SUNY and the PSM Degree:
The New York Context

CGS PSM Workshop
December 2, 2009
SUNY PSM Program: Context

• The State University of New York consists of 64 campuses and 427,000 students. Approximately 40,500 are graduate students.

• SUNY also operates SLN, the SUNY Learning Network, an on-line course delivery system that has ~100,000 students enrolled. SLN is expected to become a significant delivery vehicle for PLUS courses.

• The SUNY PSM Program is directed by Dr. David King, Dean of Graduate Studies and Research at SUNY Oswego, under the auspices of the SUNY Provost’s Office.

• The SUNY PSM Program enjoys strong support among state and regional economic leadership.
The Professional Science Master’s Initiative

Purpose/Goals

• Reverse the “brain drain”

• Strengthen master’s level education across SUNY

• Help to solve the national shortage of domestic students in the sciences and mathematics.

• Create another major focus in graduate education that would articulate a distinctive professional emphasis for more master’s degree programs.

• Revitalize the career potential for students who do not wish to pursue the doctorate.
State-Wide PSM Advisory Board
Organizational Membership

Business Council of New York

New York State Economic Development Council

NY Association of Training and Employment Professionals

New York State Foundation for Science, Technology and Innovation

Brookhaven National Laboratory

Business Incubator Association of New York State
State-Wide PSM Advisory Board
Organizational Membership (Cont’d)

Central New York Biotechnology Research Center

New York State Center for Excellence in Bioinformatics and Life Sciences

Medical Society of the State of New York

HealthNow Foundation

The American College of OBGYN

Waters Global Group

Fusion Market Group
SUNY PSM Executive Committee Membership

Director of the SUNY PSM Program

Associate Provost for Engineering and Technical Education, SUNY System Administration

Dean of Graduate Studies, University at Albany, State University of New York

Associate Provost and Executive Director of the Graduate School, University at Buffalo, State University of New York

Chief Academic Officer (Vacant)

Dean of Graduate Studies, The College at Brockport, State University of New York

President, MedTech

Director of Talent Initiatives, CNY Metropolitan Development Association
History of the PSM Program

In 2007, the Alfred P. Sloan Foundation awarded SUNY a large grant to develop and establish PSM degree programs on nine different SUNY campuses. The original goals of the program were to reverse the “brain drain” of STEM talent in New York State; strengthen master’s level education in New York; help to solve the national shortage of domestic students in the sciences and engineering; create another major focus in graduate education that would attract a distinctive professional emphasis for more master’s degree programs; and, revitalize the career potential for students who do not wish to pursue a doctorate.

Bringing Science & Business Together

SUNY Professional Science Master’s Program

— Funding by the Alfred P. Sloan Foundation

Resources

www.suny.edu/psm
www.professionalsciencemasters.com
www.spmad.org
www.psmusa.org

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SUNY The State University of New York

Professional Science Masters

Why Enroll in a Professional Science Masters Program?

Designed for a broad range of science and technology, (STEM) disciplines, the innovative Professional Science Master’s (PSM) program combines a rigorous science-based curriculum with management, marketing and other industry-relevant coursework.

Typically, PSM programs consist of two years of formal academic coursework in a scientific or interdisciplinary field, along with a professional practice component that may include internships and experiential learning in business and communications skills. Specifically designed to meet the needs of regional industry partners, PSM graduates face numerous employment opportunities in high growth sectors of the economy.

More than 100 PSM degree programs are now offered by dozens of major universities across the United States. Other large public university systems that are developing PSM programs with Sloan Foundation support include the California State University and University of North Carolina system. These national efforts have also been supported by the Council of Graduate Schools and the National Professional Science Masters Association. For additional information about this exciting concept, visit www.suny.edu/psm.
SUNY PSM Campuses

University at Buffalo
Biophysics
Natural and Biomedical Sciences

Buffalo State College
Applied Mathematics/Computational Science

The College at Brockport
Biological Sciences (enrolling)

Binghamton University
PSM Certificate Programs:
Geographic Info. Systems (enrolling)
Materials Science and Engineering (enrolling)
Integrated Watershed Studies (enrolling)
General Science

SUNY Institute of Technology
Applied Mathematics
Advanced Physics
Health Informatics

SUNY Oswego
Human-Computer Interaction
Chemistry (enrolling)

SUNY Plattsburgh
Environmental Policy

SUNY Potsdam
TBD

University at Albany
Computer Science
Forensic Molecular Biology
Biodiversity, Conservation and Policy
SUNY PSM Campuses (Continued)

**SUNY College of Environmental Science and Forestry**
Paper and Bioprocess Engineering
Conservation Biology

**SUNY Cortland**
Sustainable Energy Systems
Advanced Materials
Conservation Biology/Biomedical Sciences
Pharmaceutical Chemistry

**SUNY Fredonia**
Green Business

**Stony Brook University**
Chemistry
Instrumentation

**Empire State College**
“Plus” Coursework

**Cornell University Graduate School**
Applied Statistics

**SUNY Oneonta**
Lake Management
System-wide PSM “Best Practices”

• Begin with leadership “buy-in” early at all levels: system, campus, and program.

• Develop clear lines of communication by establishing a regular newsletter, PSM specific website, system-wide brochure, and a listserv to promote discussion.

• Lessen bureaucratic tensions and “turf issues” by naming a system-wide PSM director, naming point people on each campus, establishing a system-wide advisory board and encouraging campuses to develop program-level advisory committees.

• Avoid complex bureaucratic structures by establishing a decentralized administrative model that encourages “scale-up.”
“Best Practices” (Cont’d)

- System-wide PSM Program infrastructure must be built top down and bottom up.

- Establish a timeline for PSM development and create metrics to benchmark progress.

- Early PSM development should focus on adapting existing master’s degree programs.

- Encourage campuses to build CGS accreditation into program design.

- Develop an assessment regime to monitor program outcomes.

- Solicit internship placements from employers.
“Best Practices” (Cont’d)

• Build a “sustainable” infrastructure to maintain PSM programs for the long term.

• Emphasize the PSM brand by highlighting placements of graduates, employment opportunities, and success stories.

• Do a market study regarding workforce needs and encourage faculty to “listen” to business partners.

• Seek external funding to promote PSM development, scholarships, etc.

• Ensure success by soliciting faculty “buy in” early, identifying business collaborators and engaging business/industry leaders.
Impediments toward System-wide Collaboration

- Complex bureaucratic structures and poor lines of communication may result in loss of stakeholder support.

- The scarcity of institutional resources and competition among various initiatives can place the PSM on the “backburner”.

- Even small delays on the system-level can result in severe delays on the campus level.

- Potential for “pushback” from traditional science faculty.

- Potential resistance from traditional MBA faculty.

- Strategic Persistence will frequently counter the “pushback.”
SUNY PSM: Contact Information

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