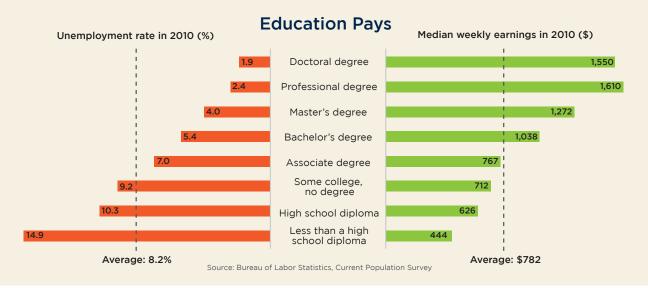
### Graduate Education in Florida

### Creates the highly skilled workforce the state needs

#### Students who earn graduate degrees receive higher wages yearly and over a lifetime.

» According to the US Census, adults with advanced degrees earn 44% more than those with bachelor's degrees. Those with graduate degrees have significantly lower unemployment rates than the general population.



#### Florida employers require workers who have graduate degrees.

- » According to the Bureau of Labor Statistics, one-sixth of the fastest growing occupations for 2006-16 require a master's or doctoral degree. (Council of Graduate Schools report "Higher Education and the Public Good")
- » In the U.S. 2.5 million additional jobs will require a master's or doctoral degree between 2008 and 2018, reflecting the shift in our economy towards a knowledge-based one requires more educated and more academically skilled workers. (Council of Graduate Schools report "The Path Forward")

#### Graduate students help Florida universities obtain research dollars and patents.

- » "Graduate students are an essential input into the research function at doctoral universities. Increases in graduate enrollments are associated with higher levels of external research funding." Ronald Ehrenberg and Liang Zhang, Centre for Higher Education Research and Information. Ehrenberg and colleagues also found that doctoral students increase the number of publications, citations, patent applications and patents granted (university and non-university).
- » Although Florida ranks 4th in population, it ranks only 10th in research expenditures and would have to double total research expenditures to rank among the states commensurate with its population. (National Science Foundation www.nsf.gov/statistics/nsf10302 retrieved on March 23, 2011)

#### Florida's economy is strengthened by students who earn graduate degrees.

- » 60% of all graduate students who earned master's degrees in 2007-08 remained in the state and are employed; 32% of all doctoral graduates stay in Florida and are employed. The availability of high quality graduate education avoids the brain drain faced by some other states. (FETPIP www.fldoe.og/fetpip/ retrieved March 23, 2011)
- » Cooperation between universities and companies that involve faculty and graduate students, such as in our research parks and biotechnology investments, create new jobs, produce innovative technologies, and increase state revenues.

# What does it take to build a strong technology-based economy in Florida?

- » Strong universities that create new knowledge and discoveries
- Mechanisms to bring those discoveries to the marketplace (tech transfer)
- » A solid physical infrastructure (high speed computing, for example)
- » A highly skilled technical workforce
- » Venture capital and an entrepreneurial culture
- » A welcoming and dependable quality of life

### Graduate Education creates a highly skilled workforce

- » Those with advanced degrees earn more, are more involved in their communities, healthier, and are less likely to be unemployed. They are also more likely to become leaders in their professions.
- » Florida has a shortage of hightechnology and high-skilled labor. Creating such a workforce through quality graduate programs is key to relocating businesses to Florida.
- » Thirty Professional Science Masters (PSM) programs have been approved by Florida universities to closely link education and industry, producing highly qualified scientists for the state's high tech industries. All have employer advisory boards.
- » Those with advanced degrees are targeting diseases such as cancer, diabetes, heart disease and others.

## Graduate Education enhances quality of life for all Floridians

- » Students who earn creative and artistic graduate degrees - in music, art, film, digital media and more - benefit Florida citizens by expanding their horizons, stimulating their creativity and deepening their cultural understanding. Creative and artistic activities also stimulate tourism and thereby enhance Florida's number one industry.
- » Research valuable to the state is being conducted through Florida graduate programs including the study of hurricane patterns, coastal erosion, and the effectiveness of state social programs and services.
- » Quality of life plays a key role in relocating businesses in Florida and investment in graduate education improves the quality of life. Regrettably, the state currently ranks in the bottom half of states for quality of life.

## Graduate Education promotes economic growth

- » After graduating, graduate students tend to stay in Florida and earn more and produce more for the state.
- » Florida is ranked 5th in the nation for its licensing income produced by colleges and universities, even though the state ranks 47th in its level of academic investment in R&D. This high level of productivity indicates that serious investment in academic research in Florida would result in substantial innovation increases.
- » Neighboring states rank higher than Florida (32nd in the nation) for engineers and scientists as a percentage of the population. Investment in graduate education, particularly PSM programs, would help Florida produce more highly qualified engineers and scientists.