BOARD OF GOVERNORS STATE UNIVERSITY SYSTEM OF FLORIDA

September 25, 2008

SUBJECT: University of South Florida's research partnerships

PROPOSED BOARD ACTION

Informational only.

AUTHORITY FOR BOARD OF GOVERNORS ACTION

N/A

BACKGROUND INFORMATION

University of South Florida President Judy Genshaft, Ph.D., and Karen Holbrook, Ph.D., Vice President for Research and Innovation, will present information on USF's research partnerships, including the university's partnership with Draper Laboratory.

Supporting Documentation Included: N/A

Facilitators/Presenters: Judy Genshaft, Ph.D. and Karen Holbrook, Ph.D.

University of South Florida's Integrated Research Enterprise

The University of South Florida envisions itself as a pre-eminent research university with state, national, and global impact, and positioned for membership in the Association of American Universities (AAU). Leveraging the comparative advantage of location and collaboration (with both public and private sector partners) will be essential to realizing that vision. As Florida's leading metropolitan research university, USF is dedicated to excellence in:

- Student access and success in an engaged, interdisciplinary, and learnercentered environment;
- Research and scientific discovery including the generation, dissemination, and translation of new knowledge across disciplines – to strengthen the economy, promote civic culture and the arts, and design and build sustainable, healthy communities; and
- Embracing innovation and supporting scholarly and artistic engagement to build a community of learners together with significant and sustainable university-community partnerships and collaborations.

The University is committed to the discovery of new knowledge through significant, innovative research (both basic and applied), and other creative activity. USF's impact on the creation of new knowledge is directly linked to job creation and economic development in the Tampa Bay region and across the state of Florida. USF accomplishes its research mission by building on existing program strengths; fostering effective, cross-disciplinary approaches; and finding new solutions to pervasive social, cultural, economical, medical, and technological challenges facing our communities.

USF is committed to the belief that mutually-beneficial partnerships and community engagement increase the understanding of, and present solutions to, local and global challenges with a mind to strengthening the economy and building sustainable, healthy communities. Strategic partnerships between the university and non-academic entities – such as government agencies, business and industry, and public and private organizations – is a reflection of USF's entrepreneurial spirit and innovation with a focus on defining, informing, and generating "next best practices" for research and innovation.

The dedication of USF researchers, students, and staff has contributed to the phenomenal growth in research that USF experienced over the past 20 years. In 1985/86, the University received \$22.3 million in external funding for research projects. By the end of 1994/95, research awards hit an all time high of over \$100 million in research funding. In the past year, USF researchers have been awarded \$366 million in contracts and grant funding.

Throughout the University's development, the faculty at USF has addressed needs on the local, national, and global levels. A comprehensive array of activities in such areas as health care (particularly in cancer, integrated neurosciences, diabetes, and autoimmune disorders), transportation, biodefense, education, marine science, and engineering are conducted in specialized research and development centers and institutes. The University currently has over 100 such centers and institutes. Many of these centers and institutes function in an interdisciplinary fashion, enabling coordination of projects across colleges.

USF has numerous productive research and health care partnerships through affiliation agreements with hospitals, research institutes, and not-for-profit organizations across the Tampa Bay region, providing for collaboration through shared facilities, faculty, and equipment as well as support for graduate students and internship programs. Such agreements enable the institutions to pool resources, establish core research facilities, and stimulate a rich exchange of ideas.

One of the newest collaborations is the partnership between USF and Charles Stark Draper Laboratory, Inc. Based in Cambridge, Mass., Draper Laboratory is one of the world's leading, independent research and development laboratories engaged in applied research, engineering, and development. Attracted by the University's research and scientific capital, Draper Laboratory will establish a BioMEMS (i.e. MicroElectroMechanical Systems – microelectronics, microfabrication and micromachining technologies) R&D Center at USF, in Tampa, and a Multi Chip Module (MCM) Center in St. Petersburg. Between the BioMEMS R&D Center in Tampa and the MCM pilot facility in St. Petersburg, Draper will create 165 new jobs, with an average wage of \$75,000.

Draper will be a research partner with USF, SRI-St. Petersburg, and others to form the nucleus of a micro-technology cluster, resulting in the growth of innovation workers and economic development in the Tampa Bay region and the state of Florida. Draper Laboratory's expansion into Florida is a collaborative effort between the University of South Florida, Hillsborough County, Greater Tampa Chamber of Commerce Committee of 100, Pinellas County, City of St. Petersburg, Progress Energy, Florida High Tech Corridor Council, Tampa Bay Partnership, Enterprise Florida Inc., and the Governor's Office of Tourism, Trade, and Economic Development.

Draper Laboratory is a non-profit engineering research and development laboratory dedicated to providing technological solutions to important national problems in areas including guidance, navigation, and control; miniature, low-power electronics; biomedical engineering; highly reliable embedded software; energy; and autonomous systems. Draper serves the nation as a bridge between academic research and real-world applications of technology with primary focus on applied development for the Department of Defense and NASA as well as customers in private industry.