zachary (*HAAMI 2021 graduate*)
- "HAAMI has meant a lot to me because I gained great connections and important upgrades to my skill sets."
 - Cordell (*Junior, Civil Engineering*)



HIGHLIGHTED SELECTIONS & IMPACT

HOSTED LECTURES

- No Future in This Country by Andre E. Johnson
- “Let Every Voice Be Heard: Protecting and Promoting the right to Vote and American Democracy”.

VIEWED DOCUMENTARIES

- Kelisha B. Graves, author of *Nannie Helen Burroughs: A Documentary Portrait of an Early Civil Rights Pioneer, 1900-1959*
- Ida B. Wells: “A Chicago Stories Special”
- “The Fight to Vote: Black Voter Suppression in Tennessee” Documentary

HOSTED CONVERSATIONS

- A Complete Embrace: The LGBTQIA+ Black Community and the Black Lives Matter Movement
- Reimagining Policing Panel Discussion
- Viola Harris McFerren and Fayette County Civil Rights Movement Featured in Tennessee State Museum’s Suffrage Exhibit: Ratified! Tennessee Women and The Right To Vote

LED TRAININGS

- Partnering with UofM’s School of Urban Affairs and Public Policy trained City of Memphis Code Enforcement on land Installment contracts, or rent to own agreements
- Community Relations Service, U.S. Department of Justice titled “Looking Back, Looking Forward.”

ACADEMIC RESEARCH FELLOWS

- 27 faculty from diverse disciplines and universities around the country
- Fellows to increase the Hooks Institute’s research capabilities and interconnectedness with faculty nationwide

HOOKS RESEARCH GRANT AWARDS

- Sohye Lee, PhD, RN (UofM Loewenberg College of Nursing) and Jaime Sabel, PhD (Assistant Professor, UofM Department of Biological Sciences) were awarded social change research grants by the Benjamin L. Hooks Institute for Social Change at the University of Memphis. The Hooks Institute awarded Lee a grant of \$5,000 and Sabel a grant of \$2,500 to support their research that addresses social change issues.

HOOKS COMMUNICATION STRATEGY

- The Hooks Institute communication strategy effectively uses social media, newsletters and video and postcard mailings to share its programming with the greater Memphis community to create a more equitable society. Our metrics were as follows:
 - 4,118 followers on Facebook
 - 2,314 subscribers through Constant Contact
 - 1,748 recipients on our U.S. mailing list
 - 70,760 yearly views on YouTube | 2043 Subscribers on YouTube
 - Our Livestream Videos Reached Over 25,000 People on Facebook

MEMPHIS SYMPHONY ORCHESTRA: PARTNERSHIP HIGHLIGHTS

UofM Facilities:

- MSO became a paying Tennant in on campus space!
- Rehearsals on campus as available

MSO Player / UofM Joint Programming:

- Featured student soloist for Beethoven 250th Celebration
 - David Cordoba Hernandez, pianist
- Featured student composer on Concert
 - Juan Sebastian Cardona-Ospina, world premiere of Las Venas del Oceano



MSO SIDE-BY-SIDE PROGRAM



Coordinating assessment of programs

- Doctoral candidate Demetrius Robinson joined the MSO staff to assess and evaluate MSO educational programming
- UofM impact study on how the MSO's creation of this cross-district program has changed SCS teacher's collaboration beyond the program was released
- 12 performances/year with approximately 6000 children participating

Other important internships

- Music Production Senior Shevonda Minor and Horn Masters candidate Tyler Bjerke earn paid internships with MSO



MSO / UOFM MUSICIAN FELLOWSHIP PROGRAM

TWO MEMPHIS INSTITUTIONS ACT ON SHARED DESIRE TO FOSTER A MORE INCLUSIVE ORCHESTRA

- Entering year two of the program
- Two-year program for exceptional graduate and post-graduate string players from African American and Latinx communities that are historically underrepresented in classical music
- Full-tuition scholarship for Master of Music, Doctor of Musical Arts, or Artist Diploma, and meaningful professional experience performing with the MSO
- Auditions were held in Spring 2021 for the open violin position that went to Brazilian musician Rebeca Rathlef
- Katie Brown (Viola) and Estefan Perez (Cello) are returning for a second year
- 2020-21 Fellow Allison Lovera won a position with the Minnesota Orchestra



MIKE ROSE NATATORIUM: PROGRESS REPORT

SRCB TIMELINE

- The renovated natatorium will prove a wonderful complement to the new Martin Center for Wellness and Fitness, which will offer recreational swimming among other health and fitness that are integrated into the University's core academic mission.
- Renovations are underway and expected to take about 18 months to complete.
 - Phase 1 included replacing the roof and systems like HVAC and lighting.
 - Phase 2 includes replacing the pool, adding seating, and updating offices and related facilities.
- Hosted SplashBreaking on May 26



STEM RESEARCH AND CLASSROOM BUILDING (SRCB)

SRCB TIMELINE

- **August 2020:** Design groups selected – A2H and the SmithGroup
- **November 2020:** Construction manager/ general contractor hired
- **January 2021:** Schematic design completed
- **April 2021:** Design development completed
- **September 2021:** Contract documents completed
- **March 2022:** Construction begins

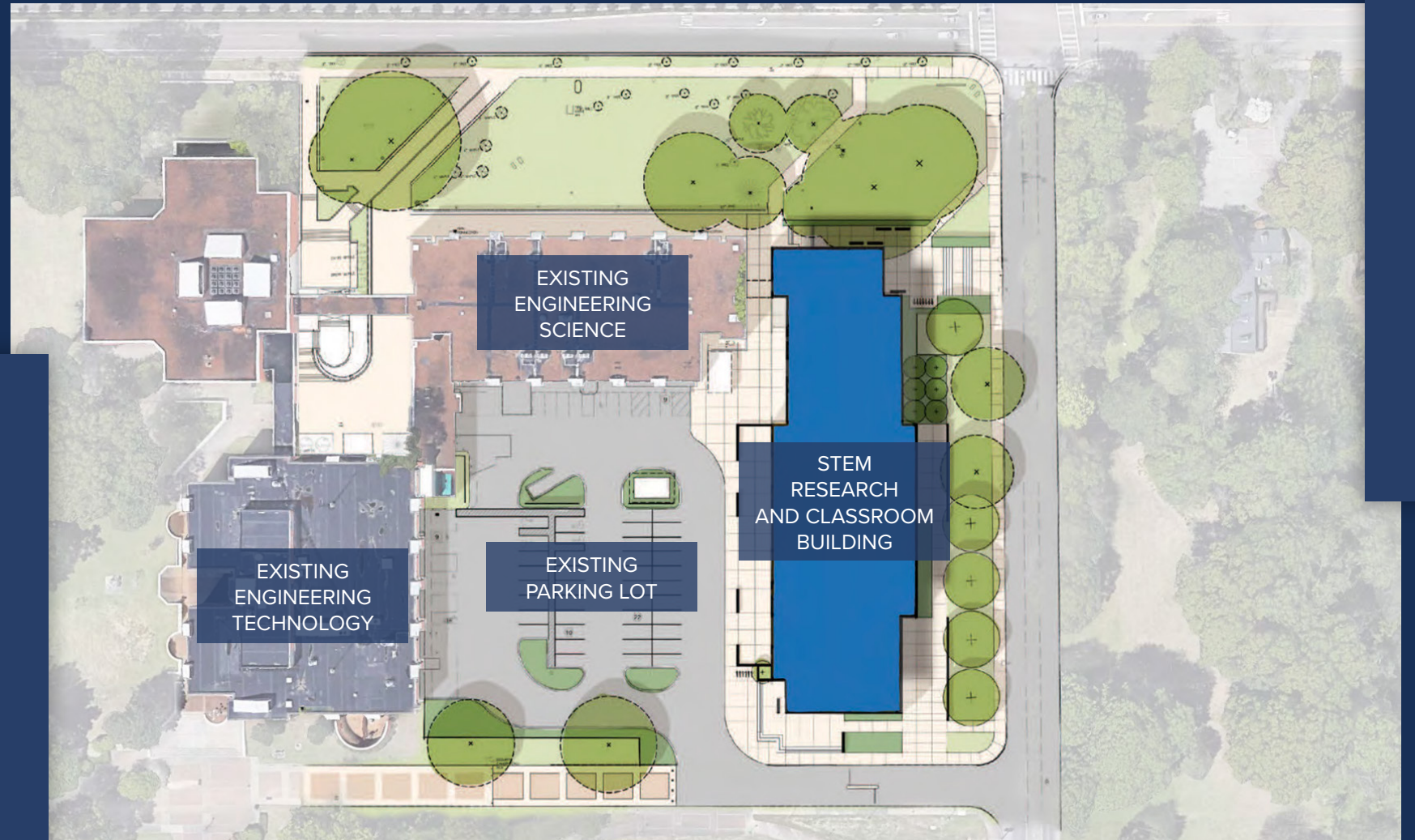
IMPACT

- FedEx's investment of \$500,000 for the STEM Research and Classroom Building (SRCB) will strengthen the University's ability to prepare the next generation of qualified graduates with extensive experience and valuable knowledge of STEM disciplines.
- The SRCB will support 22 STEM areas of study and multiple interdisciplinary research centers from the Herff College of Engineering and the College of Arts & Sciences.



STEM RESEARCH AND CLASSROOM BUILDING

CAMPUS MASTERPLAN SITE



STEM RESEARCH AND
CLASSROOM BUILDING

LEVEL 02 FLOOR PLAN



STEM RESEARCH AND CLASSROOM BUILDING

LEVEL 02 EXHIBITION VIEW





DIRECT SERVICES & IN-KIND SUPPORT

The University of Memphis is committed to collaborating with the Memphis corporate community in supporting a greater talent pool of students and employees with specialized skills that are both practical and transferable.

DIRECT SERVICES & IN-KIND SUPPORT

Program	6/1/19-5/31/20	6/1/20-9/31/21	Remaining Pledge Balance
FedEx-Funded EMBA and CDMBA Tuition for Employees	\$102,438	\$0	\$0
TOTAL:	\$102,438	\$0	\$0



STUDENT RECRUITMENT

The University of Memphis makes a concerted effort to connect FedEx with our outstanding diverse workforce pipeline of Tiger Talent. We appreciate the time and effort FedEx employees share when zooming into events, participating in virtual and in-person career fairs, spending time in classrooms, and working one-on-one with students. Together, we are building a stronger Memphis.

RECRUITMENT ACTIVITIES: BY THE NUMBERS

6

VIRTUAL CAREER FAIRS

- Including the Fall 2020 and Spring 2021 All Majors, Herff College of Engineering and Fogelman College of Business and Economics

89

POSTED POSITIONS

- Including 32 full-time, 54 internship and 3 co-op

28

FILLED POSITIONS

- Including 12 full-time, 16 internship

FEDEX INTERACTION & STUDENT ENGAGEMENT

ACCOUNTING DEPARTMENT

- Accounting Careers of Tomorrow: Samantha Morris
- Accounting 3000 course: Samantha Morris
- Department Advisory Board: John Merino
- Guest Lecturers: Frank Holloman and Robert King
- Beta Alpha Psi: Speaker: Samantha Morris

COMPUTER SCIENCE DEPARTMENT

- FedEx Express conducted a lunch-n-learn

ECONOMICS DEPARTMENT

- Department Advisory Board : Rene Bustamante

FINANCE DEPARTMENT

- Department Advisory Board: Jeffrey K. Smith

BIT/MIS DEPARTMENT:

- » Class Project Judges Panel: Chad Barton, Chris Murphy & Margaret Williams (all have volunteered for over a decade)
- » Guest Speaker: Chris Murphy
- » Liaison for Strategic IT and Project Management Class: Chad Barton
- » Project Mentors: Margaret Williams (volunteered for over a decade) Adenike (Nike) Adeoye, Trina Rogers

FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS

- College Advisory Board: Michelle Epps

HERFF COLLEGE OF ENGINEERING

- Resume Training Workshops: Chris Holliday

HUMAN RESOURCES DEPARTMENT

- Tori Black, featured course lecturer in the past
- Student Veterans in Business: Joshua Link - Internship Coordinator



DRIVEN BY PARTNERSHIP

