Organizing and Managing a Statewide PSM Initiative

PATRICIA BISHOP

UNIVERSITY OF CENTRAL FLORIDA

Vision

- Create PSM programs that will contribute to workforce and economic development in 5 key industry sectors, identified by our workforce and economic development agencies as crucial to Florida:
  - Biotechnology
  - Environmental sciences/sustainability/energy
  - Healthcare
  - Simulation
  - Homeland Security/Forensics
- Create programs that would contribute to the regional needs

The following universities are participating:

Florida A&M

Florida Atlantic

Florida Gulf Coast

Florida International
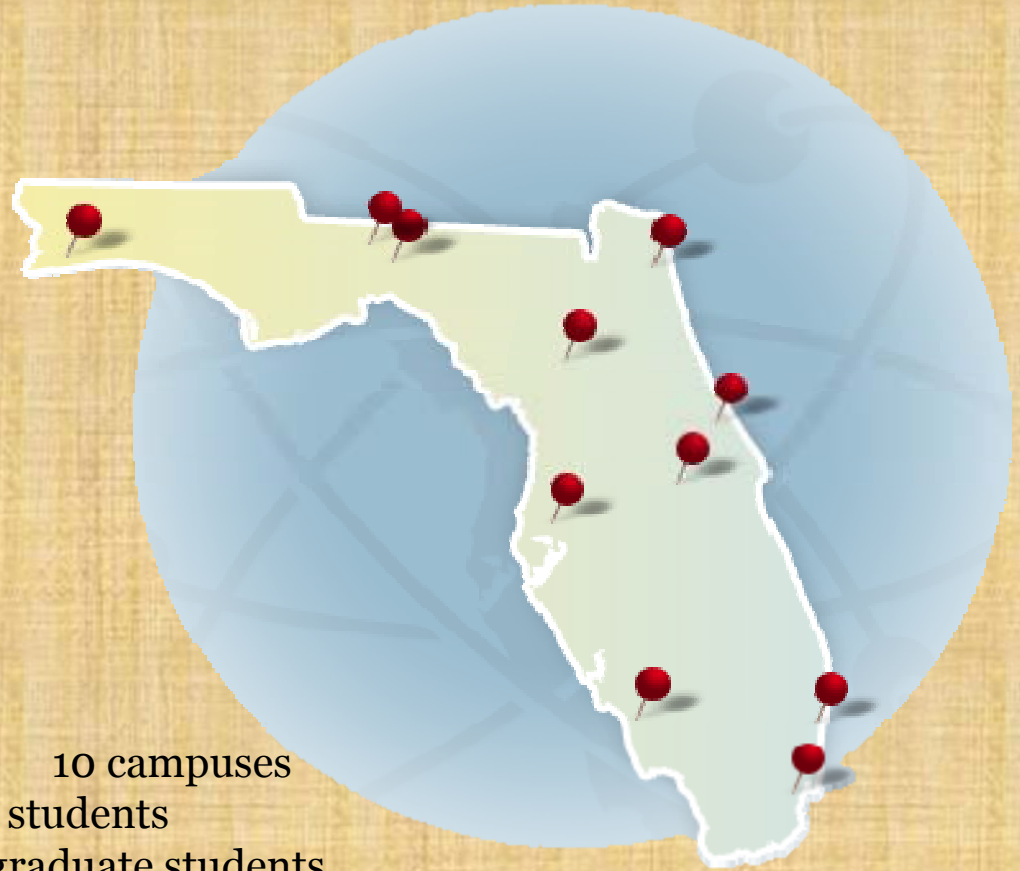
Florida State

U of Central Florida

U of Florida

U of North Florida

U of South Florida

U of West Florida

Embry-Riddle Aeronautical University

PSMs in Florida

10 campuses
302,513 students
56,872 graduate students
44,428 master's students

70,659 degrees awarded, 14,614 master's degrees awarded

Getting Organized

- Graduate Deans are the governing board for the initiative –decisions made collegially.
- Universities were welcome to participate as much or as little as they chose.
- Explored the vision with partners
- Submitted a modest Sloan proposal – funded
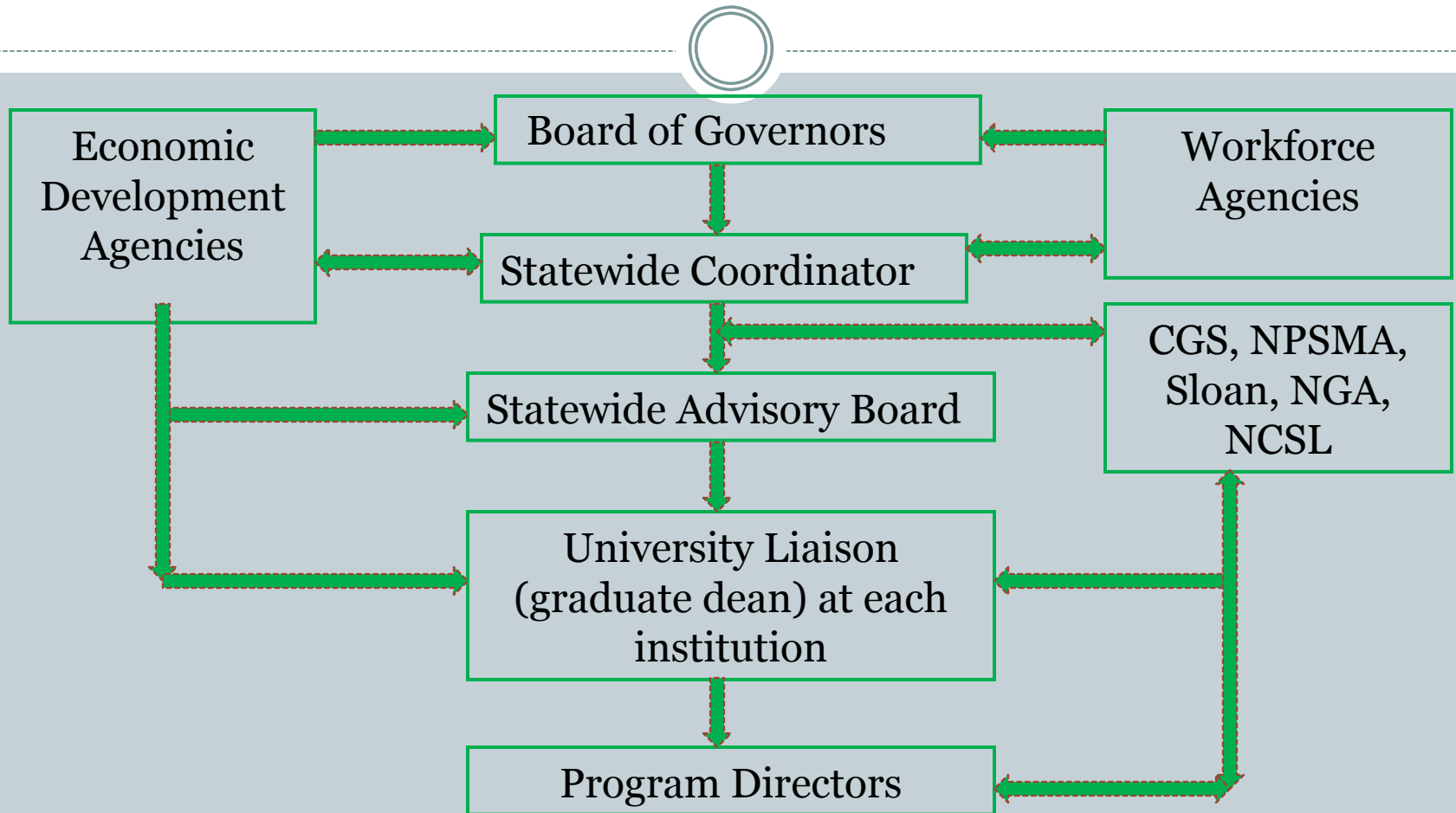- Submitted NSF proposal

Getting Organized

Agreed:

- To share courses with each other, particularly professional and online

- Timeline for delivering the programs

- All programs would satisfy CGS requirements for PSM programs and would apply to be certified

Organizational Chart

```
Economic                    Board of Governors              Workforce
Development                                                  Agencies
Agencies                    Statewide Coordinator

                                                            CGS, NPSMA,
                            Statewide Advisory Board        Sloan, NGA,
                                                            NCSL

                            University Liaison
                            (graduate dean) at each
                            institution

                            Program Directors
```

Organization of those involved

Key groups that require constant communications

- Workforce agencies (both state and local), Chamber of Commerce (both state and local), economic development agencies, employer groups (disciplinary and more general), BOG, lobbyists– full-time job

- Graduate deans and program directors. Right now graduate deans at their universities serve as conduit for information to/from faculty

- Immediate need to develop communication materials (website, brochures, posters)

- Level of interaction is still fairly informal, hasn't addressed specific issues of how to share courses, etc.

Employer Brochure

PROFESSIONAL SCIENCE MASTER'S INITIATIVE
STATE of FLORIDA

Employer's Brochure

www.FLPSM.org

a PSM?

uivalent to the MBA for the type of degree spreading on, and designed to integrate al sciences, mathematics, nd law to better prepare tessional positions ia.

Elements of PSM

This two-year degree includes four key elements:
1. Industry advisory board;
2. In-depth study in a science driven field;
3. Industry internship; and
4. Professional development courses intended to emphasize written and oral communication, leadership, business, and team-building skills

nd of programs are there?

tewide initiative PSM degree program will encompass PSM programs that ular industry sectors specific to each region, with foci important to each of the below.

ogy
programs include and Computational aceutical Chemistry, and hat are planned for this

ntal / Sustainability
programs include Science, Environmental nd GIS, and Environmental struction Management.

Homeland Security
programs include Cyber and curity, Digital Forensics, and be.

Healthcare
Planned PSM programs include Health Informatics, Medical Informatics, and Healthcare Informatics and Cytogenetics/Genetic Counseling.

Simulation / Aviation
Planned PSM programs for this sector include the joint Modeling and Simulation PSM program between Embry-Riddle Aeronautical University and the University of Central Florida.

ffer me?

novative problem-solvers.

e PSM capstone experience is a team ented, multidisciplinary research project dressing challenges and opportunities he real world. The PSM graduate's stone and internship experiences pare them to hit the ground running for r company.

Quick Facts
- There are over 130 PSM programs at over 70 institutions in 25 states and the District of Columbia.
- In the last two years alone, the number of PSM programs grew 20 percent; the first program was started about a decade ago.
- In academic year 2007-2008 there were over 2,600 students enrolled in PSM programs.
- The American Recovery and Reinvestment Act of 2009 includes $15 million for the development of PSM programs through the National Science Foundation.

o I contact?

r website for more information www.flpsm.org

stigator
op
ct.edu,
d Dean,
uate Studies
ntral Florida

Directors
Aeronautical
AU)
d
f.edu
UCF)
University
sbach
edu
eventouri
du
livera
u
mation Security
tional
)
u.edu
be
med
u.edu
Science of
nagement
ast University
al
edu

Dr. Donald Duke
ldduke@fgcu.edu
(239) 590-7542
Environmental Policy and Restoration

Florida State University (FSU)
Dr. Larry Dennis
larry.dennis@cci.fsu.edu
(850) 644-5804
Health Informatics

Dr. Giray Okten
okten@math.fsu.edu
(850) 644-8713
Financial Math

Dr. Janet Peterson
jpeterson@fsu.edu
(850) 644-1979
Scientific Computing

University of Central Florida (UCF)
Dr. Peter Kincaid
pkincaid@ist.ucf.edu
(407) 882-1330
Simulation (with ERAU)

Dr. Sheau Lang
slang@mail.ucf.edu
(407) 823-2474
Digital Forensics

Dr. Henry Daniell
daniell@mail.ucf.edu
(407) 823-0952
Biotechnology

Dr. Jay Kapat
jkapat@mail.ucf.edu
(407) 823-2179
Energy Systems

Dr. Aaron Liberman
aliberma@mail.ucf.edu
(407) 823-3264
Healthcare Informatics

University of Florida (UF)
Dr. Ian Tebbett
ittebbett@ufl.edu
(352) 273-6871
Forensic Science, Pharmaceutical Chemistry

Dr. Richard O. Snyder
snyderr@ufl.edu
(386) 418-1642
Biotechnology

Dr. Paul Zwick
pdzwick@ufl.edu
(352) 392-4836
GIS for the Built Environment

University of South Florida (USF)
Dr. Inge Wefes
iwefes@health.usf.edu
(813) 974-5360
Biotechnology, Bioinformatics and Computational Biology, Healthcare Informatics and Cytogenetics/Genetic Counseling

University of South Florida -St Petersburg (SP)
Dr. Melanie Riedinger-Whitmore
mariedin@stpt.usf.edu
(727) 873-4971
Environmental Science

University of West Florida (UWF)
Dr. George Stewart
gstewart@uwf.edu
(850) 473-7226
Public Health/Health Care Communities, Biomedical/Pharmaceutical Sciences, Medical Informatics

Dr. Klaus Meyer-Arendt
kjma@uwf.edu
(850) 479-3281
Environmental Sustainability and GIS

University of North Florida (UNF)
Dr. Radha Pyati
radha.pyati@unf.edu
(904) 620-1918
Environmental Studies

Management of Statewide Initiative

Sloan deliverables:

1. Employer Survey
2. Student Survey
3. Proposals submitted
4. Programs have had to meet with employers and develop curricula and advisory boards
5. Implemented website at www.flpsm.org.
6. Implemented employer brochure

- In absence of statewide coordinator, UCF has served as central site for website, brochure development, IRB approvals, proposal development, listserve maintainer, etc.
- UCF solicits input from other universities on all key steps as we move forward and asks for volunteers as need arises

Management of Modest Resources

Budget includes money for expenses, graduate assistant at $15K, and travel

- Interim statewide coordinator – night job; UCF pays for graduate dean's time
- Graduate assistant to coordinate and communicate – pay for 20 hrs/wk
- UCF pays for design work, computers, space for graduate assistant
- Expense and travel monies for universities either subcontracted to them or they were free to simply send UCF receipts of their expenses, up to amount

Still to do

- Develop mechanisms to register students in the shared courses
- Develop listservs for the program directors and campus liaisons to communicate
- Plan statewide events for students, employers, and faculty focused on best practices and career and professional development
- Formulate assessment tool at state level for PSM programs (# grads, job placement, employer satisfaction)
- Complete the appointment of the statewide advisory board
- Ensure programs are implemented per the timeline

Difficulties

- Gaps in state strategic planning – education, workforce and economic development agencies

- Board of Governor's structure is underdeveloped and underfunded

- Gaining access to employer groups, workforce groups

Opportunities

- Florida is developing an integrated strategic plan, linking education, workforce and economic development – and looking for funding to fuel this

- Initiative raises visibility of graduate education as part of the solution to Florida's challenges

- Level of cooperation required has increased communications, opportunities for programs, faculties and universities to work together – we can become more than the sum of our parts