

Healthcare in the State University System

May 2021

Executive Summary

Healthcare is a uniquely important industry in Florida due to the large population and underlying demographics of the state. The Board of Governors has long recognized the significance of healthcare to the state and has designated it as a distinct category in the Programs of Strategic Emphasis (PSE). As such, all healthcare programs at all institutions are specified as a PSE. Degree productivity in healthcare has grown system-wide over the last five years by 18% at the undergraduate level and 12% at the graduate level.

Many degree programs support the healthcare field and are offered at eleven of the twelve SUS institutions. These include options such as medicine, nursing, pharmacy, dentistry, health services administration, and medical informatics. The System includes six graduate-level medical schools at Florida Atlantic University, Florida International University, Florida State University, the University of Central Florida, the University of Florida, and the University of South Florida.

The SUS produced over 14,500 graduates in 2019-20 with the potential to gain employment in the healthcare industry. This total included over 3,600 registered nurses and more than 700 professional doctorates in medicine. Additionally, institutions provide technical and engineering graduates that support ancillary industries such as biotech research and development and medical device manufacturing. For further and more detailed data, please reference the supplemental document titled "Degrees Awarded in Academic Programs Potentially Leading to Careers in the Healthcare Industry." The supplemental document contains detailed graduate counts by program, institution, and degree level.

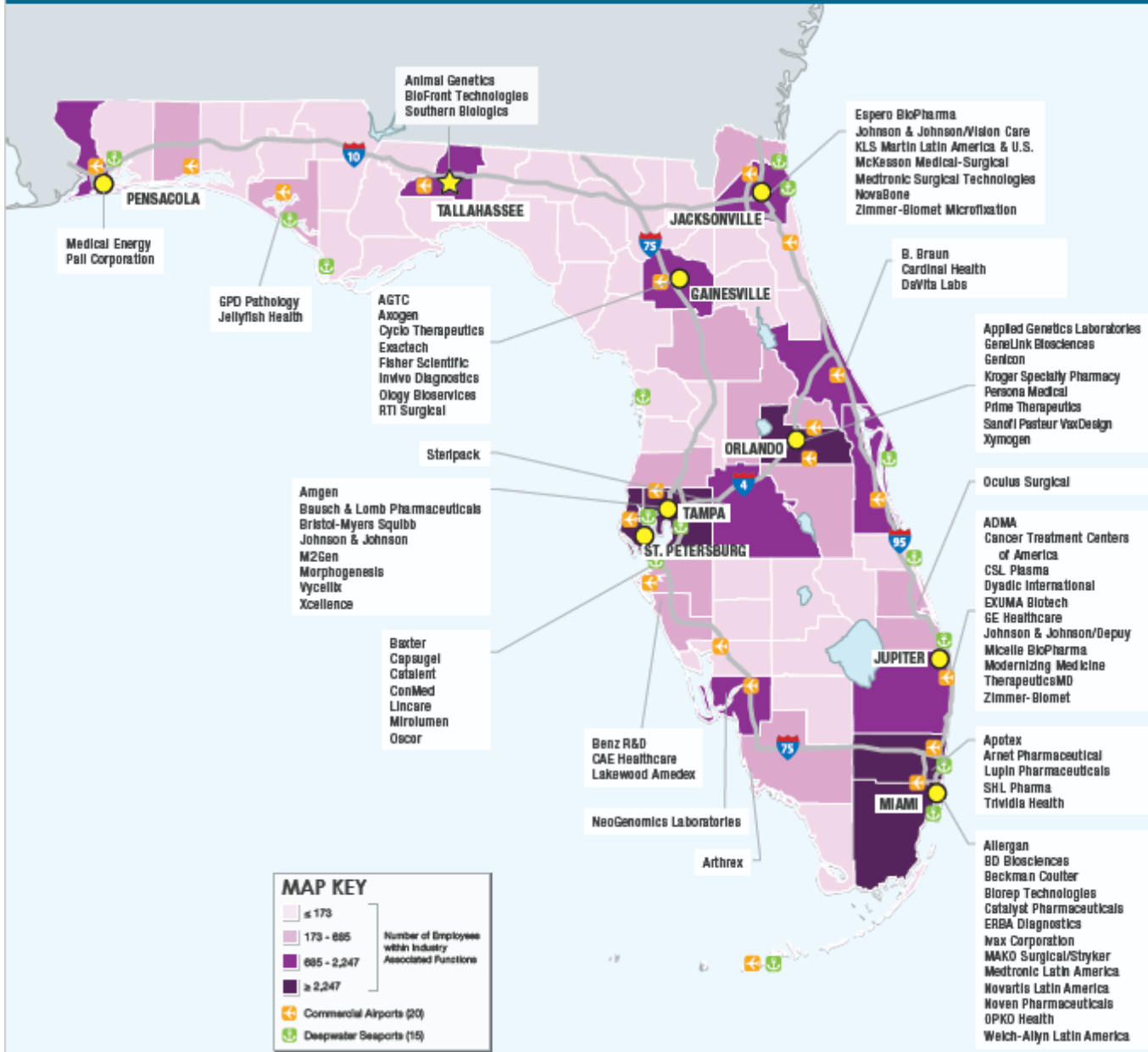
Florida public universities have also been recognized by rankings organizations for excellence in healthcare-related academic programs. For example, U.S. News & World Report recognized the medical schools at the University of Florida (ranked 36th), the University of South Florida (ranked 48th), and the University of Central Florida (ranked 86th) in its 2022 best research medical schools publication. More detailed rankings information can be found in the document titled "Institutional Responses Regarding Healthcare Activity in the State University System."

The System performs a wide array of healthcare-related research. More than a third (40%) of System federal research expenditures are from the Department of Health and Human Services, totaling nearly \$432 million in federal grant expenditures in 2019. Recently, the System has been active in research related to COVID-19. For example, USF designed a 3D-printed nasal swap for use in COVID testing kits. Over 70 million of these swabs have been produced, directly impacting the international response to COVID-19.

Finally, Florida institutions partner with and support a plethora of healthcare industry partners like hospitals and research centers in a number of ways, including clinical rotations, medical residencies, student internships, and employment opportunities, research collaborations, and more. Thousands of leading healthcare and life sciences companies operate in Florida and some of the best hospitals in the world, such as AdventHealth Orlando, Baptist Medical Center, Cleveland Clinic Florida, Healthcare Corporation of America, Mayo Clinic, Tampa General Hospital, and UF Health Shands Hospital. See the next page of this document for a map from Enterprise Florida showing Florida's life sciences cluster with the locations of many select companies highlighted as well as life sciences employment density displayed.

FLORIDA'S LIFE SCIENCES CLUSTER

(select companies highlighted)



400+ Biotech Establishments

350+ Pharmaceutical Establishments

690+ Medical Development Establishments

#2 Largest Medical Device Manufacturing Industry

#3 Clinical Trials Initiated Among States

\$1.4B Annual Life Sciences R&D Spending By Florida Universities

The following is a sampling of the numerous healthcare highlights provided by SUS institutions. For more detailed information, please refer to the document titled "Institutional Responses Regarding Healthcare Activity in the State University System."

Florida Agricultural & Mechanical University

- The School of Allied Health Sciences, Division of Health Care Management's Master of Health Administration is the only Commission on Accreditation of Healthcare Management Education accredited program at an HBCU in the U.S.
- The College of Pharmacy and Pharmaceutical Sciences and Institute of Public Health have produced over 3,000 pharmacists and 504 total public health graduates since 1999
- The Health Informatics and Information Management program is the #1 producer of African American baccalaureate degree graduates in Health Informatics and Information Management in the state of Florida
- The Institute for Public Health provided leadership in establishing and developing the FAMU COVID-19 Community Testing Site, with over 300,000 tested to date

Florida Atlantic University

- Recognized by Florida's Department of Health as a Florida Cancer Center of Excellence for an alliance between the Memorial Healthcare System Cancer Institute and FAU
- Research partnerships with multiple entities, including
 - Memorial Healthcare System
 - Nikon Instruments
 - South Florida Neurology
 - Insightec
 - Deluge Biotechnologies
- College of Nursing
 - Best Graduate School - #56 in 2022 for its master's program; #60 in 2022 for its Doctor of Nursing Practice program
 - Best Online Programs - #11 in 2021 for its online master's in nursing administration program; #32 in 2021 for its online master's degree
- College of Medicine
 - Ranked #24 amongst all medical school in the inaugural Diversity ranking by U.S. News & World Report
 - Ranked 96th by U.S. News & World Report

Florida Gulf Coast University

- The Marieb College of Health & Human Services provides research, teaching, and service to Southwest Florida's health care industry
- The nursing program has had the highest licensure pass rate among higher education institutions in the state during the last three years, based on scores on the National Council of State Boards of Nursing competency exam
 - Nursing graduates have scored 100%, 100%, and 98% on this exam in 2018, 2019, and 2020, respectively
- The occupational therapy program has maintained a 100% first-time pass rate since 2015
- FGCU opened the Community Counseling Center in November 2019, which is a laboratory for mental health counseling for students and a provider of mental health services to lower socioeconomic groups in the region

Florida International University

- Among key achievements last year, a Robert Stempel College of Public Health & Social Work professor and his team received a \$6.6 million National Institutes of Health grant to study how brain cells die in Parkinson's disease and to develop effective drug therapies for Parkinson's
- FIU is building Florida's first Health Disparities Research Center at a minority-serving institution with a \$13.1 million grant from the National Institute on Minority Health and Health Disparities
- The College of Medicine is ranked 3rd in Most Diverse Medical Schools and 12th in Most Graduates Practicing in Medically Underserved Areas by U.S. News & World Report
- The Doctor of Nursing Practice ranked 27th among U.S. public universities by U.S. News & World Report

Florida Polytechnic University

- The Health Systems Engineering concentration at Florida Poly uses engineering methods and designs to examine health systems to increase efficiency, reducing errors, improving patient safety, increasing access to and the overall quality of healthcare
 - This concentration within Computer Science, Data Science, and Business Analytics with applications based on actual problems in the healthcare industry
 - Offers a certificate allowing students across all majors the opportunity to learn, design, and implement engineering and analytical methods for continuous improvement in the healthcare industry

Florida State University

- The College of Medicine addresses Florida's needs for rural outreach and primary care – with a regional campus model, as opposed to a teaching hospital model, where over 50% of graduates complete residencies in primary care or obstetrics
- FSU has over 100 alumni leading Florida healthcare organizations such as
 - Adventhealth
 - Baptist Health
 - Cleveland Clinic Health
 - GE Healthcare
 - Mercy Hospital
 - Sacred Heart Health System
 - Shands Healthcare
 - UnitedHealth Group
- New Biomedical Engineering Programs (B.S., M.S., and Ph.D.) with 260 undergraduate students enrolled, 32 students in the first graduating class, and 22 graduate students enrolled
- New Bachelor of Science in Public Health with over 500 undergraduate students
- In 2020, FSU and the Mayo Clinic signed an agreement giving internship and research access to FSU students at Mayo and providing Mayo employees with distance learning opportunities and access to world-renowned researchers and facilities at FSU

University of Central Florida

- College of Medicine
 - U.S. News & World Report
 - #86 Best Medical Schools – Research
 - #28 Graduates Practicing in Medically Underserved Areas
 - Partnership with Hospital Corporation of America (HCA)
 - Lake Nona Medical Center
 - Lake Nona Cancer Center
 - Graduate medical education consortium (27 residency programs/fellowships; 455 residents/fellows)
 - Developed the HealthARCH program, which assists health care providers and provider networks across Florida with implementing best practices in healthcare quality and operations
- College of Nursing
 - U.S. News & World Report
 - #27 (tie) Best Online MSN Programs (up from #31)
 - #8 (tie) Best Online Nursing Education MSN Program
 - #27 (tie) Best Online Nursing Administration/Leadership MSN Program
 - #65 (tie) Best Nursing Schools: Doctor of Nursing Practice
 - 15% of faculty are Fellows of the American Academy of Nursing
- College of Health Professions and Sciences
 - Over 855 internship sites throughout Central Florida, the state, and the nation
 - \$4.98 million in external research awards in fiscal year 2020
- College of Community Innovation and Education Health Informatics and Information Management
 - Masters in Healthcare Informatics continues to grow in enrollment, with a total enrollment of 171 in spring 2021

University of Florida

- UF is the country's only university with seven health-related colleges located on a single campus, including Dentistry, Medicine, Nursing, Health and Human Performance, Pharmacy, Public Health, and Veterinary Medicine
- Healthcare delivery networks associated with UF provide access to an integrated system of community hospitals and clinics, including statewide home health care, a major veterans' health system, and the UF Health Shands Hospital system
- UF Health is a comprehensive academic health center with more than 26,500 employees who work to translate scientific discoveries into patient care advances and implement them to help people get back to living their best possible life
 - The academic health center at UF is a world leader in interdisciplinary research, generating approximately half of UF's total research awards and includes seven major health-related research centers and institutes
 - UF Health Shands, UF Health's private, not-for-profit hospital system based in Gainesville, includes seven hospitals:
 - UF Health Shands Hospital
 - UF Health Shands Cancer Hospital
 - UF Health Shands Children's Hospital
 - UF Health Heart & Vascular Hospital
 - UF Health Neuromedicine Hospital
 - UF Health Shands Rehab Hospital
 - UF Health Psychiatric Hospital
- The Evelyn F. & William L. McKnight Brain Institute of the University of Florida (MBI-UF) is one of the world's largest research institutions devoted to the challenges resulting from brain and nervous system disorders
 - Work at the institute includes research into addiction, cancers, strokes, brain and spinal cord injuries, cognitive aging, mental health and chronic neurological diseases such as Alzheimer's, Parkinson's, ALS, Epilepsy and Multiple sclerosis
- Sid Martin Biotech is a world-recognized leader in biotechnology business incubation and was recently named the top global incubator for a record third time, receiving the International Business Innovation Associations highest honor, the Randall M. Whaley Incubator of the Year Award

University of North Florida

- The UNF MedNexus will be the nation's first comprehensive, university-based medical and healthcare nexus, further placing UNF at the center of the Northeast Florida healthcare enterprise by connecting healthcare providers with university students, faculty and researchers
 - See <https://www.unf.edu/UNFMedNexus/> for more information
- Nursing graduates have consistently maintained a licensure (NCLEX) pass rate above 90%, which is significantly above the average pass rate for Florida and above the average pass rate for the nation
- Both the Nurse Practitioner program and the Psychiatric Mental Health Nurse Practitioner program have a 100% certification pass rate
- The Bachelor of Social Work and Master of Social Work programs prepare students to work in a social work capacity in a variety of healthcare settings, such as hospitals, nursing homes and assisted living facilities, behavioral healthcare hospitals and clinics, addiction treatment centers, and hospice and palliative care organizations
- UNF began offering a Bachelor's in Science in Behavioral Neuroscience in fall 2018
 - Students have obtained internships and full-time jobs at Mayo Clinic, Nemours Clinic, Johnson & Johnson, and other clinical settings in Jacksonville
 - Graduates are attending medical school, physician's assistant programs, and other health-related graduate programs

University of South Florida

- USF Health includes the Morsani College of Medicine, the College of Nursing, the College of Public Health, and the Taneja College of Pharmacy, along with select programs in its College of Behavioral & Community Sciences, offers several healthcare-related degree programs
 - 7 undergraduate programs
 - 12 masters programs
 - 6 Ph.D. programs
 - 4 professional doctoral programs
- The Office of Clinical Research currently works with 200+ external companies and has partnerships with area healthcare providers, including Veterans Administration Hospitals, Tampa General Hospital, and BayCare Health Systems
- USF's Tampa Bay Technology Incubator is home to 63 startups, of which 32 are directly related to healthcare
- USF Health's signature research areas include precision science, big data, health determinants, equity, disparity, implementation science, infectious and global communicable disease, maternal and child health, genomics, cardiovascular disease, neuroscience, drug discovery, and rehabilitation sciences
- The Morsani College of Medicine and the College of Engineering recently established the Department of Medical Engineering, where engineers, researchers, and clinicians collectively direct, sponsor, and administer a world-class Biomedical Engineering program

University of West Florida

- Health Sciences and Administration
 - The Master of Healthcare Administration program partners with the National Association of Health Services Executives (NAHSE) to actively recruit a more diverse student body
- Medical Laboratory Sciences
 - 90% pass rate on the national board certification exam in 2020
 - Over 95% of graduates have jobs within the first 3-6 months of graduation, with most of them having a job secured before graduation
 - Partners with 20 hospitals in Florida and Alabama to send students for high-impact practice internships, including Ascension Sacred Heart, Baptist, West Florida, Tallahassee Memorial, and University of Florida Health
- Movement Sciences and Health
 - Each of the last two years, UWF had at least two students recognized at the state level for 'Future Educator of the Year' by the Society of Health and Physical Educators of Florida organization
- Public Health
 - Enrolls a high number of active-duty military students and hosts Army and Navy public health training program for active-duty military
 - The Master's in Public Health program graduates the largest number of active-duty Navy and Army physician officers who go on to provide healthcare to U.S. troops at sea and abroad
- School of Nursing
 - The pass rate on the NCLEX for 1st-time test takers in 2020 was 96%
 - Masters of Science Nursing program was ranked in in top 100 for online nursing programs by U.S. News & World Report for Best Online Program: MSN