



## Report on PSM Activities April 2007

Since December 2006, the CGS PSM team has been engaged in a numerous activities to promote the PSM, which we summarize in this report.

### **Meetings and Presentations**

CGS Annual Meeting - A pre-meeting workshop on the PSM was held at the CGS Annual Meeting. The workshop, titled *Establishing and Sustaining Professional Master's Programs*, included background and overview information on CGS's PSM initiatives and highlighted best practices associated with planning, implementing, and sustaining professional master's programs. Three PSM directors—Saeed Foroudastan (Middle Tennessee State University), Shirley Kovacs (California State University, Fresno) and James Henkel (University of Connecticut)—addressed various aspects of these issues, while Carol Lynch presented the overview information and Eleanor Babco addressed the data collection effort. The workshop was well attended and elicited many questions. Carol Lynch joined the breakfast meeting of the SUNY deans and Anne Huot from the SUNY system to discuss the possibility of a system-wide initiative for PSM. Carol was invited to Albany to assist with the planning.

### **Regional Meetings**

A pre-meeting workshop for PSM program directors and graduate deans was held in conjunction with the 36<sup>th</sup> Annual Meeting of the Conference of Southern Graduate Schools (CSGS). Joan Bissell Associate Director, Academic Affairs and Keith Boyum, Associate Vice Chancellor, Office of the Chancellor from the California State University system joined by teleconference for the last hour of the meeting. This was designed to be a multi-purpose meeting, including not only sharing and networking for deans and directors of existing PSM programs, but also assisting the deans and KY Council on Postsecondary Education (CPE) staff with planning for a state-wide PSM initiative. CGS also arranged a session titled *CGS Professional Science Master's Initiative* at the regular CSGS meeting. Presentations were made by Carol Lynch who provided a summary and overview of CGS initiative and three PSM program directors. Dagmar Beck, coordinator of the PSM programs at Rice University, Gregory Buck, director of PSM program at Virginia Commonwealth University, and Saeed D. Foroudastan, director of the three PSM programs at Middle Tennessee State University. This session was very well attended, and resulted in several requests for additional information.

Western Association of Graduate Schools (WAGS) – Carol Lynch participated in a plenary session panel titled “the Competitiveness Agenda.” She discussed *Professional Masters Degrees – Rationale, Significance, and Status*. Carol also hosted a “hot topic” table discussion on the Professional Science Master's Degree. Both of these sessions were well attended and elicited much discussion.

A second pre-meeting workshop for PSM program directors and graduate deans was held prior to the opening of the Northeastern Association of Graduate Schools (NAGS). CGS also organized a plenary session on the CGS Professional Master's Initiatives. Carol Lynch provided a summary and overview of the CGS professional master's initiatives, Christopher Tudge of American University, Ali Eskandarian from George Washington University, and Susan Guma, Dean of the Graduate School at Sarah Lawrence University presented information about their programs. The presentations were well received and elicited much discussion and interest.

Midwestern Association of Graduate Schools (MAGS) Two consecutive workshops on Professional Master's Programs were held. Carol Lynch provided a brief introduction to the PSM while Susan Koch, Graduate Dean at the University of Northern Iowa discussed the development of five PSM programs at her institution from a graduate school dean's perspective. Paul Eloie, also a member of the CGS PSM Advisory Board, then discussed his PSM program in financial math at the University of Dayton.

### **Engaging Universities**

Eastern Illinois University – At the invitation of the Graduate Dean, Carol Lynch gave a presentation to a large number of faculty and administrators. They would like to use the PSM to revitalize some of their master's programs with flagging enrollments. Carol had dinner with the graduate dean, the business dean, and two members of the graduate council to discuss implementation.

American University and George Washington University – At their request, Carol Lynch, Eleanor Babco and Emily Neubig met with the program directors of the PSM programs at these institutions to discuss their programs. These program directors also participated in the plenary session on the PSM held at the NAGS meeting.

University of Tampa – Carol Lynch made a presentation on the PSM to a number of faculty and administrators at the invitation of the graduate dean. She also met with the President and Provost. There was broad interest in developing a PSM program(s) and continued follow-up is planned.

Roosevelt University – Graduate Dean Janett Trubatch again invited the PSM team to make presentations to interested faculty/administrators at the university. Carol Lynch provided the overview of the PSM and the CGS professional master's initiative. Two PSM directors, Elizabeth Friedman, Executive Coordinator of the four PSM programs at Illinois Institute of Technology, and Clifton Chancey, program director of the PSM program in applied physics from the University of Northern Iowa discussed their programs. This is the second visit to Roosevelt.

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. The physics PSM program has just been approved and will probably begin enrolling students in fall 2007 and the other three programs are working their way through the approval process.

SUNY Buffalo – Carol Lynch and Eleanor Babco have continued follow-up with Heather Kornacki, the PSM coordinator for their programs. SUNY-Buffalo has just received word from the New York State Department of Education that their advanced (graduate) certificate program in “Professional Science Management” was approved and registered. Two new PSM tracks at SUNY-Buffalo are being developed – one in biophysics and one with the geology department. The PSM track in computational chemistry is being revitalized.

Case Western Reserve University – Carol Lynch and Eleanor Babco have continued follow-up with Case-Western Reserve University. After a year of suspended enrollments in the five PSM programs, they started enrolling students again in fall 2006.

University of South Florida – Carol Lynch made a site visit to the PSM program in bioinformatics and computational biology at USF. She met with the Director and Associate Director, several students, and the Associate Dean of the Graduate School. The Graduate School would like to add new PSMs. Although this original PSM at USF is a high quality, interdisciplinary program and has no trouble recruiting or placing students, there is little on the “plus” side and the directors are planning improvements.

University of Illinois at Urbana-Champaign – Following the visit last fall by Carol Lynch and Sheila Tobias, the Graduate School submitted a proposal for a planning grant to the Sloan Foundation. This was funded and they are moving ahead with program development.

University of Pennsylvania – Eleanor Babco and Carol Lynch are working with representatives from the College of General Studies at Penn who want to retool their current terminal masters programs to fit the PSM model. Representatives from Penn attended the NAGS workshop on the PSM that CGS arranged. A future site visit is planned.

Towson State University – Eleanor Babco has been working with representatives from the physics department as they develop a new PSM program in applied physics. Towson currently has a PSM program in forensic science. Representatives from the Towson physics department attended the NAGS workshop on the PSM that CGS arranged.

Louisiana State University – Carol Lynch has agreed to make 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.

Texas A&M University – Carol Lynch and Eleanor Babco, working with a representative at Texas A&M, designated a current program in biotechnology as a PSM. It has been added to the list of PSM institutions.

University of Minnesota – Acting upon the suggestion of Sheila Tobias, Eleanor Babco contacted a faculty member at the University of Minnesota and their program in financial mathematics is now a PSM program.

### **General System Initiatives**

California State University – Carol Lynch met with a group of administrators, and led a conference call with Cal. State faculty on a number of campuses, both who have PSM programs and who will be developing programs under the California State system PSM initiative which was funded by the Sloan Foundation. The meeting took place at Cal. State, Fullerton, where Carol also met with the president.

SUNY – Carol Lynch and Sheila Tobias met with a group of interested deans and several system administrators, including the Provost, to plan for the development in a system-level proposal on PSM to the Sloan Foundation. A proposal has been discussed with Jesse Ausubel, and a final version should have been submitted.

### **Federal/Agency/Media Relations and Policy Initiatives**

Patty McAllister and her staff continue to work with the Congress to advocate for the PSM as part of the national competitiveness initiative. On April 25, 2007, the Senate overwhelmingly passed the America COMPETES Act (S. 761) by a vote of 88-8. This legislation contains funding at the National Science Foundation for creating and improving PSM programs. In speaking about the legislation, Senator Alexander (TN) noted that “this new money for education programs at the NSF goes ... to a program called the Professional Science Master’s – this is a program where colleges are helping students earn master’s degrees not necessarily with the goal of going onto a PhD, but a master’s degree that might take you on to a highly technical field in business that in other words making us more competitive.” A number of bills from the 110<sup>th</sup> Congress have been reintroduced. H.363 does not currently contain any provisions for the PSM, but does address funding for graduate education at the NSF and is an ideal vehicle for a PSM provision. McAllister and Babco met with Jim Wilson of the House Science Committee, which is chaired by Senator Bart Gordon of Tennessee who is an alumnus of Middle Tennessee State University, where there are three thriving PSM programs, to discuss any opportunity for including the PSM in the bill.

Patty McAllister and Eleanor Babco met with Kevin Whittlesey, an AAAS Congressional Science Fellow working with Congresswoman Matsui (D-CA) who had just introduced the Scientific Communications Act of 2007. This bill would provide resources at the National Science Foundation to provide communications skills training for graduate students in the sciences. McAllister and Babco introduced him to the PSM, noting that three PSM programs are being developed at California State Sacramento in the Congresswoman’s district. The PSM concept was well received by Whittlesey and further follow-up will continue.

Patty McAllister, Carol Lynch, and Eleanor Babco met 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 to participate in an intensive workshop on the PSM and welcomed suggestions given them on the

composition of teams for the states. PSM information was provided and continued follow-up and collaboration is planned.

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

Patty and the PSM team met with the federal relations staff from California State University and plan to coordinate efforts to promote the PSM.

### **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. An e-mail survey to PSM directors to ascertain the status of their PSM programs resulted in nearly a 100% response. We are continuing to investigate a web-based data collection tool to use to survey graduating PSM students, as well as collect longitudinal data on career progress and satisfaction of PSM graduates.

Communication – The CGS team uses the PSM list-serve to provide regular detailed updates of PSM activities to all programs, and to solicit feedback. PSM directors use it to report on common activities.

Carol Lynch did an interview with a reporter from the *Greentree Gazette* and an article was published in the March issue. Although featuring the MBA, there was a significant discussion about the PSM as well in the article.

Carol Lynch was interviewed extensively for an article on the Professional Science Master's, which appeared in the April 9, 2007 issue of *Hispanic Outlook*. The entire article was devoted to the PSM and was extremely informative and interesting. The article will be posted on the [sciencemasters.com](http://sciencemasters.com) website.

We continue to work with Gehrung & Associates to aid in the promotion of the PSM nationally. Peter Rooney of Gehrung Associates is working with one of the PSM directors in Tennessee, Saeed Foroudastan, to do a story on the success of the programs in his institution. This story will be "pitched" to the regional press in that area.

Outreach – A number of CGS staff, including Carol Lynch and Patty McAllister, met with staff at the Office of Science and Technology Policy to discuss CGS projects including the PSM.

Carol Lynch was invited to make a presentation on the Professional Science Masters at the inaugural meeting on March 28, 2007 of the National Research Council's Board on Higher Education and Workforce Committee on Enhancing the Master's Degree in the Natural Sciences. The Committee's task is to develop a guide for enhancing professional education at the master's degree level in the natural sciences in response to the needs of employers in the non-academic sector. Further meetings are planned and the CGS PSM team will remain involved in this effort. Three members of the CGS National PSM Advisory Board are on the committee.

Carol Lynch continues to coordinate with the nascent PSM National Organization planning group as they work to formulate their mission and develop plans for a permanent organization.

### **Promotion Efforts**

Two additional promotional flyers – one directed toward employers and one directed to policymakers - have been developed by the CGS PSM Team. These two flyers complement an earlier one directed toward students. Bulk copies of each of these flyers have been distributed to the program directors of all PSM programs. They are also available electronically from the [sciencemasters.com](http://sciencemasters.com) website. These flyers are distributed at every opportunity by the PSM team.

Website – The CGS PSM team of Carol Lynch, Eleanor Babco, Helen Frasier and Emily Neubig, completely redesigned the Professional Science Masters (PSM) degree website ([www.sciencemasters.com](http://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. The team has received much favorable feedback and updates are ongoing.

Additionally, a letter was sent to all the deans of the member institutions of the Council of Graduate Schools encouraging them to review their master's offerings and to nominate programs for formal PSM designation. The response thus far has been very favorable.

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://sciencemasters.com) website. It will 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 PSM team will organize a Dean's Dialogue for the CGS New Dean's Institute and Summer Workshop in San Juan, Puerto Rico. The session will include an overview of the PSM by Carol Lynch and presentations by Michael Teitelbaum from the Sloan Foundation detailing future PSM activities, including support for state and system-wide initiatives, Keith Boyum, Associate Vice Chancellor for the California State University system who will discuss the CSU system-wide PSM initiative, and Phil Tuchinsky, member of the CGS PSM Advisory Board, who will provide the rationale for hiring PSM graduates from an employer's standpoint as well as provide background on how to develop PSM programs utilizing his own work with the University of Michigan.

The third meeting of the CGS PSM Advisory Board will also be held just prior to the opening of the CGS New Dean's Institute of Summer Workshop.

The CGS team is beginning the planning of the fifth biennial PSM national meeting to be held on November 8-9, 2007 in Washington, DC. A venue – the Hilton in Crystal City – has been secured, a planning committee formed, and participants notified of the date.

The data collection of enrollment and degrees of PSM programs will continue through spring. If the response rate is not as high as hoped, the CGS team will employ telephone calls to urge deans to submit their data.