Statewide Initiatives Moffitt Cancer Center & Institute for Human and Machine Cognition FY 2019-2020 Legislative Budget Request

Moffitt Cancer Center - \$8.5 M

Moffitt is the leading educational facility for oncology in the State. As part of the State University System and a statutory teaching hospital, Moffitt trains more students in cancer than any other Florida institution.

Current funding of \$10.6 million contributes to the education and training of over 2,000 students either rotating or working full time at Moffitt. These students include:

- Full Time Medical Residents and Fellows
- Medical Residents and Fellows rotate annually through training programs
- Undergraduate and Advanced Practice Nursing Students
- Radiology
- Nutrition Therapy
- Medical and Physician Assistants
- Pharmacy Students
- Other Clinical

Florida is facing a critical shortage of Oncologists in the state as the next generation reaches the most likely cancer stage. Moffitt Cancer Center is working to ensure that we retain as many cancer residents and physicians in our state as possible. For FY 2019-2020, Moffitt is requesting \$8.5 million to support cancer research training and professional development for faculty and graduate students.

Institute for Human and Machine Cognition (IHMC) - \$6.7 M

For FY 2019-2020, IHMC is requesting \$6.7M from the State of Florida to enhance and grow current operations at its Pensacola and Ocala Florida locations. IHMC is a world-renowned research institute working in the areas of artificial intelligence, cyber security, robotics, assistive technologies, natural language understanding, data mining, and other related high technology fields. A 501(c)3 statewide research institute created pursuant to Section 1004.447 F.S., IHMC is part of the State University System of Florida with formal research affiliations with Florida Atlantic University, Florida Institute of Technology, University of Central Florida, University of Florida, University of South Florida, University of West Florida, and the Moffitt Cancer Center. IHMC has entered into a formal collaborative research protocol with the Tampa Veterans Administration and is currently engaged in several projects with that venue. In 2016, IHMC launched

2019-2020 LBR

its STEM-Talk series, a free podcast series featuring some of the most interesting people in science and technology.

A recognized economic driver, IHMC has been honored with the top US Department of Commerce award for Excellence in Technology-Driven Economic Development. IHMC has also received national recognition for its community outreach initiatives, including its highly popular public evening lecture series, summer robotics camp, and youthoriented science and educational outreach initiatives (Science Saturdays and I LOVE Science). In June of 2015, IHMC scientists and researchers made worldwide news after placing second in the international Defense Advanced Research Project Agency (DARPA) dynamic walking robotics competition held in Pomona, California. Also of importance, both IHMC's CEO Dr. Ken Ford and Senior Research Scientist Dr. Jerry Pratt have been inducted into the Florida Inventor's Hall of Fame and in 2018 Scientist Dr. Dawn Kernagis received the Young Scientist/Medical Doctor Award from the Undersea and Hyperbaric Medical Society.

Researchers at IHMC pioneer technologies aimed at leveraging and extending human capabilities. Current active research areas include: knowledge modeling and sharing, adjustable autonomy, robotics, advanced interfaces and displays, communication and collaboration, computer-mediated learning systems, intelligent data understanding, software agents, cyber security, sensory substitution, natural language understanding, expertise studies, work practice simulation, knowledge representation, and other related areas. IHMC prides itself on a broad and interdisciplinary approach to addressing societal issues and creating advanced technological solutions, thus its researchers and scientists include well-known computer scientists, cognitive psychologists, neuroscientists, physicians, philosophers, engineers, and social scientists of various focuses. Currently in 2018, IHMC is exploring transferring its mature technologies into the commercial sector through working with businesses in Pensacola and Ocala to further economic development efforts in these regions.

In summary, the funding request of \$6.7 million will enable IHMC to continue to enhance its operations and expand in research of national significance including advanced cognitive assistance technologies, network/cyber security, companion devices, exoskeletons, critical infrastructure protection, and sustainable energy modeling and simulation.

2019-2020 LBR