FAU
BOARD OF TRUSTEES
Florida Atlantic University

Item: III. f. i.

Friday, August 26, 2022

SUBJECT: APPROVAL OF FLORIDA ATLANTIC UNIVERSITY'S FISCAL YEAR 2023-2024 UNIVERSITIES OF DISTINCTION LEGISLATIVE BUDGET REQUEST

PROPOSED BOARD ACTION

Approval of the FAU 2023-24 Universities of Distinction Legislative Budget Request.

BACKGROUND INFORMATION

Each year, in anticipation of the upcoming state legislative session, State University System (SUS) institutions are required to submit their operational legislative budget requests (LBR) to the Board of Governors (BOG) for review. In August 2019, the BOG released a new framework that they would be utilizing to evaluate individual university LBRs and submit their systemwide legislative request to the Governor and Legislature for consideration. As they did in fy2022-23, the BOG will again be seeking legislative funding in three distinct categories – Performance Based Funding, Preeminent Universities, and a category entitled Universities of Distinction.

Senate Bill 72, which was signed by Governor DeSantis on June 29, 2020, formally established the Universities of Distinction and authorizes the Board of Governors to establish standards and measures whereby state universities focus on one core competency unique to the State University System institution. That core competency should achieve excellence at the national or state level, meet state workforce needs, and foster an innovation economy that focuses on areas such as health care, security, transportation, and science, technology, engineering, and mathematics (STEM), as well as supply chain management.

As was discussed and approved by this Board, FAU identified artificial intelligence and data-related sciences as its focus. Per the BOG's instructions, FAU submitted our University of Distinction LBR - *Applying Artificial Intelligence across the Community Health Continuum* to the BOG by the required due date of July 15, 2022. FAU's fy2023-24 LBR aligns with the University of Distinction program as well as with FAU's Accountability Plan and FAU's Strategic Plan for the Race to Excellence, 2015-2025.

In 2019, the BOG also implemented a requirement that an institution's Board of Trustees approve the LBR that is submitted to the BOG. This year, the BOG also has provided guidance that asks university

boards to ensure that LBRs are board approved prior to BOG meeting on September 13-14, 2022. Because of the late date of the Governor's approval of the General Appropriations Act (June 2, 2022), coupled with the BOG's July LBR due date, this is the first Board of Trustees meeting opportunity to seek approval of the university's fy2023-24 LBR.

IMPLEMENTATION PLAN/DATE

Upon approval by the BOT, staff will transmit the approval of the LBR to the BOG for their records.

FISCAL IMPLICATIONS

N/A

Supporting Documentation: FAU 2023-24 Universities of Distinction Legislative Budget Request - Applying Artificial Intelligence across the Community Health Continuum

Presented by: Mr. Ryan Britton, Executive Director of Government Relations **Phone:** 561-297-2583

State University System
Education and General
2023-2024 Legislative Budget Request
Form I

University(s):	**Florida Atlantic University**
Request Title:	**Applying Artificial Intelligence across the Community Health Continuum (University of Distinction)**
Date Request Approved by University Board of Trustees:	**September 19, 2022 (pending)**
Recurring Funds Requested:	**$23.8M**
Non-Recurring Funds Requested:	**$6.8M**
Total Funds Requested:	**$30.6M**
Please check the request type below:	
Shared Services/System-Wide Request	☐
Unique Request	☒

1.Purpose – *1. Describe the overall purpose of the plan, specific goal(s) and metrics, specific activities that will help achieve the goal(s), and how these goals and initiatives align with strategic priorities and the 2021 University Accountability Plan established by your institution (include whether this is a new or expanded service/program). If expanded, what has been accomplished with the current service/program?* 2. *Describe any projected impact on academic programs, student enrollments, and student services. University of Distinction proposals should also address the requirements outlined in the separate guidance document.*

Florida's demand for healthcare is continually growing even as the workforce supply is increasingly shrinking, and the competency "toolkit" needed to deliver care is constantly evolving. To address these challenges, Florida Atlantic University requests recurring and non-recurring funding via the *"Universities of Distinction"* program to support its growing focus on **Applying Artificial Intelligence across the Community Health Continuum.**

This legislative budget request aligns with FAU's longstanding strategic focus on health and community partnerships as noted in the Key Initiatives & Investments section outlining "student learning/support, growth in research and scholarly activity, and first-choice university" prominence on page 5 of the institution's *2021 Accountability Plan* and on page 5 of the institution's *2022 Accountability Plan*. Additionally, this request aligns with the 'community-based academic and research activities' articulated on page 9 of FAU's *Strategic Plan for the Race to Excellence, 2015-2025,* which prefaces FAU's commitment to "institutionalize a culture of collaborative and experiential engagement with community partners that recognizes and values the dynamic and reciprocal exchange of knowledge, ideas, and resources to identify community concerns, build consensus, implement resolution and evaluate success."

In accordance with the overarching goal of this program to move institutions towards preeminent status, our bold vision focuses on the rapidly-rising rankings of the Colleges of Medicine and Engineering/ Computer Science to leverage their complementary strengths with the dual goals of achieving even greater recognition for national excellence while making a sizable impact on the workforce supply and transforming care delivery to the most vulnerable members of our communities (i.e., aged, underserved). In alignment with the strategic goals of this program, our ambitious plan includes an innovative strategy to develop a workforce of the future to provide data-driven efficient care and improved access to healthcare in our community. Specifically, we will meet patients where they reside using AI and data driven applications that produce positive outcomes. To do this, we aim to 1) grow the number of providers trained based on the needs of our vision, 2) instill new core competencies, 3) build novel interprofessional teams, and 4) create a transformative community care model of personalized care outside the walls of traditional healthcare facilities (Table 1). In developing an investment strategy to achieve these goals, our purposeful intent is recruiting talented people and empowering them through data-driven processes, rather than investing in buildings, to provide the greatest return. Ultimately, our success in bringing transformational change to the community health delivery system in Florida is dependent on the additional funding made available through this request. This request is part of our larger initiative of FAU Health Network which transcends the competitive landscape with all partners in the healthcare space regionally to serve the 3.2 Million people in Broward, Palm Beach and Martin County.

"Universities of Distinction" Goals	**FAU's Goals**
Identifies a core competency unique to State University System and is poised to achieve excellence at the state/national level	Focuses on health sciences and AI to achieve excellence across the community health continuum at the state/national levels by: ✓ creating "Center for AI in Community Medicine" to form an innovative means of health care delivery ✓ targeting performance indicators; and ✓ improving state/national rankings
Focuses on a critical workforce need(s) in Florida	Addresses workforce shortages and changing needs in the healthcare industry by: ✓ increasing medical student class size and adding AI competency to curriculum ✓ expanding residency/fellowship programs, which reduce unnecessary hospital admissions or readmissions ✓ enhancing medical/graduate curricula to promote new core competencies required for 21st century practices
Fosters health/STEM economy in Florida	Transforms the community care model by: ✓ developing FAU Medicine as a model for data-driven care emphasizing mobile, pre- and post-hospital medicine

	✓ leveraging this model as a hands-on platform for interdisciplinary training ✓ harnessing innovation to improve accessibility, quality, and value of healthcare

1.1 Targeting AI in Medicine to achieve excellence in community health programs

The "Universities of Distinction" program provides funding to institutions progressing towards preeminent status. For this purpose, the Board of Governors sets criteria whereby the targeted university identifies a core competency unique to the State University System (SUS) institution that is poised to achieve excellence at the state or national level. As first approved in 2020, FAU selected AI and data analytics as a key focus. The university has made rapid progress to develop the required metrics and goals that will be leveraged to create a Center for AI in Healthcare to further propel the individual colleges and institution towards pre-eminent status. Healthcare worker shortages have reached a critical stage in Florida. The 2020 census revealed that the fastest growing states, including Florida, consistently rank lowest when it comes to health and healthcare. Specifically, Florida added 3 million residents and ranked 41st overall healthcare in 2020. Its residents have rising chronic disease burden and high levels of premature death from treatable conditions, while at the same time, lack access and affordability to healthcare systems. Due to the increased demand with the rising population and diminishing work force, the overall workforce shortage in healthcare in Florida is increasingly concerning. Active intervention is necessary to rethink how health care is delivered. *We propose using predictive analytics to determine which care can safely be administered outside of hospitals—in patients' homes and communities—to streamline processes which allow for the delivery of this optimized care, and to train the healthcare workforce of the future in interprofessional settings on data driven care.* To do this, we will leverage our existing strengths in our community focused college of medicine, coupled with our institutional strengths in business, data science and AI, and educational programs in health sciences.

1.1A Enhancing Institutional Excellence at National Level.

FAU Health Network. More than 3.2 million residents currently live in Broward, Palm Beach and Martin counties — collectively the largest metropolitan population in the state. As Florida's population continues to grow daily, so do its anticipated doctor, nursing and healthcare workforce shortages. In an effort to meet our area's growing healthcare needs, the launch of the FAU Health Network, the President of FAU, John Kelly, and the Chair of the FAU Board of Trustees Brad Levine announced the inception of FAU Health Network. The mission of this network is to transcend the competitive landscape through education and research collaborations between the regions' leading public and private academic and medical leaders. Internally, we have created FAU Health Network to maximize interactions between colleges at FAU, including nursing, medicine, engineering, science, education, business, social work and arts and letters to expand our ability to train the needed workforce in an interprofessional environment. Our regional partners in Palm Beach, Broward and Martin offer an outstanding opportunity for dynamic faculty and learner experiences, as well as provide connectivity to the local healthcare community, ensuring the recruitment and retention of our superbly skilled healthcare professionals. These

collaborative academic endeavors will allow for the innovative solutions necessary to tackle the workforce crisis. While patient care needs are paramount, expanding the region's health-related teaching and research endeavors are also vital in producing future "thought leaders" and driving the next wave of advances in medicine, all designed to meet the diverse needs of South Florida.

Strengths of College of Medicine. The Charles E. Schmidt College of Medicine (COM) is one of newest and rapidly rising medical schools from among 155 accredited medical in the U.S. With more than 90 full and part-time faculty and more than 1,300 affiliate faculty, the college matriculates 64 medical students each year and has been nationally recognized for its innovative educational and research programs. Specifically, the COM has received high marks for serving populations in need (#61), graduates practicing in rural areas (#85), and diversity of its trainees (#35) in the *2023 U.S. News and World Report*. This rise in ranking is driven by several achievements during the past five years, which include LCME re-accreditation for the full eight years, a stellar record of student success metrics, and a nearly 3-fold increase in external research funding. Collectively, these achievements attest to a growing record of excellence in medical and graduate education programs, which are continuously expanding to include dual degree programs (e.g., BS/MD, MD/MBA, MD/PhD) designed to meet regional and national workforce needs development. The "Genomics and Predictive Health" graduate certification has recently been launched. The COM, which currently receives nearly $30 million support from the National Institutes of Health (NIH), is seeking to transform the practice of medicine by engaging in cutting-edge research to optimize patient care. We will collaborate across colleges with existing AI and data science experts to model not only the data but also best practices for care delivery and cost savings. With this request, we seek to differentiate ourselves from other medical schools by providing an innovative, interprofessional education focused on delivery of personalized, data driven patient care at places where patients reside. Ultimately, this LBR support will enable us to increase recognition and achieve our aspirational goal of being ranked in the top 75 of all COMs.

As a medical school "of the community, for the community," the COM has also demonstrated a record of excellence in serving uninsured and underinsured populations in need by offering opportunities for students and residents in Caridad Clinic, Mission Clinic, and Boca Resident Clinic. Furthering this mission, our Emergency Medicine (EM) Department is collaborating with local constituents (Dr. Angus Jameson, Director of EM services for the state; Dr. Terry Cohen, Medical Director of Boca Fire Rescue; and Chief John Treanor, Director of EMS in Boca Raton) to improve care in pre-hospital medicine with a focus on addiction medicine, psychiatry, and physical medicine. Our team has gained access to national databases to determine the work needed for pre-hospital medicine and have experience in these studies as shown by their publication and funding record, including current funding in falls in the elderly causing head trauma. The proposed work would also build upon Ken Scheppke's work in Palm Beach County, prior to his ascension to Deputy Secretary for Health for the state, which redirected patients suffering from overdoses to addiction treatment centers instead of emergency rooms. Finally, we will work with the Colleges of Nursing, Social Work, Arts and Letters (Public Health Administration), Science (Exercise Science), Business (Healthcare Analytics), and Undergraduate/Honors colleges (Pre-Med Research Experiences, Epidemiology of Health Risk Factors) to ensure that these topics are being considered with all stakeholders and to determine

how to best ensure safety with these novel treatment paradigms and iteratively refine algorithms while monitoring outcomes.

Strengths of College of Engineering/Computer Science. The College of Engineering and Computer Science (COECS) is among the top three fastest improving engineering colleges in the nation, and is ranked 103 in computer engineering (up from 122 in 2022), 151 in electrical engineering (up from 155 in 2022), and 146 in computer science in the 2023 *U.S. News & World Report's* "Best Graduate Programs". This rise in rankings is due in large part to numerous achievements during the past four years, which include a 2.6-fold (164 percent) increase in external research funding, a 5.8-fold (480 percent) increase in student internships, and a 40 percent increase in M.S. and Ph.D. degrees awarded. Collectively, these accomplishments provide strong evidence for the robustness of the engineering programs, which are continuously progressing, evolving and ascending to align with national priorities for workforce development and whose graduates are being sought after by industry and government. Notably, the COECS is trailblazing a path in cutting-edge research and technologies focused on AI, data science, and machine learning, which is supported by the National Science Foundation (NSF), the National Institutes of Health (NIH), the United States Department of Defense, the U.S. Department of Transportation, the U.S. Department of Education, the state of Florida, and industry. This past year, the college launched the Center for Connected Autonomy and Artificial Intelligence (ca-ai.fau.edu), which has garnered already more than $9 million in basic research federal funding. Focusing on the intersection of mobility and public health solutions, the Center combines standard and accelerated programs with honors, pre-health, nursing, and engineering as well as innovative Transportation and Environmental Engineering Ph.D. that focuses on the intersection of mobility and public health solutions. Currently, COECS has 18 tenured and tenure track faculty in various fields related to healthcare technologies and AI, garnering nearly $15 million in healthcare related research funding from the NIH, NSF, DOD, and Industry. Altogether, these achievements highlight a college that is poised to become a top 100 engineering college in the nation within the next 1-2 years with the appropriate strategic investments.

Notably, the Center for Smart Health represents an initial collaboration between the COECS, COM, and College of Nursing toward improving healthcare through an interprofessional lens. Its goal is to facilitate the development of new high-quality and reliable patient-centered care technologies and informatics to improve care delivery and quality of life. The center will support interdisciplinary education and training for "jobs of the future"- careers at the intersection of technology with medicine, nursing, public health, and human biology.

Strengths of The College of Business. The College of Business is recognized for outstanding institutional performance with our Executive Education Professional development program ranked 11th in the US and first in Florida. It is nationally and internationally ranked in several key areas of business, particularly executive education, online education, entrepreneurship, and international business. Recently, the college was ranked 92 for their part-time MBA program (up from 115 in 2022), demonstrating FAU's commitment to serving working professionals and non-traditional students. The college has seven centers, and active partnerships with many local, national, and international companies. It is home to over 8,000 students, seven departments and an impressive offering of

interdisciplinary and professional development programs taught by the college's world-class faculty in analytics in five departments. The college strives to inspire students, faculty, and the regional business community to innovate and make fundamental and positive changes to the way business is conducted through various programs ranging from health economics to data analytics. Specifically, a Master of Science in Information Technology and Management (MSITM) is jointly offered by the Department of Information Technology and Operations Management (ITOM) in the College of Business and the Department of Computer Electrical Engineering and Computer Science (CEECS) in the College of Engineering and Computer Science. The program is designed for highly motivated individuals with a strong STEM and management background. College of Business also offers several programs for health administration, specifically, Master of Health Administration (MHA), Executive MHA, and Online MHA. The MHA Programs aims to transform students to become tomorrow's leaders in healthcare administration and ensure a well-rounded knowledge base relevant to the current business climate. Judy Monestime is an expert in the College and specifically researches management and adoption of electronic health records and ICD-10-CM. One of her notable works looked at different models reported in the literature, such as risk-prediction models to identify high-risk patients to ultimately reduce hospital readmission rates. In looking at FAU undergraduate cohort as a whole, 40% are Pell eligible and 64.2% of graduates are employed for more than $30,000 per year. Median wages at $41,500 among bachelor's graduates who are employed full time. Opportunities like the ones presented above would help raise the median wages, percentage of graduates earning $30K, and continue to improve SUS STEM metrics.

Strengths of Other Collaborating Colleges

The **College of Nursing (CON)** has similar contracts and relationships with community agencies across Palm Beach and Broward County. Of particular interest, the Memory and Wellness Center provides an adult day center (serving 40 to 80 clients daily), counseling, educational programs, and community outreach, while the Community Health Center provides care for the medically underserved who are challenged by low health literacy, no transportaton, distrust of the mainstream healthcare system, and in many cases inability to qualify for free or low cost health care. Both programs receive state and/or federal support to provide these services. In addition to these clinical services, CON faculty are engaged in several research studies totaling more than $5 million in funding that utilize sensor technology and AI such as in-vehicle sensors to detect cognitive change in older adults, a study of wearable sensor data to predict falls, and two other studies employing wearable sensors for congestive heart failure. Notably, the Master's in Nursing program ranked No. 54 (up from No. 56 in 2022) in the *2023 U.S. News & World Report.*

The **College of Social Work & Criminal Justice (COSWCJ)** houses academic, research, and service programs, including the Child Welfare Institute, the Healthy Aging Academy, the Office of Substance Use Disorder, Mental Health, and Recovery Research, and the Robin Rubin Center for Happiness and Life Enhancement. The Healthy Aging Academy works to bridge the gap between academic and research activity at FAU and community practitioners caring for the aging population. Additionally, more than 300 community agencies across 6 counties from Miami-Dade to Vero Beach have partnered with the College of Social Work & Criminal Justice to provide students with meaningful experience

and job readiness skills in their chosen field. In the *2023 U.S. News and World Report*, the college's social work program ranked No. 79 in the nation.

The **College of Arts and Letters (CAL)** focuses primarily on public health and consists of several schools including the School of Public Administration which offers programs about leadership and management in social, economic, political, local, national (and international) environments. The School of Interdisciplinary Studies offers a Master's in Data and Society. CAL is developing a new interdisciplinary Health Humanities Minor which will provide undergraduate students the opportunity to examine health, illness, and healing. Faculty in CAL are collaborating with the Memory and Wellness Center on a study related to caregiver support systems for older adults with Alzheimer's disease and are affiliate faculty in I-HEALTH. A partnership with the Gruber Sandbox and Susan Schneider's co-directing the AI lab has led the way to all sorts of ongoing research in areas like medical data privacy, AI and the future of work, the use of simulations for drug discovery, trust and transparency of AI systems, brain machine interfaces, core questions in biomedical ethics, and more. The CAL is excited to expand faculty to support the development of a concentration in the area of biomedical ethics and AI. The p*hilosophy branch similarly demonstrates expertise in through their Philosophy and Ethics of Science, Technology, AI and Biomedical Practice and raises awareness in the utility of AI, and just as important, educating future medical leaders about being conscientious consumers and users of these capacities.* In the *2023 U.S. News & World Report*, the college's Public Affairs program ranked No. 81 (up from No. 83 in 2022).

The **College of Science (COS)** offers several pipeline programs for the health professions. Specifically, the *Pre-Health Professions Office* is a source of support and guidance for all students, post-baccalaureates, and alumni interested in pursuing careers in the health professions. Last year the Pre-Health Office served over 5,000 students. In addition, 60 students completed the committee process, a comprehensive preparation program for admission to medical school and health professions graduate programs, and 46 of those were accepted into medical school for an approximately 77% acceptance rate.
Our pre-health advisors provide educational counseling tailored to meet the needs of each individual, creating meaningful relationships with our students. We work to create an environment full of academic excellence, strong relationships with students, faculty and staff; and learning opportunities through clinical experiences, community service, scientific inquiry and research as well as campus involvement. A "traditional" pre-health pathway is offered for freshmen and transfer students wanting to earn a bachelor's degree and apply to professional school. Students may select any major at FAU; however, due to restrictions in credit hours and the design of the new MCAT exam we recommend that students consider one of these degree programs: Neuroscience, Biology, Medical Biology, and Chemistry (Biochemistry). A post-baccalaureate medical pathway program is also offered for students that have already earned a bachelor's degree. FAU Bachelor's/MD Program at Florida Atlantic University is a collaborative effort between FAU's College of Medicine and the COS. This program is offered at the Boca Raton campus, enabling the two Colleges to create special opportunities for undergraduate students. Applicants should be high school seniors who demonstrate a strong interest in medicine, a high level of academic ability, a passion for service, and a commitment to volunteerism. Students admitted into this program will be guaranteed admission

to FAU's College of Medicine provided they maintain the required program standards. Each student works very closely with the program coordinator to develop an individual education plan and to ensure a smooth transition into the College of Medicine.

The **College of Education (COE)** offers unique interprofessional education (IPE) for first Year medical students (COM), nursing students (CON), and Master of Social Work Students (COSW-CJ) to learn effective collaboration to improve health outcomes under faculty facilitation. The College of Education also offers counselor education which includes mental health and prepares students for careers as licensed mental health counselors (LMHC). Speech pathology services are offered through the college.

Contribute to FAU's Ascent Towards Carnegie 1 Status. FAU opened its doors in 1961 as the fifth public university in Florida. Today, the University serves more than 30,000 undergraduate and graduate students across six campuses located along the southeast Florida coast. FAU remains committed to providing educational opportunities for all. Using big data and student-centered analytics, FAU provides achievement for students regardless of income, first-generation status, or race, allowing it to be among the top 3 universities in degree completion and ranked first as the most diverse public university in Florida. FAU achieved recent designation as a member of the Age-Friendly University (AFU) Global Network and was ranked 24th in the *College Consensus* "2022 Best Value Colleges and Universities." Through a well-developed network of partner campuses, FAU's annual economic impact is approximately $6.3 billion. The university has more than doubled its research expenditures, putting it on track for Carnegie 1 recognition. Complementary to its mission of research excellence, FAU partnered with three premier scientific research organizations: The Scripps Research Institute, the Torrey Pines Institute for Molecular Studies and the Max Planck Florida Institute for Neuroscience, as well as with the H. Lee Moffitt Cancer Research Institute and the Smithsonian Marine Station to enhance FAU's mission. Additionally, a number of pillars, institutes, and centers provide faculty and students with cutting-edge academic and research opportunities.

Through educational access and excellence, FAU embodies an innovative model where a culture of strategic and collaborative community engagement result in mutual benefit to the institution, and to the diverse internal and external communities it serves. As a designated Hispanic-serving institution, FAU is ranked as a top public university by U.S. News & World Report and a *High Research Activity or a Carnegie II* institution by the Carnegie Foundation for the Advancement of Teaching. To attain Carnegie "R1" status, the university has recently made strategic adjustments and investments into areas critical to its research status. These investments support an increase in research staff and postdoctoral fellows, with a Postdoctoral Affairs Office now supporting such efforts. These initiatives have set FAU on the "Road to R1", with the expectation to reach it in by 2025. Such status will improve student and faculty hiring, our resources and establish our reputation among the nation's research institutions. A sustainability plan further improves investments into doctorate students, research infrastructure and research staff to maintain this status, once achieved.

1.1B <u>Creating "Center for AI in Community Medicine" to Harness the Power of Data Analytics and Innovative Technologies in Healthcare Delivery</u>

Rapid advances in generating and acquiring data have far outpaced the current capabilities in extracting knowledge and making meaningful interpretations that can

translate into new discoveries and practical applications. Perhaps, nowhere is this true than in the field of healthcare where digital data is doubling at a rate of every 76 days. Given the increasing variety, volume, and velocity of data, data science will become the cornerstone of 21st century medicine and science. As first articulated in its "Strategic Plan for the Race to Excellence" FAU has invested heavily in building an infrastructure for "Big Data Analytics" that has enjoyed wide stakeholder buy-in and impressive track record of success. In its current structure, more than 80 faculty are engaged in the data analytics initiatives that are siloed. With this new funding allocation, we will establish a "Center for AI in Community Medicine" to serve as a catalyst for larger institutional change by bringing together data experts and health scientists across colleges, departments, and pillars to become a leader in data-driven improvements in healthcare for our communities. Altogether, this investment will offer substantial benefits in terms of continuing accreditation, improving national rankings, ascending to Carnegie I status, and fulfilling our commitment to the vision *"Of the Community, For the Community"*.

The Center will bridge our growing national reputations in health sciences, AI/data science and business to optimize the health of both individuals and communities. The organizational structure is designed to create a cross-disciplinary process to accelerate medical discovery and clinical implementation. Critical to the success of this endeavor are the strategic investments in the following essential areas:

- ***Leadership***. Broad-based leadership of people with growth mindsets and strong reputations. The Executive Committee will include two co-executive directors and highly regarded faculty members spanning all colleges. This core team will meet biweekly with documented standard operating procedures and conflict resolution plans.

- **Intellectual Investment.** To provide strong guidance, the first priority will be to hire established leader and cluster of 3 faculty with deep expertise in AI, data science methodologies, and community health to pave the way through teaching and research. The scope will span a broad range of domains: predictive analytics and patient risk stratification, patient monitoring, personalized disease diagnostics and treatments, enhanced clinical workflows, and integrated approaches to pre-hospital management and optimization. Unlike investments in facilities and tools, multiple studies have consistently shown that a similar investment in educational attainment of the workforce produces a comparable return on investment through a direct and linear increase in productivity. To augment and expand breadth of our full-time faculty, we will buy out fractional effort of faculty from other colleges that have specialized expertise and devote efforts towards team-based teaching and research. These partially funded positions are valuable in building a data science community, evolving in responses to needs, and broadening impact across campus. Finally, the center will be staffed by PhD or MD-educated scientists (Data Scientists) and/or master's level staff (Data Analysts) with deep knowledge of data science methodology (one or more of data management, machine learning, causal inference, data visualization, cloud computing, and an application domain (list clinical applications). Working across disciplines, these individuals will provide critical expertise and support to faculty and trainees in the tools, methodologies, and applications necessary for successful collaborations.

- ***Dedicated Space***. The plan envisions space in FAU Tech Runway on the Boca Raton campus to serve as a hub for data and health sciences educational programing, transdisciplinary research activities, a place for our clinicians

delivering care to our communities, and a venue for commercial collaborations. Identifying dedicated space outside traditional academic units is essential for informal interactions and exchange of information that leads to innovation and collaboration. The ideal space includes dedicated workspace for permanent staff, drop-in rooms for collaborative discussions and office hours, and larger space for community-oriented events.

4.1 Space for new medical student expansion 37,230 gross square feet
4.2 Space for Mobile Medicine 25,000 gross square feet
4.3 Space for new Center for AI in Medicine 4800 gross square feet

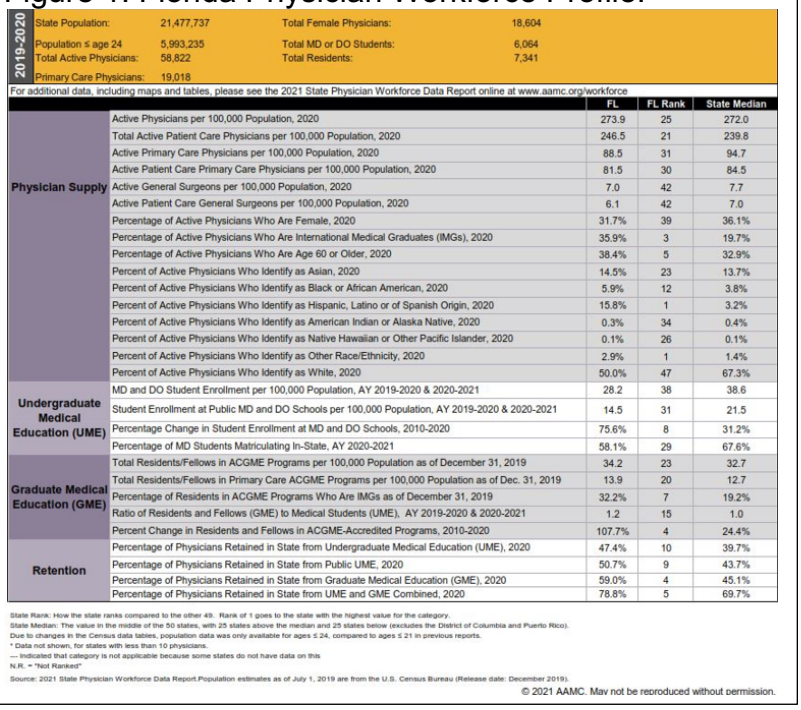
	Facility Project Title	Fiscal Year	Amount Requested	Priority Number
1.	Space for new medical student/resident/graduate student expansion (37,230 sq ft lease)		$1,858,770	
2.	Space for Mobile Medicine (25,000 sq ft lease)		$ 925,000	
3.	Space for new Center for AI in Medicine (4,800 sg ft of leased space)		$ 177,600	

- ***Hub for Academic-Business Partnerships in digital health*** Located in FAU Tech runway, the "Center for AI in Community Medicine" will offer a nurturing ecosystem to support entrepreneurship in digital health in South Florida by providing a collaborative space in which data, content, and business experts can come together to accelerate the path from discovery to clinical implementation. A public-private partnership, Tech Runway includes a collaborative working space providing innovators with room to transform and grow their ventures from ideation to the scaling stage. This shared, community-driven location offers access to established and reputable businesses and service providers, who directly contribute to the entrepreneurial network. Tech Runway also works with forward-thinking philanthropic individuals and organizations that can catapult a company, its ideas and entrepreneurs to the next level of success, showcasing the region as a center of innovation.

These academic-business partnerships will provide real life training for our undergraduate, graduate, and health profession students in emerging field of digital health to align with the workforce. Growth in the technology sector, in general, is a clear priority for the State of Florida. More specifically, the Council of 100's Project Sunrise refers to the need to focus on "Information and Technology" as an occupational area that is primed for growth. Furthermore, the report details Florida's gaps in terms of technological infrastructure. This AI/Data proposal would attend to both recommendations. In addition, the Florida Chamber of Commerce's Florida 2030: The Blueprint to Secure Florida's Future talks about the need to "introduce and develop Internet of Things, artificial intelligence, and other emerging technology within state, regional, and local infrastructure" (p. 9). Finally, as a Hispanic serving institution, there is a unique opportunity to contribute to a diversified workforce where roughly only 20% of workers in the AI and data sciences field are black or of Hispanic origin.

Finally, these alliances will serve as a hub to foster entrepreneurship in the digital health revolution. Market trends expect advanced wearable technologies, smart home and health sensors, and powerful analytics platforms to generate more than $120 billion in the current year. Bringing together the “Center for AI in Community Medicine”, the newly launched “Center for SMART Health”, and community partners in South Florida will enable state-of-the-art patient-centered and community-based health care. Affecting providers, patients, and insurers alike, this digital health care revolution will require deploying data-driven strategies which will in turn foster regional economic growth.

Figure 1. Florida Physician Workforce Profile.



2019-2020

State Population:	21,477,737	Total Female Physicians:	18,604	
Population ≤ age 24	5,993,235	Total MD or DO Students:	6,064	
Total Active Physicians:	58,822	Total Residents:	7,341	
Primary Care Physicians:	19,018			

For additional data, including maps and tables, please see the 2021 State Physician Workforce Data Report online at www.aamc.org/workforce

		FL	FL Rank	State Median
Physician Supply	Active Physicians per 100,000 Population, 2020	273.9	25	272.0
	Total Active Patient Care Physicians per 100,000 Population, 2020	246.5	21	239.8
	Active Primary Care Physicians per 100,000 Population, 2020	88.5	31	94.7
	Active Patient Care Primary Care Physicians per 100,000 Population, 2020	81.5	30	84.5
	Active General Surgeons per 100,000 Population, 2020	7.0	42	7.7
	Active Patient Care General Surgeons per 100,000 Population, 2020	6.1	42	7.0
	Percentage of Active Physicians Who Are Female, 2020	31.7%	39	36.1%
	Percentage of Active Physicians Who Are International Medical Graduates (IMGs), 2020	35.9%	3	19.7%
	Percentage of Active Physicians Who Are Age 60 or Older, 2020	38.4%	5	32.9%
	Percent of Active Physicians Who Identify as Asian, 2020	14.5%	23	13.7%
	Percent of Active Physicians Who Identify as Black or African American, 2020	5.9%	12	3.8%
	Percent of Active Physicians Who Identify as Hispanic, Latino or of Spanish Origin, 2020	15.8%	1	3.2%
	Percent of Active Physicians Who Identify as American Indian or Alaska Native, 2020	0.3%	34	0.4%
	Percent of Active Physicians Who Identify as Native Hawaiian or Other Pacific Islander, 2020	0.1%	26	0.1%
	Percent of Active Physicians Who Identify as Other Race/Ethnicity, 2020	2.9%	1	1.4%
	Percent of Active Physicians Who Identify as White, 2020	50.0%	47	67.3%
Undergraduate Medical Education (UME)	MD and DO Student Enrollment per 100,000 Population, AY 2019-2020 & 2020-2021	28.2	38	38.6
	Student Enrollment at Public MD and DO Schools per 100,000 Population, AY 2019-2020 & 2020-2021	14.5	31	21.5
	Percentage Change in Student Enrollment at MD and DO Schools, 2010-2020	75.6%	8	31.2%
	Percentage of MD Students Matriculating In-State, AY 2020-2021	58.1%	29	67.6%
Graduate Medical Education (GME)	Total Residents/Fellows in ACGME Programs per 100,000 Population as of December 31, 2019	34.2	23	32.7
	Total Residents/Fellows in Primary Care ACGME Programs per 100,000 Population as of Dec. 31, 2019	13.9	20	12.7
	Percentage of Residents in ACGME Programs Who Are IMGs as of December 31, 2019	32.2%	7	19.2%
	Ratio of Residents and Fellows (GME) to Medical Students (UME), AY 2019-2020 & 2020-2021	1.2	15	1.0
	Percent Change in Residents and Fellows in ACGME-Accredited Programs, 2010-2020	107.7%	4	24.4%
Retention	Percentage of Physicians Retained in State from Undergraduate Medical Education (UME), 2020	47.4%	10	39.7%
	Percentage of Physicians Retained in State from Public UME, 2020	50.7%	9	43.7%
	Percentage of Physicians Retained in State from Graduate Medical Education (GME), 2020	59.0%	4	45.1%
	Percentage of Physicians Retained in State from UME and GME Combined, 2020	78.8%	5	69.7%

State Rank: How the state ranks compared to the other 49. Rank of 1 goes to the state with the highest value for the category.
State Median: The value in the middle of the 50 states, with 25 states above the median and 25 states below (excludes the District of Columbia and Puerto Rico).
Due to changes in the Census data tables, population data was only available for ages ≤ 24, compared to ages ≤ 21 in previous reports.
* Data not shown, for states with less than 10 physicians.
--- Indicated that category is not applicable because some states do not have data on this
N.R. = "Not Ranked"
Source: 2021 State Physician Workforce Data Report,Population estimates as of July 1, 2019 are from the U.S. Census Bureau (Release date: December 2019).

1.2 Addresses critical workforce shortages and changing needs in the healthcare industry In 2021, Florida had a total of 58,822 physicians at a rate of 273.9 physicians per 100,000 people, which was slightly over the median of states nationally (Figure 1). Florida is ranked 31/50 for primary care physicians with a rate of 88.5 physicians per 100,000 people and ranked 42/50 for general surgeons with a rate of 7 surgeons per 100,000 people (Figure 1)[2, 3]. Interestingly, only 13.1% of physicians in Florida are 39 years old or younger, whereas 38.4% are 60 and older[2]. Thus, the workforce shortage will likely be exacerbated by a high retirement rate and low incoming rate of new physicians. Taking a further look at medical education rates, Florida ranks 38th out of 50 for undergraduate medical education (UME) student enrollment with an enrollment rate of 28.2 per 100,000 people. Despite the lower enrollment rate, 58% of enrollments consist of Florida residents suggesting a high retention rate. Additionally, Florida has a higher rate of residents and fellows in graduate medical education (GME) programs, suggesting that while more students seek UME in other states, students come to Florida for higher level training. About 47% of physicians trained in Florida remain and are active physicians, of these 50.7% came from medical schools and 59% came from residency and fellowship programs (Figure 1).

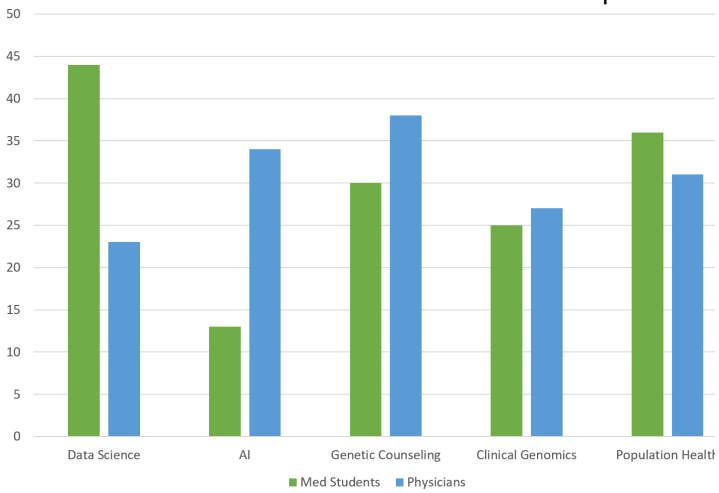
As an integral part of our community, FAU’s COM has made valuable contributions to the physician workforce that has dynamically impacted and diversified the care of our communities. In recent graduating classes as many as 50% of our women and 30% or our historically under-represented medical students remained in Florida for their residency and fellowship training. Even more compelling an average of 50% of our graduated residents and fellows stay on to practice in our state. As our state’s population grows, the COM’s strong track record of training physicians that remain in Florida aligns with the charge to Florida’s medical schools to grow our physician workforce. Without high quality healthcare and access to healthcare, the well-being of our community will

suffer. Over the next five years, we will further innovate the curriculum by incorporating new core competencies required for 21st century healthcare aim and train increased numbers of medical students and residents/fellows with these skill sets. To reach that goal, we will rely on strategic investments made possible through this LBR funding.

1.2A <u>Enhancing medical and graduate curricula to promote requisite knowledge and skills in AI and medicine to practice and advance science in 21st century.</u>

From the beginning, COM has offered an integrative curriculum combining "high tech, high touch" to produce highly competent, humanistic doctors. At the same time, we recognize firsthand how digital data is revolutionizing our understanding of patient and population health that has the potential to solve critical challenges to healthcare delivery. Due to the rapid expansion of AI, big data, remote monitoring, geocoding, social networking, and an increasing array of health apps, there is a compelling need to "reboot" medical education and residency training. The recognition that future doctors must become experts in skills that are not currently emphasized in medical training identifies a critical need to re-design medical education to better prepare doctors to practice 21st century medicine. Specifically, this LBR proposes to develop a future "physician and scientist toolkit", by leveraging existing academic programs and strategically expanding faculty efforts to develop a transdisciplinary curriculum for medical/graduate students, residents, and other health providers.

Figure 2. Florida Physicians' Toolkit.
Source: Stanford Medicine 2020 Health Trends Report.



As revealed by a recent national survey of medical students, residents, and doctors, there are high levels of interest but low levels of readiness to implement the technologies projected to have the most transformative potential for health care. Notably, 73% of medical students/residents and 47% of doctors reported the need for additional training to better prepare themselves for emerging innovations. These survey data further revealed the top five areas that need to be most urgently addressed, notably AI and data science; genomics, genetic counseling, and precision medicine; and population health (Fig. 2).

Through strategic investment made possible by this LBR, we propose to launch new academic programs in "Predictive, Precision, and Population Health" as one of the few in the country that is specifically designed to address these five competency requirements for future doctors and biomedical scientists. Predictive models can address population health initiatives by identifying the most vulnerable patients and providing personalized solutions to maximize the quality, efficiency, and effectiveness of health care.Such models leverage multiple information sources, data driven technologies, and evidence-based interventions, but their successful implementation depends on a workforce with the requisite education and training to drive the questions and provide actionable recommendations.

Building upon COM's newly launched "Genomics and Predictive Health" graduate certificate for medical, master's and Ph.D. students, we will integrate AI and predictive analytics in community medicine into our innovative interprofessional curriculum and develop a doctoral program in "Predictive Community Health." The promise of predictive health derives from the recent explosion in "big data" which reflects the variety and volume of information that is now collected as part of routine patient care. By analyzing the past trends and patterns in the data, new causes for common diseases can be identified along with targeted treatments for individual patients. And, by leveraging the power of AI and machine learning, new ways of predicting, preventing, and managing diseases are now possible. At the time of its inception, this certificate was one of only two such programs offered within the State University System. While housed within the College of Medicine, the certificate leverages an interdisciplinary group of faculty throughout the university who contribute to its success. Recognizing the lack of understanding of health providers and researchers is a major barrier to the implementation of a more proactive and personalized approach to population health, both medical and graduate students will have the opportunity to train in this emerging field through completion of an integrated set of genomics and predictive health courses. Moving forward, advanced degrees will further expand the programming to include additional coursework and practical experiences in data science, clinical investigation, and health systems implementation that will be integrated into the medical and graduate curricula as described below.

Undergraduate/Graduate Medical Education. Doctors and trainees alike show high interest to better understand how to apply AI in their practice. At the same time, they must also be able to shape how AI will play roles in the patient-doctor relationship, clinical decision-making, practice management and workflow. Instilling a foundation in AI and data literacy will be a critical skill for future physicians to accommodate such roles going forward. Accordingly, AI an*d* data science content will be integrated into the MD curriculum by layering content onto the existing foundational and clinical science courses, problem-based learning (PBL) patient case scenarios and providing medical students with the opportunity to conduct scholarly/research projects utilizing large, de-identified clinical database to ask real world questions. Further the *2019 National Human Genomic Research Institute (NHGRI) Training Task Force Report* cites a growing need for tailored curriculum development for doctors that develops the requisite genomic competencies that will become part and parcel of personalized medicine and patient care. Likewise, the *NHGRI Genomic Literacy, Education, and Engagement Initiative* reports similar shortages of other genomics competent health providers (e.g., counselors, nurses). Future generation of scientists will also need a solid grounding in AI, data analytics, and omics-based approaches to teach future generations of medical students and conduct patient-centered research. To this end, the LBR proposes to reimagine medical education by incorporating a "big data" literacy component necessary for all our health science students to inform clinical decision making.

1.2B <u>Increasing medical student class size</u>.

In 2020, COM earned full LCME re-accreditation for the maximal window of 8 years, a particularly impressive feat for a new medical school. The feedback received from the

accrediting body reported several notable strengths, including our "high tech, high touch" curriculum and the valuable contributions of our graduates who return to practice medicine in South Florida. Our medical education program has received accolades for its early engagement of trainees in community-based clinical settings and interacting in small group sessions that instill problem-solving, critical thinking, and collaborative learning skills that are essential for doctors practicing today. Despite the many strengths, COM has experienced a flat budget for over ten years with increasingly challenging inflationary pressures. The school has continued to innovate and produce a small cadre of well-trained graduates. Moreover, attesting to demand, this past year saw the highest ever number of applications with nearly 100 applicants for each spot in our medical school class. With the next accreditation cycle several years away, we believe now is the perfect time to invest the resources into growing the class size and redesigning the curriculum to better prepare doctors to practice 21st century medicine. Through strategic investments from this LBR, the necessary expansion of key faculty and space will ensure our continuing success in performance metrics and LCME accreditation.

	Current Enrollment	Future Years - Increased Numbers Dependent on LBR Funding						
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
M1	67	72	83	94	104	104	104	104
M2	64	67	72	83	94	104	104	104
M3	64	64	67	72	83	94	104	104
M4	64	64	64	67	72	83	94	104
Total Students	259	267	286	316	353	385	406	416

Accordingly, COM will expand the number of high quality, well trained medical students graduating from our program to meet the needs of a rapidly expanding and aging population of Florida and healthcare workforce shortages. The current program encompasses 259 medical students with projected growth to 416 trainees over the next eight years. These students will not only aid in resolving our workforce needs in the state, but will also be educated with this new curriculum to provide data driven efficient healthcare in our communities. Given our retention rates to date, this could provide a near doubling of new doctors in our Florida communities beginning in FY 2028-29. Of these, one third are expected to go into primary care.

1.2C <u>Expanding breadth of residency and fellowship programs.</u>

The College of Medicine's Consortium for Graduate Medical Education (GME) was formed with five leading hospitals in Palm Beach County and with five Accreditation Council for Graduate Medical Education (ACGME) accredited residencies including internal medicine, surgery, emergency medicine (EM), psychiatry, and neurology and four fellowship programs including Hospice and Palliative Care, Cardiovascular Disease, Vascular Surgery, and Geriatrics. The current programs include 177 residents and fellows with a plan to increase by another 25% with strategic investment from this LBR. To ensure that we are able to actualize our plan in community health AI and to further FAU's commitment to increase much needed medical residency positions in Palm Beach County, as part of this LBR funding request, the GME programs will be expanded to increase the supply of specialty and subspecialty trained physicians to meet the growing

demand for a workforce with increasing knowledge of and ability to care for complex patients including in the out-of-hospital setting. LBR funding will allow for trainee and student stipend and successful recruitment of faculty to lead these efforts. Specifically, we will expand our EM residency and offer EM based fellowships. We will also fund residency and fellowship opportunities that our focus groups have are considered integral in pre- and post-hospital care. Specifically, we will recruit addiction psychiatry and pain management fellows and faculty to lead these fellowships. Further in light of impact of mobility issues in our patient population, we will initiate a physical medicine and rehabilitation (PMR) residency. The College of Science currently offers an exercise science and health promotion which includes several tracks of study like exercise physiology, health promotion, and strength and conditioning. With help from the College of Science, we will integrate similar tracks into the PMR residency program. Additionally, each fellowship program will graduate 1-3 fellows per year, who will be prepared to enter the workforce locally. Currently, 50% of our residents/fellows remain in Florida.

Emergency Medicine Residents/Fellows

The EM residency program will be expanded from 6 to 8 residents per year to provide added workforce in community paramedicine and to provide a stream of physicians for our proposed fellowship programs. This year, there was a substantial reduction nationally of students pursuing emergency medicine likely due to the ramifications of the pandemic with an unprecedented 217 open positions at the end of Match week. Florida was one of the states with the most unfilled positions. In contrast the strength of our program was evident by a full complement of residents and over 10% of our medical school graduates pursuing a career in the field. To build upon this strength, EM based fellowships are necessary to attract the best and the brightest. The LBR will allow for creation of these opportunities in the areas of emergency medical services, clinical informatics, and simulation. Additional faculty will be recruited to mentor and supervise these residents and fellows. Our community health program will provide care through FAU Medicine Mobile Health, vans that work with EMS and 911 services to provide care. The additional residents, fellows and faculty will be integral to patient care. Fellowships are described as below:

Emergency Medical Services (EMS) Fellowship. The EM residency program will be expanded to provide a pipeline into a new *EMS fellowship program*, which will be designed specifically to train emergency medicine physicians to develop expertise in prehospital medicine. EMS-trained physicians elevate prehospital care by bringing evidence-based medicine and data-driven decisions to care mostly provided by EMTs and paramedics. Additionally, EMS physicians oversee the emergency dispatch process, whereby decisions are made about which 911 calls need which resources. The EMS fellow will work closely with the medical directors of local EMS agencies across Palm Beach County, Broward County, and Martin County. The fellow will also practice as a physician within the FAU Medicine Mobile Health (see below). Two of our existing faculty including the Chair of EM are EMS fellowship trained, an important distinction as only 37 physicians in Florida are similarly trained.

Clinical Informatics Fellowship. The development of this program will train EM physicians to use their clinical skills in combination with informatics concepts, methods, and tools to improve pre-hospital and post-ED healthcare. Fellows will learn to assess information and knowledge-based needs of healthcare professionals and patients, and then using this to evaluate and refine the clinical processes. The fellow will work with FAU Medicine Mobile Health to make data-driven decisions regarding patient care.

Simulation Fellowship. The creation of this program will expand and enhance the capabilities of the existing FAU Simulation Center for interprofessional education. Enhancing traditional healthcare education with simulation allows for safe and structured fostering of medical knowledge, as well as the development of procedural skills, communication, and teamwork. Using data analytics, the simulation fellowship curriculum will identify areas in all healthcare professions, including medicine, nursing, and paramedicine, which would benefit from increased education in the aforementioned areas. The workforce output will be not only fellowship-trained physicians, but also the health sciences students and professionals who rotate through the Simulation Center to obtain their profession-specific skills.

Pre- and post-hospital care residents/fellows

These residents and fellows will also be a part of the FAU Medicine Mobile Health team in addition to more traditional clinic and inpatient roles.

Addiction Psychiatry Fellowship. This program would bring a lot of value to our community in Florida given the ongoing opioid crisis within our state amidst the national epidemic and the recognition that there is a lack of resources to adequately treat patients with substance use disorders. This fellowship will be the first step in a process of building a framework to properly treat and refer these patients for continued care. It will also serve to attract subject matter specialists in the fields of addiction psychiatry and addiction medicine to serve as faculty, work clinically, and synergize with our ongoing research initiatives. We have an existing psychiatry residency program and faculty trained in addiction medicine.

Pain Medicine Fellowship. This program will focus on how to best care for patients with acute and chronic pain, including prevention of opioid addiction cycle. The fellow will learn the medical, interventional, physical, and behavioral aspects of pain medicine. We have an existing neurology residency program and faculty trained in pain medicine.

Physical Medicine & Rehabilitation (PM&R) Residency training program. Physiatry plays an important role in the post-acute care (PAC) to promote the functional recovery of older adults, such as the growing demographics of Florida, prevent unnecessary hospital readmissions, and avoid premature admission to long-term care facilities. It is one of the newer subspecialty areas of medicine that focuses on functional independence and quality of life.

Proposed increases in GME Programs

	Current		Future Years - Increased Numbers Dependent on LBR Funding			
Program	FY23	FY24	FY25	FY26	FY27	FY28
Emergency Medicine Residents	18	18	20	22	24	24
Emergency Medicine Related Fellowships			3	3	3	3
Physical Medicine & Rehabilitation Residents			3	6	9	12
Addiction and Pain Management Fellowships			2	2	2	2
Total Residents/Fellows	18	18	28	33	38	41

1.2 Transforming the community care model to foster an innovation economy

The "Universities of Distinction" program will come full circle by providing the necessary funds to foster an innovation economy in healthcare. As one of fastest growing states in the nation, Florida ranks 41st in healthcare delivery (https://www.census.gov/programs-surveys/decennial-census/decade/2020/2020-census-results.html), which represents both a major drain and a large barrier to economic growth. Notably, this creates an opportunity for FAU to lead the charge in South Florida to launch a "Center for AI and Community Medicine" which will become a talent hub and attraction for businesses and employers interested in joining the digital health revolution in Palm Beach and surrounding counties. And, driving the digital healthcare sector can further diversify Florida's economy which was hard hit by the pandemic through lost tourism. Finally, the proposed expansion of FAU Medicine into the mobile/prehospital medicine arena will transform the community care model by reducing unnecessary hospital admissions and readmissions, which in part are responsible for unnecessary healthcare expenditures. Further FAU Medicine Mobile Health may limit the fragmented care that is a major barrier to higher quality and lower cost care. As these interventions are based on healthcare data analytics, we aim to educate the healthcare workforce of tomorrow in these techniques as well as healthcare. The lack of professionals with data analytics training and critical thinking skills are the biggest barrier to adoption of AI and predictive analytics in healthcare Altogether, this LBR will provide needed resources for AI and data science academic programs to engage and enhance training of health professional workforces necessary to realize promise of 21st century medicine by investing in key faculty hires, graduate student stipends, and workforce development with substantial returns on investment, including a growing body of literature showing a strong relationship between information exchange systems and improved health outcomes, quality outcomes and provider/patient satisfaction[7], which are all major generators of revenue over time.

1.3A By developing FAU Medicine Mobile Health as a model for team-based and data-driven care with emphasis on mobile/prehospital medicine. In the current healthcare model, fragmentation of care represents a major impediment and highlights the overriding need for better coordination, in-home monitoring, and care management across the spectrum. Key to developing this futuristic model is bringing together interdisciplinary teams capable of leveraging new technologies and deploying data driven strategies to deliver more personalized care and attenuating issues before they lead to hospitalization. This transformation in the care continuum is seen as the next step in dramatically improving essential healthcare in our region. As a first step, we propose to utilize the strengths of the existing Emergency Medicine program to develop and pilot the application of data driven approaches in the field of mobile health and prehospital medicine. Working with psychiatry, physical medicine and rehabilitation and geriatrics will broaden the scope with existing strengths. Our accrediting bodies have noted the strength of our geriatrics student experience and fellowship program. The interface between emergency services and geriatrics at FAU has already resulted in a number of publications and grants. With a nationally recognized, interdisciplinary team in chronic pain and substance use disorders led by Dean Julie Pilitsis, the fundamental building blocks for our vision are in place.

Mobile Health /Prehospital Medicine

Mobile medicine or Mobile Integrated Healthcare (MIH) allows for patient-centered, innovative delivery of needs-based care in the patient's home or mobile environment. MIH offers a novel and emerging approach to coordinating care, reducing unnecessary

medical spending, and improving quality. For South Palm Beach County, this fills a need that is not being captured, made increasingly evident throughout the pandemic. Many of the citizens are elderly with complex medical conditions were hospital visits and admissions are more problematic than helpful and thus should be reserved for cases where the patient truly needs this level of care. Studies suggest that approximately 15% of all Medicare beneficiaries transported to the emergency department (ED) by emergency medical services (EMS) were either nonemergent or emergent and primary care treatable, costing approximately $1 billion per year. Additionally, unplanned rehospitalizations cost Medicare $26 billion annually, with an estimated $17 billion spent on potentially avoidable readmissions. Emergency, urgent, or unplanned care also is often disconnected from the patient's ongoing health care management, resulting in additional financial burden related to duplicate testing, an increase in the risk of medical errors, and a lack of communication and coordination between care teams and settings. MIH interventions have the potential to close some of these gaps while decreasing cost and improving patient experience.

The practice will initially serve the City of Boca Raton, with a population of 101,000. As demand for the services increase, the program will also be available throughout Palm Beach County, with a population of 1.5 million. Specifically, we will work with Boca Raton EMS and Fire to determine how to best utilize our 911 triage system and EMS response team. Experts in FAU College of Business will aid in data-driven models to inform best practices for triage and ultimately for care that can be delivered at home or in the mobile environment. Previous literature has shown efficacy when using decision tree modeling structure for diagnostics. Due to nature of our mobile health care, diagnosis will be crucial to inform next steps, however, we will not have a fully equipped emergency room. Such models can be applied to our system to effectively diagnose patients using cost-effective and efficient methods. Additional health economic model software has been created by Daniel Pollard and Gordon Fuller to assess major trauma triage. This software can serve as a foundation as we create our model to better fit our needs. Healthcare economics models will be created using the expertise of Paul Sergius Koku and Sharmila Vishwasrao, with the help of Ravi Behara, a specialist on AI in healthcare.

The FAU Medicine Mobile Health team will be overseen and led by physicians and additionally composed of registered nurses, paramedics, EMTs, nurse practitioners, physician assistants, social workers, and students of all disciplines. With physician oversight, the team will provide direct and virtual care of patients, including evaluation of acute and chronic medical and psychosocial complaints. Teams will perform screening exams to determine patient acuity and triage patients to appropriate settings. Services provided by the team will include acute home health visits, performance of minor procedures, medication reconciliation, home/living condition evaluations, psychological crisis stabilization, psychosocial need evaluations, and child/family services. Telehealth will be utilized as needed. FAU College of Nursing and Social Work are fully supportive of this initiative and planning sessions with Deans George, Luna and Pilitsis are underway.

Ultimately, FAU Medicine Mobile Health will act as a liaison between EMS agencies, our hospital partners, and additional community resources in providing prehospital care outside of emergency response. The practice will intervene when requested for both patients seeking healthcare for problems not warranting acute hospitalization, as well as patients who may need assistance with chronic diseases in the prevention of hospitalization. The practice will engage with its community partners to establish referrals to this program. Referral sources will include hospitals, EMS providers/fire departments, physicians, social service agencies, and patients themselves. Similar

programs have been established at neighboring schools such as Florida International University (FIU) in Miami and University of Florida (UF) in Gainesville. FIU has partnered with Baptist Health South Florida to launch the Neighborhood HELP program in which medical, nursing, social work, and physician assistant students deliver household-centered primary care services. Analysis of outcomes revealed that this initiative has been very valuable to the community. Specifically, in the first 6 years of the program, 7,452 visits were conducted at 848 households. Additionally, in the first two years alone, use of preventative care increased, and use of emergency room decreased as a result of these visits. Not only did households receive free health and social services, but graduating students reported more experience with health disparities and clinical interprofessional education and were rated highly by residency programs for cultural sensitivity, teamwork, and accountability. UF developed a similar program called the Mobile Outreach Clinic (MOC) which serves the medically under-served and low-income community in rural areas in and around Alachua county. However, these programs differ from our proposal in that they provide mobile primary care and the MOC still requires patients to travel. Our proposal echoes the multidisciplinary nature but rather serves to address fragmented care around hospital admission and ED visits.

Such a model will allow us to increase access to care for a growing population where medical facilities have been unable to keep up. Further as workforce shortages especially in nursing but also in physicians escalates in Florida, this multi-disciplinary approach will aid in revamping who delivers care and how it is delivered through interprofessional collaborations while maintaining scope of practice for all involved. According to the Bureau of Labor Statistics employment of healthcare clinical social workers is projected to grow 13 percent from 2020 to 2030. Healthcare clinical social workers will continue to be needed to assist patients and their families adjust to new treatments, medications, and lifestyle. FAU Medicine Mobile Health will fill in the gaps in the healthcare system and establish continuity of care by working with EMS and hospital partners to enhance and supplement existing healthcare delivery throughout the community. This program will decrease burden on the 911 system, saving resources of fire departments that provide EMS care. The program will furthermore decrease preventable readmissions and save hospitals money on observation visits. The FAU College of Business will aid the team in assessing where the greatest cost-saving opportunities lie. Further, they will determine how revenue can best be generated in order to create financial sustainability. These data will be shared with all stakeholders regularly to continue forward momentum of this community-based project. The program will be implemented as below:

Phases of Implementation

1 - Fellowship creation and residency expansion. EMS, clinical informatics, simulation, addiction medicine, physical medicine rehabilitation and pain management. Workforce: physician program director for each fellowship, physician core faculty members, program coordinators.

2 - Hospital follow-up to prevent readmission. Geographics: City of Boca Raton. Workforce: physician team leader with nurse, social work and paramedic team. Identification of appropriate patients and interventions to be targeted through data analytics from the state of Florida's Biospatial Database. These data can be augmented with partnerships with our hospital networks who already work with us in the GME consortium. Our AI data analytics team developed through this LBR will partner with experts currently working in FAU COECS and Business.

3- Integration of 911 to prevent unnecessary hospital transports. Geographics: City of Boca Raton. Workforce includes a nurse and paramedic team to evaluate patients for the acute problem for which 911 was called, along with telehealth consultation by a physician team leader. Data analytics will be used to identify patients not in need of acute hospitalization, with intervention performed eliminating need for EMS transport. Our focus groups suggest that the main needs are in addiction medicine, psychiatry and physical medicine and rehabilitation. The proposed LBR funding includes leasing of space to provide these services with our new and existing faculty/partnerships.

4 -Services for care- The LBR will allow funding of FAU MobileHealth vans to serve the community and provide assessment and basic services. These vans will have electronic medical records that are linked to our internal system.

1.3B By leveraging this model as a hands-on platform for interdisciplinary training. Physicians are but one part of developing the healthcare workforce that will be required to address the growing and complex needs of our communities. The labor market forecast shows significant employment demand in healthcare and computer/information services in the coming years. Specifically, registered nurses have a projected growth rate of 13% over the next 10 years. However, in Florida, only 5% of students complete a registered nursing degree. Similarly, healthcare administration is projecting a 37.5% growth rate over the next 10 years, but there is a declining conferral rate and a projected occupational gap. And, even lower proportions of new graduates in these areas have a working knowledge of the myriad applications of AI and data analytics in medicine. Further, healthcare, business/finance, IT/math, and engineering are four areas showing promise of advanced wages and long-term resiliency, however they only represent 32% of all job postings in Florida. In this regard, there is a compelling need for new educational programs that offer immersive and practical experiential learning in a team-based venue. This is a central tenet of our FAU Health Network initiative as our healthcare workforce can and should learn some of these applications together, supporting teamwork from the beginning of their education.

Within the educational programs offered by FAU's Colleges of Medicine, Nursing, and Social Work, the unique opportunity exists to integrate learners in the FAU Medicine Mobile Health practice. Physician, nurse, and social worker members of the Mobile Health team will serve as clinical preceptors to students. Rotations will be established into the existing curricula, integrating students and adding human resources into the care teams. The clinical practice will serve as a training ground for increased EM and PMR residents and for EMS, Clinical Informatics, Simulation, Addiction Medicine, and Pain Medicine fellows. While faculty members will be leading patient care, fellows will be learning the specific subspecialties. A model will be created to develop a pipeline of multidisciplinary learners to go from trainees to new clinicians who will immediately be able to work within FAU Medicine Mobile Health.

The Clinical Skills Simulation Centers (CSSC) operated by FAU College of Medicine is a premier venue for providing training interdisciplinary teams through the use of state-of-the-art patient care simulation experiences. Using high-tech facilities and realistic training environments, the centers provide healthcare simulation for medical students, residents, registered nurses, nursing students and emergency response healthcare providers. Hands-on simulation as well as professional certifications in Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS) and Advanced Trauma Life Support (ATLS) assists both individuals and teams to develop awareness and acumen to improve critical thinking, real-time communication, teamwork and collaboration to address urgent and emergent issues.

Hundreds of customizable scenarios have been developed, requiring novel responses from participants. High fidelity mannequins including adult male and female, pediatric, neonatal, and obstetrics birthing mannequins respond to pharmacology, ventilation, and other treatments. The latest scenarios introduce trainees to telehealth. The CSSC has also been at the forefront of providing interprofessional education experiences, bringing together trainees from social work, nursing and medical schools to learn how to work together to manage patients' conditions.

Since its inception in 2006, the CSSC has provided training to more than 10,000 healthcare providers, including 42 of FAU's Emergency Medicine (EM) residents, 84 of FAU's General Surgery residents and 225 of FAU's Internal Medicine residents. Healthcare providers and trainees from other institutions include HCA Southeast Division; HealthTrust/HCA; local nursing schools; Palm Beach County Graduate Medical Education Consortium; Morse Life Health Systems, Manor House, among others. Additionally, the CSSC has had contracts with local fire and rescue units. Many facilitators employed by CSSC are former or current active Emergency Medical Technicians (EMT).

In particular, the CSSC provides training for EM residents focused on critical decision making, communication, high acuity, low opportunity procedures and presentations, crisis resource management and disaster response. Many of these skills would be very challenging to effectively train without the simulation center. FAU's residents enjoy this form of training because they are able to apply best practices in medical education, including small group and hands-on training. Ultimately, they practice leadership and communication strategies that improve their ability to practice, prepare and analyze every aspect of emergency medicine. Simulation training can be applied to multiple different arenas, including virtual reality, augmented reality, mobile healthcare, telehealth and numerous other future residency training requirements. As educational needs change, the simulation modality should also be changed to help meet that need.

Both the CSSC and COM IT have begun pursuing augmented and virtual training modalities with vendors and faculty to bring training for all disciplines to the next level. Using virtual reality, scenarios have been created to introduce students to difficult patient encounters in end-of-life situations and with blind patients. There is great promise in using AR and VR in the anatomy/morphology curriculum as well as in the simulation curriculum. Ultimately, AR and VR will be important in the delivery of clinical services to patients and these pioneering efforts will further inform the deployment of data-driven strategies related to accessibility, quality, and value of healthcare to foster economic growth (1.3C). Our proposed advances in patient care and delivery across the community health spectrum can be expected to accelerate the shift from volume-based to value-based healthcare that is more personalized and convenient for patients, is optimized for patient outcomes, and reduces healthcare costs. In developing this innovative model, FAU will become a hub for a whole range of businesses at the crossroads between digital data, remote monitoring, and healthcare delivery to further diversify the local economy. And, operating at this intersection will further leverage academic- private-public collaborations to drive an innovation economy and establish FAU and its Tech Runway as a model for such engagement in South Florida.

- *FAU Tech Runway*. FAU Tech Runway is FAU's Start-up Incubator and Accelerator program that provides an infrastructure and programming for student-, faculty/community- and community-led entrepreneurship resulting in small businesses. The trademark "Venture Class" includes mentoring,

introductions to early-stage capital, grants and seed funding. Programming focuses on providing the tools necessary to become successful entrepreneurs that are provided in a rigorous bootcamp. Further, the program provides access to business and technology events, allowing networking within the regional innovation environment. Through the “Launch Competition”, the program accepting applications into the Venture Class, participants are screened for their likelihood to benefit in this program. Interwoven into the Venture Class is the NSF-iCorps approach that enforces customer discovery to improve the entrepreneurial outlook and product development. The FAU Wave student entrepreneurial program provides young entrepreneurs an opportunity to develop ideas before making the commitment of creating a company. This program serves as a feeder program to the Venture Class. Lastly, all participants in the Venture Class have access to a “Tech Runway Investor Network”, are encouraged to give pitch presentations to this network in an effort to secure funding for their idea.

- *Palm Beach Life Sciences Cluster.* The Palm Beach Life Sciences Cluster is home to 200 biotech companies involved in the research/ development and manufacturing of medical devices, pharmaceuticals, and biotechnologies. The Cluster is conveniently located near the nation’s top healthcare systems facilitating business development from “bench to bedside”. Companies in this group are supported by academic partnerships with top institutions like FAU, COM, Scripps Florida Research Institute, and the Max Planck Florida Institute. Palm Beach County’s central location among world-renowned research institutions and universities allows for collaboration with internationally recognized research institutes to explore a variety of fields.

II. Return on Investment - *Describe the outcome(s) anticipated, dashboard indicator(s) to be improved, or return on investment. Be specific. For example, if this issue focuses on improving retention rates, indicate the current retention rate and the expected increase in the retention rate. Similarly, if the issue focuses on expanding access to academic programs or student services, indicate the current and expected outcomes. University of Distinction proposals should also address the requirements outlined in the separate guidance document.*

The Return on Investment (ROI) will be measured through metrics that are directly related to the key goals of this LBR request. Specifically, the ROI will be assessed by progress toward the objectives and key performance targets set forth in FAU's Strategic Plan: Race to Excellence, as well as COM's Strategic Plan. With their implementation, both FAU and COM have established robust tracking systems for measuring progress toward their synergistic goals, using institutional data alongside statewide and national benchmarks. Through the strategic investments made possible by this LBR request, we anticipate substantial impact in terms of attaining national excellence, expanding the number, core competencies, and success of our medical/graduate trainees, broadening faculty expertise in emerging areas of precision medicine and community health, improving our research productivity, and fostering an innovation economy.

2.1 Enhancing the State of Florida's reputation for research and excellence
Despite the fact that Florida is the third most populous state in the country, the state only ranks 9th in federal research expenditures ($1,626,712 in 2020), 33rd in industry R&D expenditures ($26,548 in 2020) (https://www.nsf.gov/statistics/2018/nsb20181/data) and 11th overall with 2020 expenditures totaling $2,727,590. The responsibility for positively impacting this figure has fallen on the backs of a select few preeminent institutions, as well as those that are designated as very-high research institutions in terms of their Carnegie Classifications by the Center for Postsecondary Research. This plan thrusts FAU forward from its current designation as a high research institution, helping the state with its standing in research funding, and stimulating the economy as it does so. The National Institutes of Health (NIH) estimate that every "$1.00 increase in public basic research stimulates an additional $8.35 of industry R&D investment after 8 years" (https://www.nih.gov/about-nih/what-wedo/impact-nih-research/our-society). With the 2025 target of FAU reaching $200 million in research expenditures, the university projects that its efforts to expand its research enterprise will result in approximately $1.4 billion impact in private sector R&D by 2033. This particular formula does not take into account the economic impact of the increased numbers of degrees awarded at a more efficient pace, or the likewise precipitous rise in the region's tertiary economy that supports the university, its employees, and its students.

2.2. Increasing Florida's healthcare workforce
An increase in Florida's healthcare workforce will not only provide more jobs to Florida residents but will also bring more healthcare to Florida society. Further, with a larger workforce, facilities can increase their daily patient load while reducing physician burnout and higher costs. Currently, Florida has the second lowest number of primary care physicians and lowest number of general surgeons even as the older average age of Florida residents demands more physicians and increased healthcare utilization. By increasing the number of available physicians, primary care offices will be able to serve a greater number of patients and families. Lack of sufficient primary care increases the utilization of higher cost specialty care. This transition to specialty care occurs either because of access or by disease progression due to delay in care. Physician burn-out may result. Ultimately, we expect our plan to offer significant ROI by increasing the

availability of physicians and healthcare analytics experts subsequently increasing patient load per medical facility. In addition to physicians, the LBR includes an interprofessional component designed to similarly increase the number of nurses, social workers, and other healthcare professionals.

2.3 Transformative healthcare delivery model with associated metrics showing improved value and/or quality of care for chronically ill, elderly, underserved populations

Similarly, we expect this transformative healthcare delivery model to reduce costs to patients and medical institutions by eliminating unnecessary admissions and readmissions and reducing provider time. Our mobile healthcare approach will be equipped with state-of-the-art equipment capable of efficient diagnosis to inform future care. We intend to eliminate the need for patients to travel to office visits, a factor which often deters patients of low socioeconomic status and those who rely on others for transportation from going to the doctor. The elderly tends to do better at home than in a hospital and when possible treating patients where they live is ideal. Additionally, this proposal aims to expand use and education of AI and data science in healthcare to ultimately improve health outcomes, quality outcomes, and provider/ patient satisfaction, all major generators of revenue over time.

2.4 Economic benefits including growth and diversification and increased interaction with top 8 employers of FAU graduates in the community

This plan aims to foster development of new technologies that will contribute to the vast biomedical industry already established in Palm Beach County. Introduction of new companies will provide revenue for the county and state as a whole by attracting new businesses and employers looking to join the digital healthcare revolution and thus diversifying the workforce. Partnerships with world-renown institutions and top 8 employers of FAU graduates (including many hospitals and biotech companies) will raise awareness and attraction to the FAU community and increase funding from grants and investments.

FAU's Goals	Year 1 Milestones	Deliverables
Focus on AI and community health to achieve national excellence by: 1. Targeting institutional performance indicators in areas of strategic emphasis. 2. Improving state/national rankings	1a. Develop predictive analytics tool and implement strategic plan for improving specific metrics 2a. Track progress towards rise on national rankings	1a. Provost Picks (1-yr retention rate, 4-yr graduation rate, % URM) 1b. Degrees awarded in AI/Data/Community Medicine 1c. Increase in median salary of graduates from AI/Data programs 1d. Increase in % of graduates employed in AI 2a. US News&World Ranking (top 90) 2b. Carnegie I Attainment

3. Enhancing Florida's reputation in research and excellence	2a. Track NIH and federal funding	3a. NIH funding (>$100M) 3b. Other federal funding
Address workforce shortages and changing competencies by: 1. Increasing medical student class size 2. Expanding residency & fellowship programs 3. Increasing # doctoral students and enhancing medical/graduate curricula to promote new core competencies required for 21st century practices	1a. Data on medical student outcomes (# MD Degrees awarded, residency match rates, # graduates staying in Florida) 2a. Data on resident/fellow outcomes (# trained, # graduates staying in Florida) 3a. Develop doctoral program 3b. Implement interprofessional curriculum in precision and population medicine 3c. Track data on student readiness in new core competencies	1a. Increase # MD Degrees awarded by >1.6 fold 1b. Increase # and diversity of graduates staying in Florida 2a. Increase # resident/fellows trained by >2.3 fold 1b. Increase # and diversity of graduates staying in Florida 3a. Increase # and diversity of PhD, dual MD/PhD degrees, MD/MBA Degrees awarded 3b. Improve student readiness to implement core competencies
Transform community care model by: 1. Developing FAU Medicine as a model for data-driven care emphasizing mobile and pre- and post-hospital medicine 2. Leveraging this model as a hands-on platform for interdisciplinary training 3. Harnessing innovation to improve accessibility, quality, and value of healthcare	1a. Analyze existing data in our community to identify opportunities for care 1b. Work with local stakeholders to optimize processes 2a. Develop strategy for combined nursing, social work, physician care 3a. Improve patient access in non-traditional settings 3b. Personalize patient experience	1a. Improve patient experience 1b. Reduce unnecessary hospital admissions or readmissions 1c. Contain costs 2a. Develop career ladders for members of team 2b. Triage patients effectively for type of provider needed. 3a. Enhance patient health outcomes 3b. Alleviate ER workforce demands 3c. Reduce overall healthcare costs

III. Personnel – *Describe personnel hiring and retention plans, making sure to connect both plans to initiative(s) and goal(s) described in section I. State the amount of faculty FTE and staff FTE and estimated funding amounts used for retention and new hires in each category. In describing faculty hires, provide overall hiring goals, including academic area(s) of expertise and anticipated hiring level (e.g. assistant professor, associate professor, full professor. Please describe how funds used for faculty or staff retention will help the institution achieve its stated goals. University of Distinction proposals should clearly note how anticipated hires or retained individuals will help the institution elevate a program or area to national or state excellence.*

3.1 Faculty Hiring Plan. This "University of Distinction" initiative is requesting $11,202,642 of funding for 52.29 (FTE) for new faculty. This 52.29 FTE includes 70% at the Assistant Professor rank and 30% at the Associate Professor ranking. Consistently, studies show that an investment in people rather than buildings produces a greater return on investment. Increased faculty is needed to support the expansion of the medical school class size. In addition, targeting new hires in emerging areas of AI, data science, precision medicine, and population health will help to attract high quality students, provide new core competencies for 21st century medicine, and raise the national reputation of our multi-faceted academic programs. New faculty hires will also aid in the production of research to develop practical solutions for a new workforce that seeks to provide more personalized care to residents within our communities including non-traditional settings.

Table 3: Proposed Faculty Hires

FTE	Positions	Amount Requested for New Hires (salary & f.b.)	Goal Alignment
3	Healthcare Analytics	$ 858,000	Degree attainment in areas of strategic emphasis; Research productivity; Healthcare innovation and delivery; Center for AI in Community Medicine
3	Precision Medicine	$858,000	Degree attainment in areas of strategic emphasis; Research Productivity; Healthcare innovation and delivery; Center for AI in Community Medicine
3	Population Health	$858,000	Degree attainment in areas of strategic emphasis; Research Productivity; Healthcare innovation and delivery; Center for AI in Community Medicine
2	Sensor Engineers	$ 455,000	Mobile Health; Sensor Technology for Home
2	Software Engineers	$ 455,000	Mobile Health; Sensor Technology for Home
7	Nurses	$ 910,000	Mobile Health/Mobile Integrative Health
3	Physicians	$ 780,000	Mobile Health/Mobile Integrative Health
7	Social Workers	$ 819,000	Mobile Health/Mobile Integrative Health
2.50	GME Faculty	$ 162,500	New Fellowships/ Medical Workforce Growth and Data Skills Enhancement - Graduate Medical Education
2.17	GME Faculty	$ 619,667	PMR Residency/ Medical Workforce Growth and Data Skills Enhancement - Graduate Medical Education
7.50	UME Faculty	$1,950,000	Medical Workforce Growth – Medical Students
.75	Department Chair	$ 243,750	Medical Workforce Growth – Medical Students
.75	Assistant Librarian	$ 54,600	Medical Workforce Growth – Medical Students

.75	Care of the Underserved	$ 195,000	Medical Workforce Growth – Medical Students
.75	Sim Center Coordinator	$ 53,625	. Medical Workforce Growth – Medical Students
1.50	Research Mentors	$ 448,500	Medical Workforce Growth – Medical Students
.375	Thread Director	$ 97,500	Medical Workforce Growth – Medical Students
1.875	Clerkship Directors	$ 487,500	Medical Workforce Growth – Medical Students
.75	FOM Course Director	$ 195,000	Medical Workforce Growth – Medical Students
.75	Basic Science Course Director	$ 195,000	Medical Workforce Growth – Medical Students
.75	Assistant Dean UME	$ 219,375	Medical Workforce Growth – Medical Students
.75	Assistant Dean OSA	$ 190,125	Medical Workforce Growth – Medical Students
.375	ASC Faculty	$ 97,500	Medical Workforce Growth – Medical Students

3.2 Staff Hiring Plan. This "University of Distinction" initiative is requesting $5,558,937 of funding for 53.21 (FTE) for new staff. To increase bandwidth in AI/data science in medicine, funds are requested to hire two data scientists to support key research and educational initiatives. To support increases in MD and PhD degree production and the associated faculty expansion, additional funds are requested to support the new programming.

Table 4: Proposed Staff Hires

FTE	Positions	Amount Requested for New Hires (salary & f.b.)	Goal Alignment
2	Data Scientists	$ 572,000	Center for AI in Community Medicine
7	Paramedics	$ 938,000	Mobile Health/Mobile Integrative Health
5	Fellowship	$ 544,410	New Fellowships/ Medical Workforce Growth and Data Skills Enhancement - Graduate Medical Education
5	EM Residency	$ 575,784	EM Residency/ Medical Workforce Growth and Data Skills Enhancement - Graduate Medical Education
12	PMR Residency (Residents)	$1,151,568	PMR Residency/ Medical Workforce Growth and Data Skills Enhancement - Graduate Medical Education
1.3	PMR Residency (Staff)	$ 134,000	PMR Residency/ Medical Workforce Growth and Data Skills Enhancement - Graduate Medical Education
.75	Curriculum Coordinator CQI	$ 55,275	Medical Workforce Growth – Medical Students
.75	Curriculum Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	Faculty Affairs Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	HR Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	Communications/Marketing Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	Finance Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	Medical Student Research Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	DEI Asst Director Expand Pathways and Mentoring	$ 80,400	Medical Workforce Growth – Medical Students
.375	Legal Affairs	$ 50,250	Medical Workforce Growth – Medical Students
.75	Department Coordinator	$ 45,225	Medical Workforce Growth – Medical Students

.75	IT Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	Ed Tech Specialist	$ 65,325	Medical Workforce Growth – Medical Students
.75	Care of Underserved Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	M1/M2 Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	M3 Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	M4 Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
.75	Service Learning Coordinator	$ 55,275	Medical Workforce Growth – Medical Students
1.5	Assessment Coordinator	$ 110,550	Medical Workforce Growth – Medical Students
.75	Admissions Asst Director	$ 75,375	Medical Workforce Growth – Medical Students
.75	Admissions Coordinator	$ 50,250	Medical Workforce Growth – Medical Students
.75	OSA/Pre-Matriculation Coordinator (+VSAS)	$ 50,250	Medical Workforce Growth – Medical Students
.75	Learning Specialist Assoc. Director	$ 120,600	Medical Workforce Growth – Medical Students
.75	Tutoring Prog. Coordinator	$ 50,250	Medical Workforce Growth – Medical Students
.75	Financial Aid Asst Director & Asst Registrar	$ 80,400	Medical Workforce Growth – Medical Students
.75	Counseling PhD	$ 90,450	Medical Workforce Growth – Medical Students
.75	Compliance Coordinator	$ 55,275	Medical Workforce Growth – Medical Students

IV. Facilities (*If this issue requires an expansion or construction of a facility, please complete the following table.):*

NA

2022-2023 Legislative Budget Request
Education and General
Position and Fiscal Summary
Operating Budget Form II
(to be completed for each issue)

University: Florida Atlantic University

Issue Title: Applying Artificial Intelligence Across the Community Health Continuum

	RECURRING	NON-RECURRING	TOTAL
Positions			
Faculty	52.29	0.00	52.29
Other (A&P/USPS)	53.21	0.00	53.21
Total	105.50	0.00	105.50
Salaries and Benefits	$16,761,579	$0	$16,761,579
Other Personal Services	$0	$0	$0
Expenses	$2,702,655	$2,200,000	$4,902,655
Operating Capital Outlay	$0	$4,644,394	$4,644,394
Electronic Data Processing	$450,000	$0	$450,000
Financial Aid	$931,400	$0	$931,400
Special Category (Specific)	$0	$0	$0
		$0	$0
Leases	$2,961,370	$0	$2,961,370
	$0	$0	$0
Total All Categories	$23,807,004	$6,844,394	$30,651,398