

**State University System
Education and General
2021-2022 Legislative Budget Request
Form I**

University(s):	University of Central Florida
Request Title:	Keeping Florida's Tourism Economy Safe from Emerging Infectious Diseases
Date Request Approved by University Board of Trustees:	August 4, 2020
Recurring Funds Requested:	\$7,948,750
Non-Recurring Funds Requested:	\$0
Total Funds Requested:	\$7,948,750
Please check the request type below:	
Shared Services/System-Wide Request	<input type="checkbox"/>
Unique Request	<input checked="" type="checkbox"/>

I. Description - 1. Describe the service or program to be provided and how this issue aligns with the goals and objectives of the strategic priorities and the 2020 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.



UCF requests a recurring state appropriation of \$7,948,750 for the College of Medicine. The economic prosperity of Central Florida depends on tourism and the safety of its visitors and residents. Located in one of the largest cities in Florida that is a global tourist destination, UCF has a unique opportunity to establish itself as a leader in tourism-connected infectious disease and emerging pathogens. This funding will support development of an Infectious Disease and Tourism Health Initiative, which will drive increased National Institutes of Health (NIH) research funding and additional revenue to the college. These resources will bring together multidisciplinary expertise, research, education, clinical and service components to study, track and manage emerging pathogens in a community of global tourism and travel. The funding will enable key partnerships with pharma, private industry, and public entities. Funding the faculty and infrastructure for the Infectious Disease and Tourism Health Initiative will also help support the college's M.D. program and in doing so will add resources that will address accreditation requirements to demonstrate adequate financial resources.

If funded, this \$7.9 million will allow us to:

- Strengthen capacity to predict and respond to pandemics that impact the tourism industry and Florida's economy
- Enhance the preparedness for care of infectious diseases through nationally recognized educational programs
- Create programs and collaborate with the College of Engineering and Computer Science (university of distinction LBR) to increase preparedness and response through technology, data, clinical sciences, and artificial intelligence
- Increase depth and breadth of faculty (17 faculty positions)
- Increase research expenditures by 20%
- Increase number of graduate students by 20%

The budget will be spent on:

- \$5.5 million to hire more faculty that will:
 - Increase number of graduate students in STEM area
 - Decrease bottleneck on graduation rates in STEM undergraduate programs
- \$1.3 million to support faculty, post-doctoral scientists, and students
- \$1.1 million to establish a research clinical lab capable of testing
- Addressing accrediting body's support and resource requirements

Building on existing strengths:

- Central Florida is a global tourist destination and a substantial contributor to the state's economy

- UCF's College of Medicine anchors a growing Medical City at the center of an emerging aerotropolis
- 25 faculty currently engaged in infectious disease research
- Dual degree biomedical engineering and biomedical sciences for undergraduate students preparing for medical school
- Joint degree program in medicine and hospitality
- Limitless Solutions collaboration between engineering and medicine for 3-D printing of medical devices, supplies, and clinical trials
- Partnerships in medical city including Nemours, VA Orlando Medical Center, UF

Infectious Disease and Tourism Health Initiative

Much of the State of Florida's growth can be attributed to technologic advances furthering mobility of people and resources at regional, national and global levels. Expansion of travel to Central Florida by land, air and water has driven dramatic development of tourism, the hospitality industry, a wide spectrum of construction, airport resources, convention center, and cruise lines. Not fully appreciated until now is the downside to this global mobility, namely more rapid spread of contagious illnesses. The international circulation of existing and novel contagions is greatly accelerated by close human contact during travel, impacting the travelers, all employed in the travel and tourism industries, and area residents vulnerable to the community spread. The dependence of Florida's economy on health and safety aspects of travel have never been more highlighted than by the current COVID-19 pandemic. The convergence in Orlando of travel and tourism-related industries presents UCF COM a unique timely opportunity to support the state's financial viability as well as the health and safety of both residents and visitors.



UCF COM's strengths are already well-aligned to address the current and future tourism health concerns, with a strong track record of successful research in infectious disease including microbiology, viruses and other pathogens, and vaccine immunology in the College of Medicine's Burnett

School of Biomedical Sciences. UCF faculty's experience in laboratory testing, high-throughput operations and pathology is also particularly relevant. UCF proposes to leverage the existing strong basic and clinical sciences to expand this research. UCF will develop evidence-based, hands-on guidance to support the tourism industry and the military.

Operationalizing the science is made possible by unique attributes of the UCF College of Medicine:

- **Burnett School of Biomedical Sciences** includes a large community of research-intensive basic scientists addressing the needs for new anti-microbial drugs and new immune-based therapies for viral, bacterial and parasitic infections.
- Burnett School researchers partner across UCF to discover and develop new technologies for the detection of pathogens, and novel surface treatments that can protect large populations from exposure to pandemic organisms.
- **COM Department of Population Health Sciences** includes clinical epidemiology and other public and community health disciplines, and social determinants of health and health care delivery.



In addition to these attributes of the College of Medicine, the university offers partnerships that contribute other resources across UCF:

- **College of Engineering** is internationally recognized for new technologies in surfaces, coatings, materials, advanced devices and systems engineering, biomedical engineering, environmental, and computer modeling.
- **Rosen College of Hospitality** is in the top-two global rankings for expertise integral to tourism, and will benefit not just large corporations but also small local businesses.

- **Department of Psychology** is world renowned as an authority and advisor to industry for industrial operations and human factors.
- UCF clusters
 - **Sustainable Coastal Systems** investigating the impact and structure of Florida's coastal systems on the emergence of infectious organisms including impact on the cruise industry.
 - **Genomics and Bioinformatics** focused on identifying emerging pathogens, understanding the genetic basis of disease, and developing statistical models to analyze disease transmission.
 - **Cybersecurity and Privacy** working with businesses and government to address human and technological security and privacy issues critical in pandemics or disasters.
- **Nanoscience Technology Center** developing novel sensing nanoparticles and vaccine adjuvants to promote anti-SARS immunity.
- **UCF Academic Health Sciences Center** is expanding with the 2021 opening of the UCF Lake Nona Medical Center university hospital bringing an even wider scope of interdisciplinary research, education and clinical services (e.g. the College of Nursing with the training of nurses and nurse practitioners).
- **Orlando VA Medical Center** and **SimLEARN**, the national VA simulation center, are partners located adjacent to the UCF College of Medicine in Medical City.
- **The National Center for Simulation** located in the UCF partnership complex is the nation's central hub for the organizations leading America's military simulation training and modeling efforts including commands from the Army, Navy, Marine Corps, and Air Force.



The essence of the UCF COM proposal is to advance infectious disease and tourism/travel health by expanding and refocusing our research and educational programs to serve the community and industries.

This initiative strengthens:

- UCF’s biomedical collaborations across basic science, clinical and applied sciences for infectious diseases and readiness to address the spread of novel and emerging pathogens.
- UCF’s integration with community partners, providing evidence-based support for best practices in preparedness and remediation.
- Physician training in emerging and pandemic infectious diseases.
- The pipeline of medical lab technicians in BSBS who are trained in cutting edge technologies.
- The ability to carry out clinical infectious disease testing in an accredited facility.

Advancing the UCF Strategic Plan

The Infectious Disease and Tourism Health Initiative and strengthening of the UCF College of Medicine is very strongly aligned with the *UCF Collective Impact: Strategic Plan*. The College of Medicine will continue to “deploy our distinctive assets to solve society’s greatest challenges” while serving our communities and “create partnerships at every level that amplify our academic, economic, social, and cultural impact and reputation.” UCF has identified several five- and twenty-year objectives to measure transformational impact. These include doubling research awards and generating economic, social, and cultural impact – all of which will be advanced through the strengthening of the UCF College of Medicine. With UCF’s demonstrated commitment to major partnerships, the value of the Infectious Disease and Tourism Health Initiative’s educational and research activities will be increased exponentially through its current and future partnerships.



Essential Resources

This legislative budget request will allow UCF to keep Florida’s tourism economy safe from emerging infectious disease while providing needed resources to support the medical school and its accreditation. The UCF COM is the lowest funded medical school per student in Florida.

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.

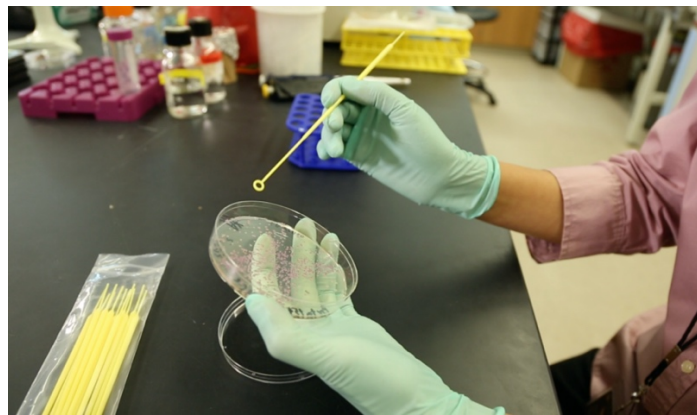
This LBR request addresses a critical social, human, environmental, and economic needs of Florida. Investment in the Infectious Disease and Tourism Health Initiative and strengthening of the UCF College of Medicine will leverage previous UCF and state investments and bring many benefits to students, the university, the state, and society at large. In this time of COVID-19, the ability to increase the output of trainees will allow us to address future crises with adequate professionals. We will grow research in critical areas related to infectious disease to have greater impact on the resolution of future crises. The knowledge gained from the research and the better educated professionals will provide a higher level of clinical care to step up in future catastrophes. The current situation presents UCF COM a unique timely opportunity to support the state's economy as well as the health and safety of both residents and visitors.



Additionally, the investment in the UCF College of Medicine would bring its funding to an equitable level relative to the other newer medical schools in the state. In accreditation site visits, UCF COM has been repeatedly cited for lack of adequate resources. This funding will demonstrate to the accrediting body state support for our medical school. The additional faculty hires and college resources made possible by this funding will demonstrate the state's commitment to the UCF College of Medicine. This critical investment in infectious disease and tourism health will have broad economic impact, strengthening not only the Florida state university system, but also society at large.

In summary, the requested state funding would allow UCF COM to:

- Develop a critically needed Infectious Disease and Tourism Health Initiative bringing expertise in identifying and managing the rapid spread of existing and novel emerging pathogens in an environment of international tourism and travel.
- Provide evidence-based best practices to secure the health, safety and financial viability of the travel, tourism and hospitality industries and our communities.
- Partner across UCF and with public and private industry to accomplish our goals.
- Continue a successfully accredited medical education program and prepare future physicians to understand and address emerging infectious diseases such as the novel coronavirus.
- Invest in needed faculty to maintain and update the STEM and M.D. education program curriculum.



III. 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.	N/A			

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 Central Florida
UCF College of Medicine Funding
Issue Title: including Infectious Disease and
Tourism Health

	RECURRING	NON- RECURRING	TOTAL
<u>Positions</u>			
Faculty	5,525,000	0	5,525,000
Other (A&P/USPS)	1,300,000	0	1,300,000
	-----	-----	-----
Total	6,825,000	0.00	\$6,825,000
	=====	=====	=====
Salaries and Benefits	\$6,825,000	\$0	\$6,825,000
Other Personal Services	\$0	\$0	\$0
Expenses	\$1,123,750	\$0	\$1,123,750
Operating Capital Outlay	\$0	\$0	\$0
Electronic Data Processing	\$0	\$0	\$0
Financial Aid	\$0	\$0	\$0
Special Category (Specific)	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
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Total All Categories	\$7,948,750	\$0	\$7,948,750
	=====	=====	=====

**State University System
Education and General
2021-2022 Legislative Budget Request
Form I**

University(s):	University of Central Florida
Request Title:	UCF RESTORES
Date Request Approved by University Board of Trustees:	August 4, 2020
Recurring Funds Requested:	
Non-Recurring Funds Requested:	\$1,050,000
Total Funds Requested:	\$1,050,000
Please check the request type below:	
Shared Services/System-Wide Request	<input type="checkbox"/>
Unique Request	<input checked="" type="checkbox"/>

- I. Description** - 1. Describe the service or program to be provided and how this issue aligns with the goals and objectives of the strategic priorities and the 2020 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.

Background and Services to Date:

UCF RESTORES provides treatment and resiliency services at no cost to Florida’s veterans, active duty personnel, first responders, and survivors of sexual assault, mass shootings or natural disasters.

Treatment Services: Our innovative three-week intensive outpatient treatment program, where personnel are treated three per day, five days per week, is the only program of its kind in the country. The program includes the use of virtual reality (sights, sounds, and smells) to enhance the effects of the therapy and we have seen remarkable success.

To date, we have treated 550 veterans/active duty personnel, 350 first responders (law enforcement, firefighters, emergency medical technicians/paramedics, and emergency dispatchers), sexual assault survivors, as well as Florida residents who are survivors of the Pulse nightclub, Las Vegas and Parkland mass shootings. Using the same “success” criteria as the VA, 67% of veterans and 77% of first responders no longer meet diagnostic criteria for PTSD after three weeks of treatment and they maintain their treatment gains six months later (with no further treatment). These results are superior to 1st line treatment outcomes at the VA - where outcomes range from 31-42% no longer having a diagnosis.

Resiliency Services: Our very popular peer support trainings continue as well and to date, we have provided this training (at no cost) to over 75 police/fire/sheriff departments throughout the state of Florida, training well over two hundred peer supporters.

Additionally, on October 1, 2018, the workman’s compensation law for PTSD went into effect. That bill included a statement that every first responder had to receive one hour of training in identification, mitigation and treatment of posttraumatic stress disorder. After receiving numerous calls from first responder agencies throughout the state, requesting that UCF RESTORES help them fulfill this requirement, we developed two one-hour on-line training videos (one for firefighter/EMS and one for law enforcement) that have been distributed (at no cost) to over 300 agencies and viewed by approximately 2000 first responders.

As illustrated, RESTORES is well-aligned with the university’s strategic plan. UCF has challenged its faculty to create partnerships that allow them to make a distinctive impact on the community. We have developed several distinctive partnerships, including our partnerships with the Florida Firefighters Safety and Health Collaborative and the National Police Foundation’s Center for Mass Violence Response Studies. We also provide opportunities for undergraduate and graduate training with several unique populations.

Initiative	Total
UCF RESTORES Treatment Program	\$850,000
On-line Suicide Prevention Curriculum	\$100,000
Red Line Rescue, Blue Line Rescue and Front Line (Veteran) Rescue apps	\$100,000

A. Continued operation of the UCF RESTORES treatment program at current locations., \$850,000

In the last year alone, we completed over 4939 hours of therapy for Florida’s veterans, first responders and survivors of mass violence (at no cost to participants). As a result of the COVID-19 pandemic, the volume of requests from the first responder community is increasing. This request is to cover services at our Orlando and Brevard Clinics. It includes salaries and fringe benefits for 5 masters level therapists, 1 care coordinator, 2 receptionists/medical records specialists, 4 graduate students (who assist in providing treatment), 1 business specialist, 1 program manager, 2 outreach personnel and housing costs for veterans and first responders who live outside the greater Orlando area but attend our 21 day intensive outpatient program. It also includes all operational costs for the clinic including electronic health record costs, maintenance of computers, printers, virtual reality equipment, consumable supplies such as diagnostic assessment materials, patient workbooks needed for treatment sessions, copy paper, telephone, etc. The request will allow the clinics to continue to function for another year.

B. Develop an on-line suicide prevention curriculum for populations at risk, \$100,000.

Twenty-two veterans a day commit suicide. More first responders complete suicide than die in the line of duty and unfortunately, the constant stress of the COVID-19 pandemic has increased the rate of suicide. In addition, there are reports of a

significant increase in completed suicide in the Panhandle as a result of the continuing challenges following Hurricane Michael.

David Rozek Ph.D. has joined the faculty of UCF RESTORES in January 2020. His specialty is suicide and PTSD. We are requesting funding for two initiatives. First, as noted in the background section of this request, in October 2018, we produced one-hour training videos on education, mitigation and treatment of PTSD (so that agencies could be consistent with the new Workman's Compensation Law for PTSD in first responders). To address the issue of suicide prevention, we are requesting funding to produce similar videos on suicide education, prevention and treatment. We would do four versions for four communities in Florida that are at risk: adolescents, first responders, veterans and the LBGTQ+ community. The length and content of these videos will vary dependent upon the population, but the message will be consistent: to reach those who contemplating suicide are, and to reach others to equip them to ask the difficult questions and know what to do with the answers. The videos will be distributed at no cost to agencies

This request directly addresses the priority of suicide prevention for vulnerable populations, particularly in light of the ongoing pandemic.

C. Build, deploy and maintain the Red Line Rescue, Blue Line Rescue and Front Line (Veteran) Rescue apps, \$100,000

Red Line Rescue currently exists as a prototype and is a collaboration between the Florida Firefighters Safety and Health Collaborative and UCF RESTORES. Its purpose is to link firefighters/EMTs who are in distress and/or suicidal with a fellow firefighter who is trained in peer support. It will also allow the firefighter to find a therapist who is culturally competent and trained in the provision of evidence-based trauma treatments.

In addition to the programming, coding, and digital art needed to produce an actual app, there will be a need for clinicians to design the questions that the app will determine the scope of the problem (e.g., substance abuse, PTSD, suicide) and more important, vet/train the peer support personnel and clinicians who will be matched through the app. Having a well-trained therapist, who is also trained in first responder or veteran culture, is crucial. When these individuals finally break through the stigma and ask for help, more damage is done if the therapist is well-meaning but ill-informed and ill-equipped. Once Red Line Rescue is online, the back end and engine will be able to be easily converted to Blue Line Rescue (police) and Front-Line Rescue (vets).

This initiative addresses the critical need of suicide prevention through the online provision of peer supporters and the identification of culturally competent, trauma informed therapists. If the first therapist that a first responder encounters is not prepared to deal with their level of trauma and "fires them", the likelihood that they will seek out another therapist decreases rapidly.

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 requested funding is projected to impact several of UCF's performance metrics.

UCF RESTORES' response to community needs is demonstrable. We are called to assist in a variety of traumatic events throughout our community, including deploying to police or fire stations when there is a first responder suicide or "bad" event. We have worked with mass shooting victims throughout the state. We continue to be the treatment center for veterans who cannot go to or do not want to the VA for treatment. Graduate and undergraduate students are integrated into all aspects of the treatment program, providing them with unique educational opportunities.

In addition to the 22 veterans a day who complete suicide, each year, more first responders complete suicide than die in the line of duty. In addition to the personal and familial loss from suicide, the community loses as well - a person dedicated to helping the community and a highly trained community responders. There are effective programs for suicide prevention but they are not readily available. Developing and launching a suicide prevention program will allow Florida's heroes to continue their contributions to the community.

In terms of return on investment, it cannot be overstated that a key outcome of RESTORES' work is to allow the state to retain its critical group of first responders by allowing them to recover from their trauma-related injuries and return to the workplace. Not only does this improve the quality of life for these heroes, it has a substantial economic impact in terms of savings from the recruitment and training of replacement personnel. It has been estimated that up to 35% of police sick-time claims are due to the consequences of stress. Similar rates have been reported for firefighters. Obviously, this results in millions of dollars in cost to the agencies. Alarmingly, this rate appears to be increasing yearly. Additionally, the National Labor Organization reports that 63% of first responders who leave the workplace cite stress as a key factor in their decision. Recruiting replacements is both difficult and costly. Many agencies are suffering from an inability to even identify qualified personnel. When replacements are found, it is estimated that the costs of training can approach \$20,000 per person.

In summary, providing a first-class educational opportunity, combined with helping these worthy public servants, further combined with substantial cost savings results in a tremendous outcome for our citizens.

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1.				
2.				

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 Central Florida
Issue Title: UCF RESTORES

	<u>RECURRING</u>	<u>NON- RECURRING</u>	<u>TOTAL</u>
<u>Positions</u>			
Faculty	0.00	0.00	0.00
Other (A&P/USPS)	14.00	0.00	14.00
	-----	-----	-----
Total	14.00	0.00	14.00
	=====	=====	=====
Salaries and Benefits	\$0	\$825,000	\$825,000
Other Personal Services	\$0	\$0	\$0
Expenses	\$0	\$225,000	\$225,000
Operating Capital Outlay	\$0	\$0	\$0
Electronic Data Processing	\$0	\$0	\$0
Financial Aid	\$0	\$0	\$0
Special Category (Specific)	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	-----	-----	-----
Total All Categories	\$0	\$1,050,000	\$1,050,000
	=====	=====	=====