



Report on PSM Activities Fall 2007

Since April 2007, the CGS PSM team has been engaged in numerous activities to promote the PSM, which we summarize in this report.

Meetings and Presentations

The CGS PSM team has been engaged in organizing the Fifth Biennial Meeting of Professional Science Master's Program Leaders which will be held November 8-9, 2007 at the Hilton Crystal City, in Arlington, VA. The meeting program was developed in conjunction with a subgroup of the CGS PSM Advisory Board – Don Landenberg, Jung Choi and Phil Tuchinsky. Additionally, other PSM Program Directors provided input into the agenda, including Loida Escote-Carlson who organized Plenary III – PSM Employers and Graduates – and secured all the speakers. CGS notified (via individual e-mail) all Program Directors and coordinators about the meeting and set-up online registration, including whether the Program Directors wanted information to set up Congressional visits. Additional information available online to facilitate the meeting planning for the PSM directors and coordinators includes the information and application for travel subsidy, and information about hotel reservations. CGS also notified all attendees at the 2003 and 2005 Biennial Meetings, sent out an announcement to the entire PSM listserv, posted information on the regular CGS website, provided an announcement to CPST that was included in the *CPST e-mail-Alerts* (which are sent to more than 100 people in the Washington, DC area who are interested in workforce and education issues), provided information to Sheila Tobias to include on her website (PSM-forum.net), and invited a selected list of higher education, professional society, and Congressional staff.

The third meeting of the CGS PSM Advisory Board was held just prior to the opening of the CGS New Dean's Institute of Summer Workshop in July 2007. Among the action items, the Advisory Board reviewed and approved (see Engaging Universities, below) recent applications for PSM Program Affiliation.

The CGS PSM team organized a Dean's Dialogue for the CGS New Dean's Institute and Summer Workshop in San Juan, Puerto Rico. The session included an overview of the PSM by Carol Lynch and presentations by Michael Teitelbaum from the Sloan Foundation—who detailed future PSM activities, including support for state and system-wide initiatives; Keith Boyum, Associate Vice Chancellor for the California State University system—who discussed the CSU system-wide PSM initiative; and Phil Tuchinsky, member of the CGS PSM Advisory Board—who provided the rationale for hiring PSM graduates from an employer's standpoint as well as provided background on how to develop PSM programs utilizing his own work with the University of Michigan. The session was well attended and a summary of it will be the lead article in the October issue of the *CGS Communicator*.

National Conference of State Legislators – On August 6, 2007, at the NCSL annual meeting, Eleanor Babco (CGS) gave an overview of the PSM addressing why the PSM is unique, the market needs it is fulfilling, and why the PSM is of unique interest to state legislators. William Detrich (PSM director from Northeastern University) reported on the PSM program in bioinformatics at his institution addressing such questions as why Northeastern University established PSM degrees, how they are unique among the other math/science options students have and shared some stories of students who have completed the degree, including their subsequent employment at a session entitled "Higher Education's Hot Degree - Preparing Math and Science Professionals for Business and Industry." The session was well attended.

Engaging Universities

Appalachian State University – The CGS PSM team approved the PSM program in Engineering Physics: Instrumentation and Automation. This program was developed as part of the UNC system-wide initiative. Dr. Edelma Huntley is the Graduate Dean and will be attending the Biennial Meeting. Dr. Chris Thaxton is the Program Director and has been invited to attend the Biennial Meeting.

Baker College – The PSM team at CGS reviewed and approved the MSIS program at Baker College for affiliation as a PSM program. Upon approval, Baker College issued a [press release](#). Scott Overmyer, Program Director, will be attending the Biennial Meeting.

Fort Hays State University – President Edward H. Hammond introduced on September 13, 2007 a “Dare to Dream Plan” for a Creative University by 2020. One element of the plan is that “FHSU would develop Professional Science Masters programs to provide advanced training in science or mathematics while simultaneously developing important workplace skills.” CGS has contacted the dean at Fort Hays and has invited him to the Biennial Meeting.

Goshen College – Helen Frasier is working with Carl Helrich to determine whether the new master’s program in medical physics that he is developing can fit the PSM guidelines.

Johns Hopkins University – Helen Frasier is working with John Wierman who is developing a PSM program which, while housed in the engineering department, may include possible concentrations in statistics and financial mathematics, as well as robotics, and nanotechnology. He has partially modeled his program after several PSM programs in financial math and the Case Western Reserve programs in entrepreneurship. He will be attending the Biennial Meeting.

Louisiana State University – Carol Lynch was a member of a program review team and made a presentation at LSU on the PSM at the invitation of the Office of Academic Affairs. Participants will include deans from the colleges of basic sciences, arts and sciences, and agriculture as well as representatives from the departments of oceanography, education, information technology, extended learning, and economic development and representatives from the research office.

Minnesota State University-Moorhead – Carol Lynch spoke with Richard Adler, the dean at MSU-Morehead about establishing PSM programs. He heard the PSM session at the CGS summer workshop and is putting together a strategy there to develop multiple PSMs. CGS has provided him with folders containing pertinent information on the PSM for him to use as he continues this effort and he will be attending the Biennial Meeting.

New York University - Eleanor Babco has continued follow-up with Jim Matthews and Dan Stein in the College of Science at NYU, which is initiating four new PSM programs. Information on affiliation has been provided to Vielka Holness, Director of the Master’s College at NYU who requested it for the physics program which has received state approval and will begin enrolling students. She is hoping to attend the Biennial Meeting.

Texas A&M University –Eleanor Babco is working with Jeannine Kantz at Texas A&M as they develop another PSM program in homeland security which they hope to have available for students in spring 2009. Dr. Kantz was involved in establishing the PSM in biotechnology at TAMU.

Texas Tech University – Eleanor Babco is working with Katarzyna Gabka as she develops a PSM program at Texas Tech University. However, there is no particular timeline on this effort yet.

University of Colorado, Denver – Helen Frasier is working with Brad Stith at UC-Denver to determine whether the master’s programs that he is directing at the Health Sciences Center adhere to the guidelines and can be designated as PSM program. Dr. Stith will be attending the PSM Biennial Meeting in November.

University of Maryland University College – The PSM team worked closely over a period of several weeks with Dr. Rana Khan and Dr. Robert Beauchamp as they prepared their programs for affiliation with the PSM. Dr. Khan is the Program Director for three tracks in biotechnology and Dr. Beauchamp is Program Director for the PSM program in

environmental management. These new PSM programs have been engaged in heavy advertising for their programs in the Washington, DC area.

University of Pennsylvania – Eleanor Babco and Carol Lynch are continuing to work with representatives from the College of General Studies at Penn who want to retool their current terminal masters programs to fit the PSM model.

General System Initiatives

California State University – Carol Lynch continues to work closely with the California State University system on the PSM. She will be making a week-long visit to a number of campuses in the CSU system to visit not only currently operating PSM programs, but those who are planning such programs.

TAMU – Carol Lynch met with Steve Gens, consultant, and Frank Ashley, VC for Academic Affairs, to discuss a TAMU system PSM initiative. Dr. Ashley presented this to a meeting of the TAMU graduate deans. CGS provided folders with appropriate PSM materials for the meeting that Dr. Ashley had with the TAMU deans.

SUNY – Carol Lynch continues her work with Anne Huot, David King, and Kavita Pandit in the development of a PSM initiative at selected SUNY institutions. Several SUNY representatives will attend the Biennial Meeting.

Federal/Agency/Media Relations and Policy Initiatives

Patty McAllister and her staff continued their work with the Congress to advocate for the PSM as part of the national competitiveness initiative. This culminated in the successful passage of HR-2272, the *America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education and Science Act (COMPETES)* by the President on August 9, 2007. McAllister and her staff were able to secure letters to selected appropriate federal legislators from San Jose State (the President, the graduate school dean, and the Program Director), Michigan State University (graduate dean), Northeastern University (Program Director and science dean), Middle Tennessee State University (graduate dean) to name but a few. Several PSM Program Directors in key states were very helpful in this effort.

Patty McAllister, Carol Lynch, and Eleanor Babco continue to meet with two representatives of the National Governors Association who have a grant from the Sloan Foundation to promote the PSM at the state level. The NGA will issue an RFP to states (probably in December) to participate in an intensive workshop on the PSM and welcomed suggestions given them on the composition of teams for the states. Patty McAllister and Eleanor Babco again met with Steve Crawford of NGA and they continue to want to work with CGS as they plan the PSM Academies for the spring. Continuing follow-up and collaboration is planned.

The CGS team continues to work very closely with Heather Grinager (now Chikoore) in the Education Division of the National Council of State Legislatures. As a follow-up from the Breakfast Briefings at the NCSL annual meetings, CGS met with Heather to develop a strategy to bring selected state legislators to the PSM Biennial Meeting. NCSL will subsidize their travel. Using a number of factors, including those who have focused the most on STEM programs, those who had included specific support for postsecondary education, and those who already were involved in PSM programs, CGS prioritized a list of states that would be most promising to Heather to invite. The letter of invitation was sent.

Patty McAllister, Carol Lynch, and Eleanor Babco are collaborating with representatives from the federal relations staff at IBM to continue to promote both the PSM and Service Sciences to Congress as well as advocate for funding for the PSM.

Patty McAllister and her staff developed information to be used by the PSM Program Directors to help them in setting up visits with their Congressional delegation while attending the PSM Biennial Meeting in November. The information included 1) background and instructions for how to set up a meeting in case the Program Directors had not done so previously; 2) contact information for their respective delegation; 3) a selection of talking points that may be useful in the discussions with Congressional members or staff; a map of Capitol Hill with the office building names; and a feedback form to allow CGS to know how the meetings went. All Program Directors who requested help in setting up meetings with their Congressional delegation were sent this information.

Ongoing Activities

Data collection – Three attempts were made to obtain enrollment and graduation data for 2005 from the graduate deans utilizing the format of the GED survey. The 2006 survey was sent to the graduate deans on April 9, 2007. In addition to asking for the 2006 data, 2005 data from those who did not respond previously will be sought. Two further attempts were made to get the enrollment and graduation data for 2006 from the graduate deans. The effort is continuing. An e-mail survey to PSM Program Directors to ascertain the status of their PSM programs resulted in nearly a 100% response.

Communication – The CGS team uses the PSM listserve to provide regular detailed updates of PSM activities to all programs, and to solicit feedback. From our last report until this one, CGS used the listserve to inform the PSM Program Directors and coordinators that:

- The President signed into law HR-2272, the *America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education and Science Act (COMPETES)* as well as provided them with a summary of the pertinent sections of the legislation that addressed the PSM.
- The Department of Defense is offering the SMART scholarships in STEM fields and provided information on how they should urge their PSM students to apply for this aid
- CGS is again sponsoring a booth at the SACNAS meeting in Kansas City. Paul Eloë and Dagmar Beck will be representing the PSM at the booth and they have requested any PSM Program Directors who want their materials available for display to sent them directly to Paul Eloë
- The NPSMA is in the process of creating an alumni database to be stored and accessed by PSM Program Directors online and are launching a number of alumni events, both regionally and nationally. Further information is available from Alaina Levine at the University of Arizona.

And, the listserve has been in frequent use as the CGS PSM team plans the Biennial Meeting in November. Program Directors and Coordinators have been alerted to the online registration, the hotel information, the preliminary program, and the information on travel subsidies.

Carol Lynch and Eleanor Babco wrote an article entitled [*Science + Professional Skills = Formula for Success: A Look at the Professional Science Masters Degree*](#). It appeared in the September/October 2007 issue of *in Chemistry* which is published by the American Chemical Society and sent to all ACS student affiliates. A total of eight of the PSM programs also took out ads in this special issue on “Graduate School and Options,” including California State University, Fresno, Illinois Institute of Technology, Keck Graduate School, Oregon State University, Rice University, San Diego State University, Temple University and Virginia Commonwealth University.

Eleanor Babco was interviewed for the Christian Science Monitor’s Work and Money section by a reporter doing a story on career paths for mid-career scientists. However, he wanted his story to contrast a PSM to an MBA wanting such information as the costs of a PSM degree in terms of tuition and time, the salary bump a PSM degree provided for mid-career professionals. Unfortunately, some of these questions are not answerable at the present.

We continue to work with Gehrung & Associates to aid in the promotion of the PSM nationally. Peter Rooney and his colleague Chris Stout of Gehrung Associates are working with Valerie Strauss, a reporter for the Washington Post to do an extensive piece on the growing PSM programs in the Washington, DC area. CGS has spoken to all the PSM Program Directors and selected a group to be interviewed by the reporter. Hopefully, this article will appear in the newly revamped education section of the Post.

A number of press releases were issued by newly formed PSM programs including 1) Western Carolina University “New master’s program cross-trains scientists for business world,” 2) Baker College “Baker College “M.S. in Information Systems Degree Receives Professional Science Master’s Program Designation” and 3) UMUC “Is a Professional Science Master’s right for you? Learn more about UMUC’s Master of Science in environmental management .

Outreach

Eleanor Babco attended the second meeting on July 14, 2007 of the National Research Council's Board on Higher Education and Workforce Committee on Enhancing the Master's Degree in the Natural Sciences. Prior to the meeting, the CGS PSM team had provided suggestions for speakers for this meeting, including a number of Program Directors. Peter Henderson, staff director of the committee, will provide an update of the Committee's work at the PSM Biennial Meeting. The CGS PSM team will remain involved in this effort.

The CGS PSM continues to coordinate with the newly funded PSM National Organization as they work to develop plans for their organization. CGS invited Dr. Bogdan Vernescu to attend a meeting of deans and directors of newly developed professional masters programs in social sciences and humanities. He shared his experience with the PSM and provided a brief introduction to the NPSMA.

Promotion Efforts

The CGS PSM team continues to distribute the three PSM flyers developed by the team – one directed at students, one at employers and the third at policymakers.

Website – The CGS PSM team of Carol Lynch, Eleanor Babco, Helen Frasier and Joshua Mahler continues to update the Professional Science Masters (PSM) degree website (www.sciencemasters.com) The dynamic new website features a more streamlined look, updated information and resources for students, faculty, employers and policymakers and includes an interactive map of program locations and lists of PSM program by institution and field. Additionally, with the oversight of the CGS PSM Advisory Committee, Guidelines for formal CGS Recognition as a PSM program were developed. These are posted on the website under PSM affiliation.

PowerPoint Presentations – The CGS PSM team prepared a PowerPoint presentation providing an overview of the PSM for use by PSM Program Directors and it is easily downloadable from the [sciencemasters.com](http://www.sciencemasters.com) website. It will continue to be updated as new information becomes available and can be adapted for use by PSM Program Directors for their own programs.

Future Activities

The CGS team will host the fifth biennial PSM national meeting on November 8-9, 2007 in Washington, DC, and a summary of the meeting will be written for the December 2007 CGS Communicator. The CGS PSM Advisory Board will meet following the Biennial Meeting.

The CGS PSM team will hold a workshop on Wednesday, December 5, 2007 at the CGS Annual meeting in Seattle, Washington on *Establishing and Sustaining Professional Master's Programs*. The workshop will highlight best practices associated with planning, implementing, and sustaining professional master's programs. Issues include: institutional financing models, professional skills curriculum, links to employers through advisory boards, projects and internships, data collection, student recruitment, and marketing the programs and graduates to business, government and non-profit organizations. Experiences of CGS institutions with successful programs, and highlights from the 5th Biennial PSM meeting and the PMA Program Directors meeting will be presented.

The data collection of enrollment and degrees of PSM programs will continue through the year.