

**State University System
Florida Board of Governors
2020-2021 Legislative Budget Request Instructions
Forms I and II**

The main objective of Form I and Form II is to align budget issues and dollar values with the goals and objectives of the strategic priorities and the 2019 University Accountability Plan established by each university.

For FY 2020-2021, each university should submit one Form I and Form II for each university-unique budget issue and/or any system-wide issue identified as a critical system-wide need. Any issues unique to a branch campus or a special unit (e.g., IFAS Workload Initiative) should not be rolled into the main campus request but reflected separately by use of the forms provided.

For system-wide issues, consideration will be given to issues that allow for greater efficiencies through shared system resources or identified as a system-wide need. If requesting funds as such, please list all university participants of the initiative and check the box “Shared Services/System-Wide Issue”.

For unique issues identified by a university, please check the box “Unique Issue for FY 2020-2021”. The date of your university board of trustees’ approval for the LBR issue must be included on the Form I.

Please keep in mind that all issues submitted for consideration by the Board should align with the goals and objectives of the strategic priorities and accountability plan established by each university.

**State University System
Education and General
2020-2021 Legislative Budget Request
Form I**

University(s):	University of North Florida
Issue Title:	UNF Medical Nexus
Date Issue Approved by University Board of Trustees:	7/29/19
Recurring Funds Requested:	\$ 6,036,375
Non-Recurring Funds Requested:	\$ 8,000,000
Less Non-Recurring Partnership Funds Committed*	\$ (2,000,000)
Total Funds Requested:	\$ 12,036,375
Please check the issue type below:	
Shared Services/System-Wide Issue for Fiscal Year 2020-2021	<input type="checkbox"/>
Unique Issue for Fiscal Year 2020-2021	<input checked="" type="checkbox"/>

I. Describe the service or program to be provided and how this issue aligns with the goals and objectives of the strategic priorities and the 2019 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.

UNF Medical Nexus (UNF MedNEX®)

SITUATION ANALYSIS

An assessment of national, state, and regional needs for healthcare professionals, combined with UNF areas of continuing and emerging healthcare expertise, present a highly, unique and transformative opportunity for UNF and the SUS to be national leaders and difference makers in healthcare training, research, and innovation. As backdrop, four factors stimulate thinking on how UNF can both solve a critical need in the marketplace and become a role model in how healthcare training is delivered and how healthcare research is conducted.

*Represents funds committed by City of Palm Coast and AdventHealth in support of UNF MedNEX initiative.

1. **Strategic Priority – Healthcare**: Educating and graduating the next generation of healthcare professionals has been and remains a strategic priority for the state university system as demonstrated by and articulated in the Board of Governors 2016 Strategic Plan for Health Initiatives.
2. **Workforce Needs – Rising Demand for Healthcare Professionals**: Health care jobs are expected to account for 23% of the state’s growth between 2016 and 2024, with an estimated 200,000 new jobs created during this period. *Healthcare Management Degree Guide* further predicts a 35% growth in healthcare jobs nationally with an average starting salary of approximately \$76,000 (Appendix A). The increased demand for healthcare personnel in our area contrasted both with the declining population of 18-21 year-olds nationally (projected major drop in 2025) and the decline in the number of freshman enrolled across all Florida institutions of higher learning (5.4% decline), implies that the shortage of college graduates in health fields could continue unabated., absent new and innovative initiatives.
3. **Regional Distinction – NE Florida is a Healthcare Hub**: NE Florida has become a mecca for outstanding healthcare (Appendix A). The healthcare industry in NE Florida – which encompasses the city of Jacksonville and Duval County where UNF is located plus municipalities located in Baker, Clay, Flagler, Nassau, Putnam, and St. Johns and surrounding counties – highlights the expansive nature of the quality and breadth of healthcare providers and healthcare-related entities in the region. They include such renowned organizations as Mayo Clinic, MD Anderson, Baptist, Memorial, St. Vincent/Ascension, AdventHealth, and Brooks Rehabilitation. Emphases on attracting healthcare providers and growing healthcare services are also priorities in the strategic plans of the cities of Jacksonville and Palm Coast, as two examples.
4. **UNF Core Competency – Healthcare Education**: UNF offers multiple, high quality programs across a wide array of health and health-related disciplines (see Appendix B). UNF indicants of excellence and expertise in healthcare fields include the following: (1) UNF RN to BSN program is ranked 14th in the nation, (2) UNF school of nursing is recognized as one of six program nationally for best practice in incorporating population health into the curriculum, (3) UNF is the only SUS school with an American sign language/English interpreting program, (4) UNF provides certificates in health informatics, (5) school of nursing graduates have a licensure (NCLEX) pass rate above 90%, and (6) both the UNF Nurse Practitioner and Psychiatric Mental Health Nurse Practitioner programs have 100% certification pass rates. UNF also has existing research agreements with Florida Blue, Johnson & Johnson, and Mayo Clinic.
5. **Fostering an Innovation Economy – UNF Center for Entrepreneurship and Innovation**: UNF’s city-centered innovation and entrepreneurship incubator (see Appendix C) generated over 118 proposals from entrepreneurs seeking to become members of a cohort receiving market education and market support through the center. Nearly one-fifth of the proposals were in the health field. A more focused, future emphasis on health care would undoubtedly draw more applicants in health fields. The

center is co-sponsoring a mentor program with the Mayo Clinic Life Sciences Incubator and hosts the Mayo Clinic Transplant Group for an offsite planning retreat.

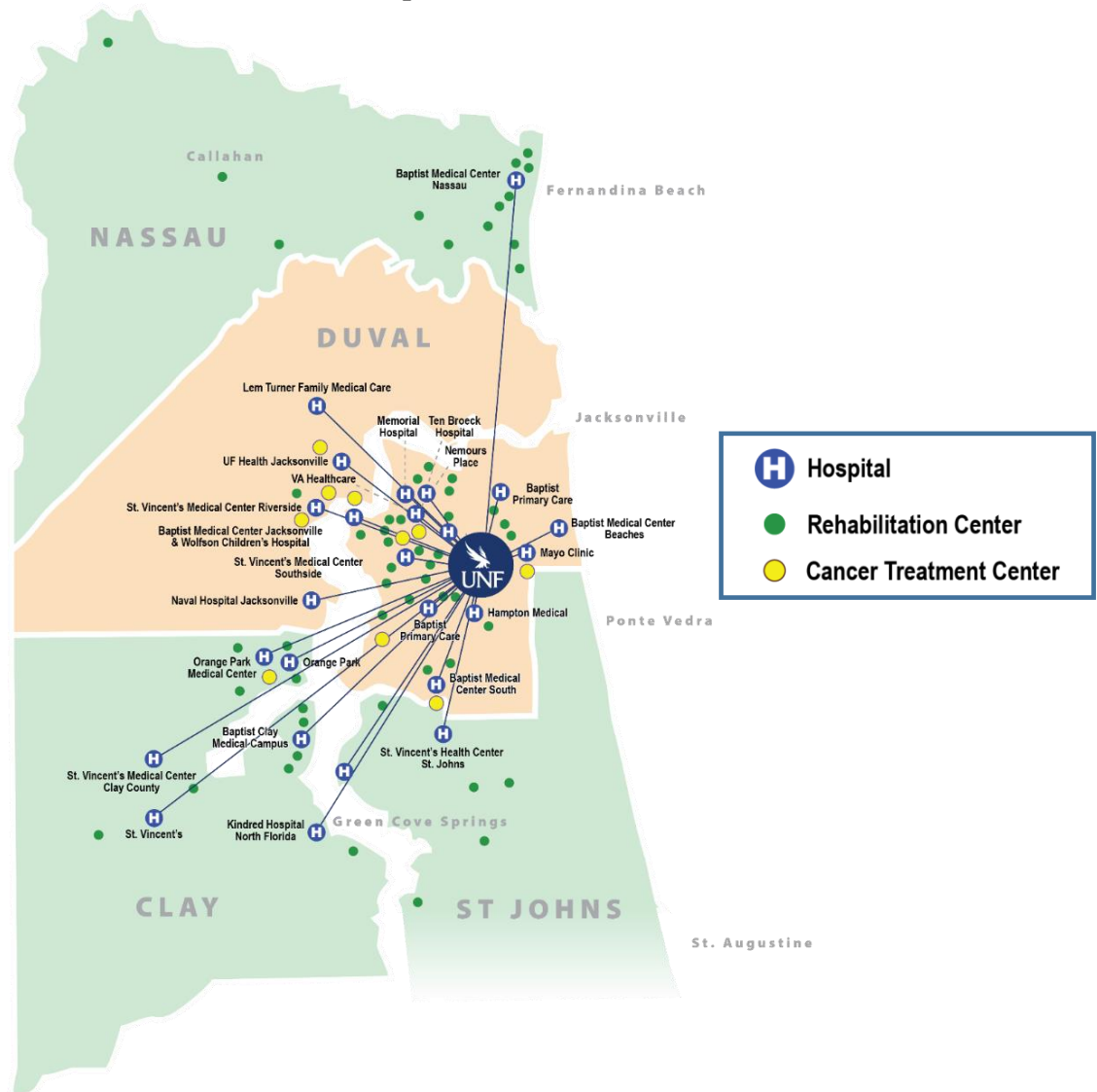
The fact that (1) healthcare is a SUS strategic priority; (2) there exists a shortage of trained, healthcare professionals in FL; (3) NE Florida is an area of healthcare distinction; (4) UNF has strength in healthcare education and research collaboration; and (5) UNF has the innovation infrastructure and national recognition to promote an innovation economy in health care, together offer the necessary backdrop to address the following problem:

PROBLEM

How can UNF become the leader and catalyst for solving the need for high, quality healthcare professionals in NE Florida in a way that is innovative and uniquely UNF?

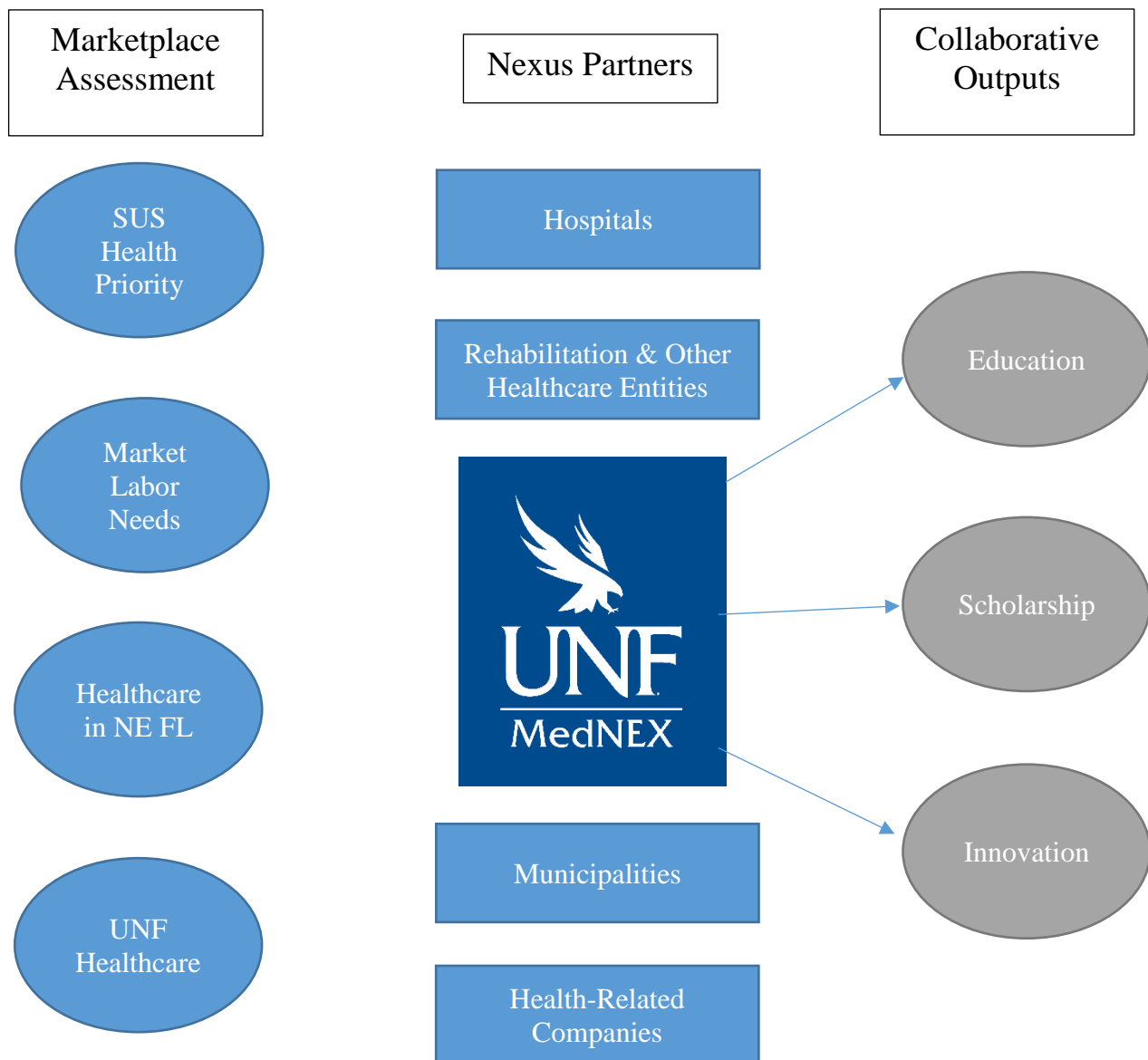
SOLUTION

Creation of the **nation's first comprehensive, university-based medical/healthcare nexus**, UNF MedNEX. UNF will be at the center of the NE Florida healthcare enterprise connecting healthcare providers with UNF students, faculty, and researchers. Figure 1 illustrates the general nature of the connectedness concept.



MedNEX possesses elements of stem colleges and a health sciences center but goes beyond and accomplishes more by bringing together multiple academic disciplines and institutions (creating pathways among SUS institutions and among FCS institutions) and multiple healthcare organizations (both disparate as well as related health enterprises) to create a superior, integrated FEDERATION of premier, health-based enterprises. Education, in particular, will possess a heavy experiential component that is not readily duplicable by other educational institutions from other regions.

UNF MedNEX is also unique in that partnerships will take place among the university, healthcare and related providers, local and regional governments, and community partners to address needs now and into the future. As summarized below, MedNEX will consolidate healthcare disciplines, technology development, research and analytics into a collaborative hub of educational learning, development and placement of students as well as a hub of scholarly and technological advancement in healthcare fields for NE Florida and the state.



The following section outlines the UNF MedNEX concept in more detail.

UNF MedNEX[®]: Learn, Lead, and Innovate

Bringing colleges and organizations together to develop/create the . . .

- Next generation of healthcare professionals
- Next-generation of healthcare understandings
- Next-generation of healthcare technologies



UNF IS NATIONALLY RANKED

UNF is ranked nationally for the first time. The 2019 *U.S. News and World Report* placed UNF at 140 among public universities. This rating places us on a new trajectory as a university with emerging national stature having a national impact. Impact in healthcare is a natural extension and next step for UNF in building a national reputation for academic excellence.

PURPOSE

By creating the first university-based, comprehensive medical nexus in the country, UNF seeks to benefit the region, state, and beyond through a transformative interdisciplinary, inter-organizational, and experiential-based focus on healthcare (1) learning, (2) leading, and (3) innovation.

CONCEPT DEFINITION

UNF MedNEX is characterized by its hub and spoke structure connecting the multiple components of the medical ecosystem at a regional, state, national, and/or international level with the health-related ecosystem of a major, public university.

The emphases are on training the next generation of healthcare professionals (**learn**), bringing together scholars and practitioners to advance knowledge and understanding (**lead**), As well as creating the epicenter in Florida for transformative technology in applied healthcare fields (**innovate**).

GOAL

Achieve greater economies of scale, greater efficiencies, and superior outcomes by capitalizing on the unique synergies available through trans-college, trans-discipline, and trans-sector connectedness and collaboration.

ACADEMIC PROGRAMS AND DISCIPLINES

UNF MedNEX will be expansive in its span of academic disciplines that can and will participate in the student learning and applied research experiences. Disciplines will include nursing, rehabilitation, counseling, nutrition, hard sciences, medical engineering, analytics, psychology, computing, philosophy (ethics training), among others. We anticipate, for example, growing high-need programs in such areas:

- Genetic Counseling
- Health Informatics and Analytics
- Mental Health DNP, including specializations in Traumatic Brain Injury (in partnership with Eisenhower), PTSD (considering the regions military population), Prevention and Treatment, Addiction Counseling, and Animal Assisted Therapy
- Nutrition & Wellness
 - UNF currently offers Doctorate in Clinical Nutrition (DCN) – this program is only the second of its kind in the United States. The first is at Rutgers University.
 - The Center for Nutrition and Food Security (CNFS) serves as a gateway to the University for non-profit Agencies, government programs, professional organizations, and industry personnel by exploring solutions to food insecurity and malnutrition.
- Occupational and Physical Therapy (JAX ranked 2nd best large city for physical therapists)
- Sports Training and Rehabilitation

PUBLIC-PRIVATE PARTNERSHIPS

Breadth of organizations for collaboration utilizing **UNF MedNEX**® include (universities, colleges, and high schools) + (hospitals, medical schools, rehabilitation centers, technology companies, etc.)

The partnership goals are to develop unique experiential learning opportunities through immersion in existing health facilities, classes taught by experienced healthcare professionals, and research that is problem specific and company sponsored.

Proposed UNF MedNEX partnerships may include, but are not limited to:

- Scholarships
- Qualified teaching professionals from area hospitals
- Credentialing: the special set of health professional organizations in Jacksonville further provides the opportunity for students to receive badges in designated areas or specific disciplines with partner organizations (e.g., certification in cancer nursing from MD Anderson, certification in patient service quality from Mayo)
- Clinical rotations
- Shared UNF simulation labs; medical technology innovation labs; specialized equipment including a Shimadzu mass spectrometer that will be used by research hospitals in the state

(Mayo, Johns Hopkins Children's St Petersburg, MD Anderson) to develop hyper early diagnostics for diseases such as cancers and neurological diseases.

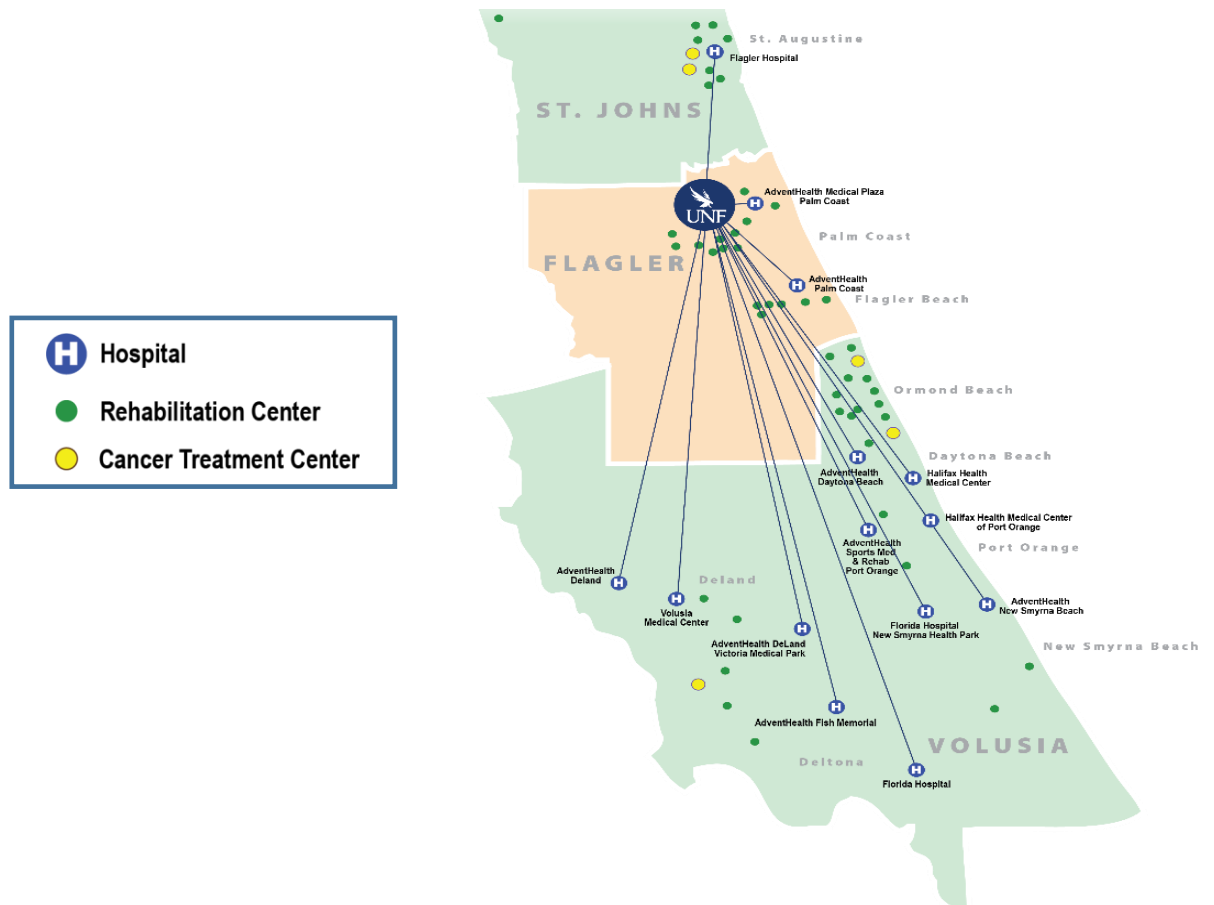
- UNF fulfillment of continuing education for institution personnel
- Online learning collaboration

Current partnerships with industry and non-profit organizations account for more than 28% of UNF's externally funded research, anchored by major collaborative agreements with institutions such as Johnson & Johnson, Florida Blue, and Mayo Clinic, companies interested in UNF both for our R&D capabilities and for our talented graduates.

As of the RFP submission date, UNF has confirmed support for the MedNEX concept from Brooks Health, Advent Health, Mayo Clinic, and Memorial Hospital. No entity we have contacted has yet declined participation.

PENDING PUBLIC-PRIVATE PARTNERSHIP: UNF MedNEX and Palm Coast/Flagler

- The MedNEX represents a multi-county hub and spoke approach to meeting the needs of the medical community in the region currently served by UNF. UNF's first connection outside Duval County and Jacksonville will be Palm Coast/Flagler County. A public-private partnership is in development with the City of Palm Coast, AdventHealth, Allete Energy, and Flagler County Schools.
- The City of Palm Coast has budgeted/committed \$1.5 million in nonrecurring funds pending final budget approval by Council to support start-up of Palm Coast educational center.
- AdventHealth has committed \$500,000 to build and outfit nursing simulation lab in Palm Coast to support this UNF initiative in the region.
- Needs assessment determines UNF offerings. Flagler County's most immediate needs are ASN to RN conversion, RN to DNP conversion, and physical therapists. The partnership will include a 2+2 agreement with Daytona State College plus the addition of classroom and health simulation labs to provide advanced training for Jacksonville and Palm Coast health care professionals.



UNF MedNEX[®] and Support for SUS Priorities

The following are among the additional ways that UNF MedNEX supports the priorities of the Florida State University System:

ATTAINMENT GOALS

- Contribute to the state-wide attainment goals by creating unique programs and pathways that promote high school and two-year graduation

FLORIDA RETENTION OF HEALTHCARE GRADUATES

- Goal is to provide full-scholarships to students enrolled in the UNF MedNEX programs. In return, graduates promise to work within the state of Florida for a specified period

PARTNERING WITH SUS INSTITUTIONS TO CREATE SYNERGIES

- Provide foundational learning opportunities that create student pipelines to professional healthcare programs at other SUS institutions

- Avoid the redundancies of seeking the establishment of additional professional schools in medicine, dentistry, pharmacy, etc.
- Create a base for student internships and residencies for UNF students and students from other SUS institutions
- Provide applied research opportunities (e.g., field-labs for dissertation research) in the health fields for students completing advanced degrees at other SUS institutions

FLORIDA COLLEGES AND 2+2 PROGRAMS

- Focus on automatic admits into specific health fields for students from two-year institutions
- 2+2 agreements with Florida State College Jacksonville, Daytona State College and St. Johns River College
- Medical Technician program support

HIGH SCHOOL PATHWAYS

- Provide dual-enrollment courses and focus on automatic admits into specific health fields for high school students who meet admission thresholds
- UNF-Flagler High School (Palm Coast) Collaboration - UNF Brooks College of Health (BCH) has had preliminary discussions regarding a formal affiliation agreement with their Medical Academy to provide BCH students an opportunity for dual enrollment. Flagler High School students would enroll in courses through UNF (distance learning, on satellite site, or on site at the high school) which would optimally prepare them for a health career major. Flagler High School currently collaborates with the local Advent Hospital to provide opportunities for students to shadow health professionals in the fields to which they aspire.
- Mayo Clinic Med School 101 - target audiences include high school seniors and college undergraduates/graduates. No-cost, half-day, public seminar that provides valuable information and tips about applying to medical schools including preparing for medical school and the Medical College Admission Test (MCAT), selecting schools, completing the American Medical College Application Service (AMCAS) application, financial aid, and volunteering.

- I. 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.

UNF MedNEX[©] and SUS Metrics

The following table captures the projected impact of UNF MedNEX on relevant SUS metrics across different levels of added student enrollments in the respective healthcare programs. “Current” is the present performance of UNF on the respective metric and “needed for 10 points” refers to ten **excellence points** and not improvement points.

Metric	Current	With Additional Undergraduate Students					Needed for 10 pts
		20	40	60	80	100	
<ul style="list-style-type: none"> Pct. of bachelor’s grads employed (\$25K+) and/or continued 1-yr. after graduation 	69.9%	70.1%	70.3%	70.5%*	70.7%*	70.8%*	72.80%
<ul style="list-style-type: none"> Median wages of bachelor’s graduates employed full time 	\$38,600	\$38,800	\$38,900	\$39,000	\$39,200	\$39,400	\$40,700
<ul style="list-style-type: none"> Net tuition and fees per 120 credit hours (assume full tuition scholarships) 	\$12,970	\$12,940	\$12,910	\$12,880	\$12,850	\$12,820	\$9,000
<ul style="list-style-type: none"> Four-year graduation rate (if additional students are in FT FTIC cohort) 	38.5%	39.2%*	39.9%*	40.6%*	41.2%*	41.8%*	50%
<ul style="list-style-type: none"> Academic progress rate (if additional students are in FT FTIC cohort) 	78.6%	78.8%*	79.0%*	79.1%*	79.3%*	79.5%*	90%
<ul style="list-style-type: none"> Bachelor’s degrees awarded in areas of strategic emphasis 	54.3%	54.6%	54.9%	55.1%	55.4%	55.7%	50.0%

Metric	Current	With Additional Graduate Students					Needed for 10 pts
		10	20	30	40	50	
<ul style="list-style-type: none"> Graduate degrees awarded in areas of strategic emphasis 	52.7%	54.4%	55.1%*	55.8%*	56.4%*	57.1%*	60.0%

Total performance-based funding points in that column's scenario	78	81	83	84	85	85

Note: Values noted with an asterisk would generate an increase in performance-based funding points for that metric but note that all scores increase.

Additional Performance Metrics:

- Year One (1) Metric:
 1. Articulated partnerships for academic program support and collaboration with healthcare providers and state colleges within our region, including the city of Palm Coast and Daytona State College.

- ROI to the State Metrics:
 1. Talent Retention--graduate placement rates within the state of Florida.
 2. Employer Retention--education and research programs established with healthcare providers as one means to attract and retain health care providers within the state of Florida.
 3. Economic Impact of Innovation Hub

- Longer-term, Improvement Metrics:
 1. Number of graduates
 2. Quality of entering students (e.g., HS GPA)
 3. Quality of graduates (e.g., passing rates on professional exams)
 4. Program placement rates
 5. Number of startups in healthcare fields

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

	Facility Project Title	Fiscal Year	Amount Requested	Priority Number
1.	Not Applicable			
2.				

Appendix A: Workforce Needs

Labor Demand, Labor Supply, and Industry Concentration Analyses

National and regional shortages of nursing and support service professionals continue to present challenges for healthcare providers. According to the Florida Center for Nursing, more than 40% of Florida nurses are approaching retirement age in the next 10 years, leaving the state to face a shortage of RNs by 2025 that can cripple the state's healthcare system. Moreover, shortages and demands are not limited to nursing. Nationally, an estimated additional 27,000 PTs will be needed by 2025 to meet demand for safe, professional, and patient-preferred physical therapy services.

Contributing to these labor shortages are the declining population of 18-21-year-olds and the declining enrollments in Florida colleges and universities (5.4%). Yet, increased access to healthcare from increased insurance coverage and the aging of the population in Florida means demand for healthcare occupations will continue to increase. Specifically, *Healthcare Management Degree Guide* shows the following predicted rise in growth percentage for nursing and other health occupations by 2025 (all in the top 20):

Occupation	Predicted Rise	Avg. Annual Salary
Genetic Counselor	41%	\$56,800
Physician Assistant	38%	\$90,930
Physical Therapist	36%	\$79,860
Orthotist or Prosthetist	36%	\$62,670
Audiologist*	34%	\$69,700
NP or Nurse Anesthetist	32%	\$96,460
Occupational Therapists	29%	\$75,400
MEAN	35.14%	\$75,974

In collaboration with area healthcare partners, UNF has been similarly identifying the specific, immediate needs of selected providers and potential partners in our area.

Healthcare Provider	RN to BSN	Physical and/or Occupational Therapists	Genetic and or Mental Health Counselors	Health Informatics
Advent Health	√	√		
Brooks Rehabilitation	√	√		
Mayo Clinic	√	√	√	√
MD Anderson*	√		√	
Memorial Hospital	√		√	

*Preliminary needs assessment

The following listing, which emphasizes the concentration of healthcare providers in our region, further accents the acute nature of the existing and impending shortage of talented healthcare professionals.

Concentration of Health Life Science Companies in UNF Geographic Region

Company Name	Northeast Florida Employees	Company Description
Baptist Health	11000	Health system
Florida Blue	7000	Health Insurance State Headquarters
Mayo Clinic	6000	Multi-Specialty Medical Center
Ascension St. Vincent's	5300	Hospital
UF Health	3600	Hospital
St. Vincent's Medical Center Southside	2720	Hospital
Johnson & Johnson Vision	2500	Contact lens manufacturing
Brooks Rehabilitation	2000	Medical Rehabilitation
Flagler Health+	1900	Healthcare System
Memorial Hospital	1800	Hospital
Parallon Business Solutions	1780	Shared Services Center for Healthcare Industry
Orange Park Medical Center	1640	Hospital
One Call	1500	Workers Compensation Services
Baptist Medical Center South	1500	Health & Life Sciences
GuideWell Source	1300	Medicare administration
Northeast Florida State Hospital	1070	Adult Mental Health Hospital
Florida Hospital Flagler	1060	Hospital
McKesson Medical-Surgical	1000	Medical Supplies Provider to the Physician Market
Baptist Medical Center-Beaches	800	Hospital
Medtronic Inc.	725	Surgical Products Manufacturer
St. Vincent's Medical Center Clay County	520	https://healthcare.ascension.org/Locations/Florida/FLJAC/Middleburg-St-Vincents-Medical-Center-Clay-County
Putnam Community Medical Center	490	Hospital
Optimum Healthcare IT	450	Healthcare Managed Services
Nemours Children's Health System	420	Non-profit clinic
Baptist Medical Center Nassau	410	Health Care
Formativ Health	360	Healthcare BPO; satellite patient access center
OptumRx	350	Managed healthcare company

Baker County Medical Services	350	Hospital Nursing Home and Clinic
Availity	350	Health Care Information Networking
Challenge Enterprises of North Florida Inc.	300	Disabled Services
Zimmer Biomet Thoracic	290	Surgical Product Manufacturing
Care Spot	280	Walk in urgent care center
Life Care Center of Orange Park	270	Nursing Home
Allegro	260	Senior Living
Care Center of Nassau	250	Care Center
Specialty Hospital	246	Long-Term Care
River Region Human Services Inc.	243	Non-Profit Behavioral Health Housing for Homeless
Baptist MD Anderson Cancer Center	240	Cancer treatment center
Kindred Hospital North Florida	230	Long term acute care
Healogics	225	HQ for Health Services Provider
Solaris HealthCare Palatka	220	Skilled Nursing and Assisted Living community
KLS Martin USA	215	Medical Device Manufacturing
River Point Behavioral Health	210	Behavioral Health Hospital
UF Proton Therapy Institute	200	Clinical research facility
Henry Schein Inc.	200	Distributor of health care products and services
Life Care Center of Hilliard	190	Serving health needs of varying population
Grand Oaks Health and Rehab	180	Skilled Nursing Care Facility
MECLABS Institute	165	Independent research institute
Cathedral Gerontology Center Inc.	160	Nursing Home
North Florida Home Health Care Inc.	150	Home Health Agency
Harmony Dental Laboratory	150	Manufacturer of Dental Prostheses
Sterling Medical Group Billing	143	Health & Life Sciences
St. Augustine Health & Rehabilitation Center	140	Health and Rehab Center
AmeriHealth Caritas	130	Medicaid processing service center
All Saints Catholic Nursing Home	120	Nursing Home
Quality Health of Fernandina Beach	110	Nursing Home Skilled Care
Centene Management Company	107	Healthcare services

Clay Behavioral Health Center	100	Outpatient Mental Health & Substance Abuse
21st Century Oncology	97	Physician Groups
Baptist Heart Specialist	90	Physician Group - Heart Specialist
Baptist Health Clay	85	Hospital, non-profit
Citra Health Solutions	80	Health benefit management
HCI Group	72	Healthcare IT services
Community Hospice Bailey Family Center for Caring	60	Not-for-profit hospice care
Ecolab	55	Water, hygiene and energy technologies & services
ARK of Nassau	36	Serves adults with disabilities
Advanced Environmental Labs	34	Laboratory
Silver Treasures at St. Augustine	32	Assisted Living Center
Cardinal Health	30	Medical Products Distribution
Marco Ophthalmic Inc.	30	Distributor of Diagnostic & Eye care Equipment
Benco Dental	20	Dental Distributor
Bremer Brace of Florida Inc	20	Orthotics and Prosthetics Manufacturers
Healthsouth Sports Medicine and Rehab.	20	outpatient healthcare services
Beutlich Pharmaceuticals	20	Pain management and preventative care pharmaceuticals
B&G Educational Innovations	15	Designer and manufacturer of training simulation products for the healthcare industry.
Dayspring Health, LLC	15	Assisted Living Facilities
Forcura	15	Healthcare Technology
Anytime Fitness	12	24-hour franchise gym
Seal Shield LLC	11	Healthcare technology
Veterinary Orthopedic Implants (VOI)	10	HQ and manufacturer of veterinary implants
TEHC LLC	10	Home health care services
Air Liquide Health Care	9	Medical Gases
Eye Envy	8	Optometry/retail eyewear
e-Zassi	8	Medical Device Software
TapImmune	7	Developer of vaccines
Safety Clamps Inc.	7	Clamp Manufacturer
Orthodontic Specialists of Florida	6	Orthodontic Care
Treace Medical Concepts	5	Foot and ankle medical device company

Alfred I Dupont Foundation	5	Foundation-Education Philanthropic Research
Advance Muscle Therapy, LLC	4	Fitness/Massage/Exercise training.
Precision Chiropractic	2	Chiropractic company; private practice.

APPENDIX B: Core Competencies

UNF Healthcare

Research and Collaboration Accomplishments in Healthcare

In just the past three years, the value of external funding awards made to UNF has increased by 25%, to an annual total exceeding \$10 million. This includes numerous competitive grants from the National Science Foundation, National Institutes of Health, the National Oceanic and Atmospheric Administration, and the US Department of Education, among other federal agencies. The majority of UNF's invention portfolio and tech transfer activity is related to the health sciences, ranging from 3d printing advances to cancer-fighting compounds.

Partnerships with industry and non-profit organizations account for more than 28% of externally funded research, anchored by major collaborative agreements with institutions such as Johnson & Johnson, Florida Blue, and Mayo Clinic, companies interested in UNF both for our R&D capabilities and for our talented graduates.

- *Big Data Advanced Analytics* - Faculty representing all five of UNF's colleges form an active working group focused on "big data" in all of its manifestations, with special strengths in health and education informatics, economic and predictive analytics, and big data architecture and statistics, as well as related fields in cloud computing and cyber-security. With Jacksonville serving as a major hub for medical research and insurance companies, faculty are actively engaging with industry leaders such as Mayo Clinic and Availity who face new data analytics needs and an aging national demographic.
- *Applied Health Research* - Collaborative engagements across UNF's health, engineering, and arts and sciences colleges have created important applied research strengths on topics ranging from obesity and pediatric health to powered mobility and interventions related to balance in geriatric populations. Other research includes the genetic mechanisms of age-related muscle atrophy, the effects of diet and reproduction on life span, and identification and control of mosquito-borne diseases. Significant funding has been provided by the NIH and the Department of Defense, as well as through important partnerships with a community known for its health and biomedical resources.
- The majority of UNF's invention portfolio and tech transfer. Patents are pending on cancer-fighting compounds that UNF faculty have synthesized from curcumin, a substance found in the spice turmeric. Tests done in collaboration with Mayo Clinic researchers show that the compounds inhibit cancer growth while leaving healthy cells unharmed.
- Samples of recent federal support for UNF research include:
 - Data Structure Framework for Chemical Informatics (\$605,849, NSF)
 - Biosynthesis of Economically Valuable Natural Compound (\$294,000, NSF)
 - Designing Adaptive Toys for Disabled Children (\$267,841, NIH)

- Current biomedical research being conducted at UNF
 - Regenerative Biology
 - Aging
 - Nanotechnology and Biomedical Devices
 - Biomedicine
 - Biomechanics
 - Diet and Nutrition
 - Bioinformatics

Nursing Accolades

- Best College Reviews ranked the University of North Florida's RN to BSN program 14th in the nation
- Department of Nutrition and Dietetics opened Center for Nutrition and Food Security
- The UNF School of Nursing (SON) was recognized by the American Association of Colleges of Nursing as one of six programs under their Curriculum Best Practices for Curriculum Improvement as a model for incorporation of population health into the curriculum.
- The SON 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 (NP) program and the Psychiatric Mental Health Nurse Practitioner program (PMHNP) program have a 100% certification pass rate.
- The SON has a program completion rate of 96% average over the past three years. The NP program has a 94% and the PMHNP has a 95% completion rate. SON graduates are highly sought out by area hospitals to the point that recruiters come to campus to recruit students prior to graduation. All SON program graduates report a 100% employment rate.
- Doctorate in Clinical Nutrition (DCN) - this program is only the second of its kind in the United States. The first is at Rutgers University.
- Awarded one of the "Best Colleges for Nutrition Degree Programs 2018-19" by schools.com

Health Informatics Initiatives

- UNF currently offers a Health Informatics certificate (Brooks College of Health/College of Construction, Engineering & Computing). Based on further needs assessment, consideration would be given to offering a Master degree in Health Informatics.

Physical Therapy & Audiology Distinction

- UNF American sign language/English interpreting program is also the only one in the SUS.

APPENDIX C: Innovation Economy

UNF Center for Entrepreneurship and Innovation

Background:

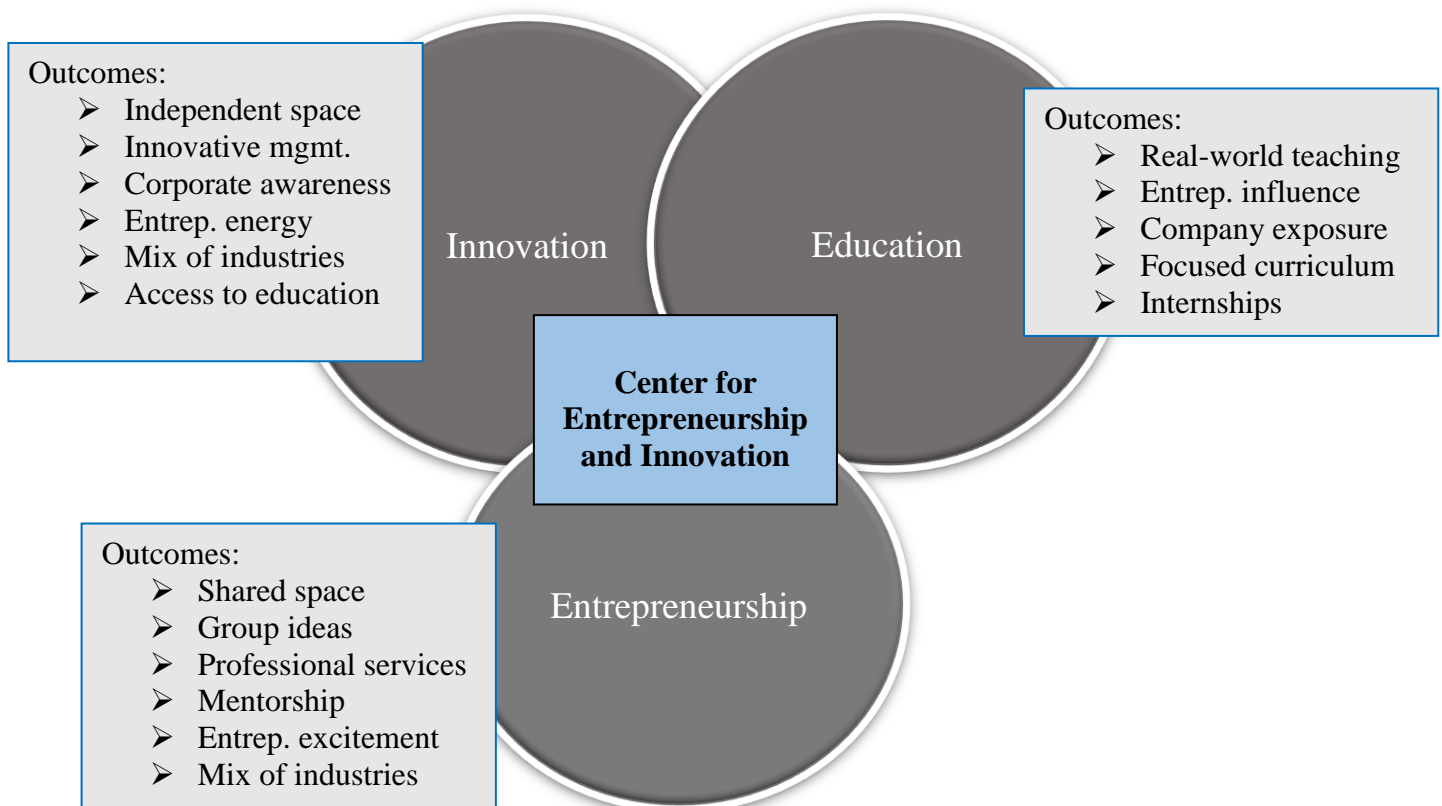
The Center for Entrepreneurship and Innovation was established to place UNF at the epicenter of new business ventures and creative thinking to the betterment of society and our region. The center is designed to serve as the educational catalyst to promote economic growth and development, attract venture capital, as well as create the next generation of startup-business leaders and business mentors to the benefit of NE Florida and the state. Housed in the former Barnett Bank Building in downtown Jacksonville, the interest, participation, and demand for our services has significantly exceeded all initial expectations.

Mission:

Create and build a thriving ecosystem through university and community partnerships that supports entrepreneurs and helps them pursue and achieve success by connecting innovative ideas with a support structure of talent, expertise, and access to financial resources.

Intersection of Innovation, Education, and Entrepreneurship:

The following diagram provides a conceptual underpinning of the positioning of the center and its collaborative culture to drive innovation in NE Florida:



2020-2021 Legislative Budget Request
Education and General
Position and Fiscal Summary
Operating Budget Form II
(to be completed for each issue)

University: University of North Florida
Issue Title: Creation of UNF Medical Nexus

	<u>RECURRING</u>	<u>NON-RECURRING</u>	<u>TOTAL</u>
<u>Positions</u>			
Faculty	4.00	0.00	4.00
Other (A&P/USPS)	5.00	0.00	5.00
	-----	-----	-----
Total	9.00	0.00	9.00
	=====	=====	=====
<u>Salary Rate (for all positions noted above)</u>			
Faculty	\$555,000	\$0	\$555,000
Other (A&P/USPS)	\$370,000	\$0	\$370,000
	-----	-----	-----
Total	\$925,000	\$0	\$925,000
	=====	=====	=====
Salaries and Benefits	\$1,290,375	\$0	\$1,290,375
Other Personal Services	\$40,000	\$0	\$40,000
Expenses	\$1,245,000	\$0	\$1,245,000
Operating Capital Outlay	\$0	\$2,500,000	\$2,500,000
Electronic Data Processing	\$0	\$0	\$0
Special Category (Specific)	\$0	\$0	\$0
Scholarships	\$2,781,000	\$0	\$2,781,000
<u>Med Tech/Simulation Labs</u>	\$680,000	\$3,500,000	\$4,180,000
Total All Categories	\$6,036,375	\$6,000,000	\$12,036,375
	=====	=====	=====

2021-2022 Legislative Budget Request*
Education and General
Position and Fiscal Summary
Operating Budget Form II
(to be completed for each issue)

University: University of North Florida
Issue Title: Creation of UNF Medical Nexus - Year 2

	<u>RECURRING</u>	<u>NON- RECURRING</u>	<u>TOTAL</u>
<u>Positions</u>			
Faculty	20.00	0.00	20.00
Other (A&P/USPS)	6.00	0.00	6.00
	-----	-----	-----
Total	26.00	0.00	26.00
	=====	=====	=====
<u>Salary Rate (for all positions noted above)</u>			
Faculty	2,045,000.00	0.00	\$2,045,000
Other (A&P/USPS)	130,000.00	0.00	\$130,000
	-----	-----	-----
Total	\$2,175,000	\$0	\$2,175,000
	=====	=====	=====
Salaries and Benefits	2,845,445.00	0.00	\$2,845,445
Other Personal Services	140,000.00	0.00	\$140,000
Expenses	1,245,000.00	0.00	\$1,245,000
Operating Capital Outlay	0.00	3,000,000.00	\$3,000,000
Electronic Data Processing	0.00	0.00	\$0
Special Category (Specific)	0.00	0.00	\$0
Scholarships	0.00	0.00	\$0
<u>Med Tech/Simulation Labs</u>	2,520,000.00	2,032,202.00	\$4,552,202
	0.00	0.00	\$0
	-----	-----	-----
Total All Categories	\$6,750,445	\$5,032,202	\$11,782,647
	=====	=====	=====

*UNF budget request for MedNEX is represented by a two-year plan to accurately reflect when funds will be spent. Funds for Year 2 shown above will be requested by UNF for the 2021 legislative session.