



Report on PSM Activities Spring 2008

Since November 2007, the CGS PSM team has been engaged in numerous activities to promote and institutionalize the Professional Science Master's degree.

Meetings and Presentations

A Planning Committee comprised of the PSM team and PSM Advisory Board (AB) members, Don Langenberg, Phil Tuchinsky and Jung Choi planned and hosted the 5th PSM Biennial Meeting of **Professional Science Master's Program Leaders** on November 8-9, 2007 in Washington, DC. The meeting was attended by more than 150 program directors, graduate deans, association and education administrators, and federal and state policymakers. It consisted of four plenary sessions focusing squarely on the dynamic growth and spread of PSM programs across the United States as well as a short session devoted to the recent National Research Council study "Enhancing the Master's Degree," and six Hot Topic breakout sessions. The first plenary session, titled "Adopting the PSM Degree System-wide: The California State University (CSU) System Example," provided attendees with a thorough background on a successful, statewide initiative. Respondents from the State University of New York and North Carolina provided insight on how they are incorporating the PSM into their educational systems. The second plenary session introduced the National Professional Science Master's Association (NPSMA) and the PSM Alumni Network. The third plenary featured a panel of PSM graduates and their employers, and was perhaps the most popular session. The session afforded the panelists an opportunity to provide testimony to the merits in the workplace of PSM training and education. Two of the panelists were returning graduates from the panel at the 2005 PSM Biennial Meeting, demonstrating outstanding career advancement in the two years between meetings. The fourth plenary session emphasized maintaining a U.S. competitive position in careers related to science, technology, engineering, and mathematics. Overall, the program targeted specific issues from the formative first decade of professional science master's programs as well as what actions should be taken to ensure another successful decade of growth and innovation. The meeting, including a number of productive breakout sessions, provided a forum for leaders and representatives to engage with colleagues interested in current and future issues for enhancing the scientific and technological workforce through PSM programs. A summary of the meeting appeared in the [December 2007 CGS Communicator](#).

The 4th PSM AB meeting was held on November 10, 2007 immediately following the PSM Biennial Meeting. Carol Lynch provided an update and status report of CGS activities, calling attention to the new PSM programs which had been approved by the CGS PSM team. There was detailed discussion of the 5th PSM Biennial Meeting including lessons learned during the first decade of PSMs. Bogdan Vernescu, newly elected President of the NPSMA, provided a brief update on the current activities and future plans of the NPSMA and the new PSM Alumni Association. Nancy Vincent provided an update and status report on legislation regarding the PSM. A number of AB members reported on their outreach activities with regard to promoting the PSM.

The CGS PSM team held a workshop on December 5, 2007 at the **CGS Annual Meeting** in Seattle, Washington on *Establishing and Sustaining Professional Master's Programs*. The workshop highlighted best practices associated with planning, implementing, and sustaining professional master's programs. Issues included: 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 represented by Ursula Bechert from Oregon State University and David Chapman from the University of Utah were presented. Helen Frasier, program manager at CGS, presented highlights from the 5th PSM Biennial Meeting and the Professional Master's in the Humanities and Social Sciences Program Directors meeting held August 2007. The meeting was well attended and received excellent reviews. Carol also discussed the PSM in a Plenary session on Master's Education in a Global Context.

The PSM team was represented at each of the four regional affiliate meetings. Carol made a presentation at a PSM plenary session at the **Council of Southern Graduate Schools (CSGS) Annual Meeting** in February 2008. The theme of the CSGS meeting was "Transforming Graduate Education through Innovation." Her presentation emphasized the significance of the PSM for competitiveness and innovation.

Carol and Nancy organized a regional PSM Deans and Program Directors meeting, which was held in conjunction with the **Western Association of Graduate Schools (WAGS) Annual Meeting** in Denver in March 2008. In addition to the Deans and Program directors, attendees included CGS PSM AB members from the WAGS region and representatives from institutions in the process of establishing PSM programs. This meeting was co-hosted by the NPSMA, represented by President Bogdan Vernescu and Executive director Stephen Lemire. Carol also organized a session at the WAGS meeting entitled "Professional Science Master's Programs as an Avenue to Diversity" that featured John Nishio from California State University, Chico.

At the **Midwestern Association of Graduate Schools (MAGS)** annual meeting Carol and Nancy again organized a regional PSM Deans and Program Directors meeting that was co-hosted by NPSMA. Carol also organized a concurrent session at MAGS on the PSM featuring Dean and AB member Priscilla Kimboko, Program Director Edward Caner, and AB member Phil Tuchinsky.

Patty McAllister, CGS VP of External Affairs gave the keynote address at the **Northeastern Association of Graduate Schools (NAGS)** annual meeting in April, 2008 held in New York City. Among other things, she spoke about the PSM. Nancy attended the meeting and was able to answer several questions from deans wanting information about the PSM.

International University Forum – On March 3, 2008, Eleanor Babco provided an overview of the PSM at the forum, which was hosted by the Nordic 5 Tech Alliance and the RES School of Renewable Energy (Iceland) on Renewable Energy Research and Education. Additionally, she gave a presentation on the PSM to a delegation of Dutch higher education officials and a representative from the Royal Netherlands Embassy on February 11, 2008.

Gates Millennium Scholars – Eleanor Babco provided an overview of the PSM on May 13, 2008 at the partners meeting of the Gates Millennium Scholars program. This program, established in 1999, was initially funded by a \$1 billion dollar grant from the Bill & Melinda Gates Foundation, with the goal to promote academic excellence and to provide an opportunity for outstanding minority students with significant financial need to reach their highest potential. They provide seamless support from undergraduate through doctoral programs for students selected as Gates Scholars entering target disciplines. The PSM is an accepted graduate program for Gates Millennium Scholars.

Bio Human Resources Conference - Carol has been working with Joan Bissell, California State University Director, Teacher Education and Public Schools Programs, on the program for a proposed session on the PSM for the BIO Human Resources Conference which will take place October 26-28, 2008 in San Diego. Scott Winston, biotechnology consultant and PSM Advisory Board member, has agreed to participate in the session.

Engaging Universities

At the joint invitation of the Dean of Science and Technology and the Dean of the Graduate School, Carol visited Western Washington University to discuss the PSM with the chairs of the science departments as well as the dean and key faculty from the Business school.

David Finegold from Rutgers (formerly at KGI) visited CGS to discuss his plans to develop several PSMs at Rutgers.

In April, Carol made a presentation on the PSM to the Graduate School Advisory Council at the University of Colorado at Boulder. She also visited Colorado State University and met with several faculty from Science, Agriculture and Business to discuss their plans for one or more PSM programs.

The CGS PSM team approved the following PSM programs: **Arizona State University** program in Nanoscience, **Michigan State University** program in Integrative Pharmacology, **New York University** program in Physics, and the **University of South Florida** program in biotechnology. Additionally, the CGS team continues to work with many institutions as they work to establish new PSM tracks. The attached sheet lists information about most of the 55 PSMs scheduled to come online.

General System Initiatives

California State University – The CGS PSM team continues to work with the California State System PSM initiative as they bring more and more PSM programs to fruition. In particular, there will be an article in the August/September issue of the *CGS Communicator* about the CSU system interaction with their business/industry partners, specifically as it involves their PSM programs.

SUNY – Carol Lynch has been working with David King, Dean of Graduate Studies and Research at SUNY, Oswego as they develop new PSM programs in the SUNY system after receipt of Sloan Foundation funding. Additionally, CGS PSM staff have been reviewing brochures, utilizing the CGS format, which SUNY is preparing to publicize PSM programs.

North Carolina System Initiative – Carol and Michael Teitelbaum visited NC State in Raleigh to attend the Industry Advisory Board meeting for their Molecular Biotechnology PSM program and to present a joint keynote address at a Graduate School Symposium on Professionalizing graduate education. They also visited with the NC State General (system) Administration and were apprized of anticipated progress in adding PSM programs as well as the plan to move administration and coordination of the system PSM initiative to the NC State campus.

Federal/Agency/Media Relations and Policy Initiatives

Patty McAllister and her staff, particularly Belle Woods, in their work with Congress continued to advocate for securing appropriations for the PSM after the successful passage of HR-2272, the *America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education and Science*

(COMPETES) Act which was signed into law by the President on August 9, 2007. However, to date there have been no appropriations for the PSM or for any other program advocated in the HR-2272 legislation.

The **California Healthcare Institute** in collaboration with CGS and others, held a Capitol Hill Briefing on January 15, 2008, on the PSM Program. David Gollaher, President and CEO of CHI provided the context and introduced the speakers. Carol Lynch and Michael Teitelbaum, provided information on the background and value of the PSM. Gail Naughton, Dean of Business and San Diego State University spoke about the relation of their PSM program to the biotech industry in San Diego, and Chip Hance, from Abbott Laboratories spoke about their reasons for providing support for the new PSM program at San Jose State University. The briefing was well attended by congressional staff and agency representatives and was followed by an extensive and useful question and answer period.

Carol is working closely with Chris Hayter of the National Governors Association as NGA plans its Center for Best Practices Policy Academy: State Strategies to Meet Emerging Workforce Needs Through the Professional Science Master's Program, which will be held in Sacramento, California on June 2-3. Carol will also be a presenter at the Academy.

Written Reports

January is report season for the PSM staff and we completed 1) a final report for the Sloan Master's project that provided planning and implementation grants to master's focused institutions; 2) a final report for the Ford Professional Master's project that provided grants to programs in the social sciences and humanities, and 3) an interim report for the Sloan Core PSM project that supports CGS promotion and institutionalization activities. We also submitted a grant proposal to extend the Sloan Core PSM project by continuing our current activities and initiating new ones for two additional years to December 31, 2010, which was successful. CGS submitted a proposal on the PSM to the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) FY 2008 Comprehensive Program grant competition and urged all PSM programs and systems to do so as well via the listserv. A number of institutions submitted proposals.

A report entitled "*The Professional Master's Degree: Results of a Pilot Survey of Programs*" was completed, published, sent to all PSM program directors, and posted on the CGS and sciencemasters.com websites. This report details the findings of a CGS survey of PSM program directors and covers enrollment and degrees, placement status, employment, recruitment, internships, sustainability, and challenges the program directors face. It is being distributed to appropriate federal agency and legislative representatives, among others, when appropriate.

CGS analyzed the traffic to the sciencemasters.com website from when it was launched on January 24, 2007 through June 30, 2007. Over that period, approximately 20,100 visitors accessed the updated website and viewed 57,005 pages. On an average day, there were 2.83 page views per visitor. Further examination revealed that there were more than 15,500 new visitors since the website launched and that the highest number of visitors, more than a quarter, came through gradschools.com, either from the main page (8.94%) or more commonly, through the programs.gradschools.com pages (20.35%). Clearly visitors are most interested in which institutions offer PSM programs and what those programs are. In fact, on average, visitors spend 2.33 minutes on the PSM Locations Map when they accessed it by clicking on the top navigation bar. Visitors averaged 2.36 minutes on the PSM Programs by Field list. The analysis was repeated for the period July 1, 2007 through December 31, 2007 and revealed even more positive trends. Over that period, more than 29,500 visitors accessed the website, with an average 160 visitors per day. Almost 79,000 pages were viewed, with visitors spending an average of 2.31 minutes on the website. In addition, nearly 75% of the visitors to the website were new, and again the highest number of visitors, nearly a fifth, came through the gradschools.com site. Again, visitors are most

interested in where PSM programs are and in which fields. Both reports are available from CGS upon request.

Collaboration and Communication

CGS continues to work with the newly formed NPSMA providing assistance and advice. We also provide assistance to our member institutions as they develop and expand their PSM programs and communicate with them on a regular basis.

The CGS team continues to use the PSM listserv to provide regular detailed updates of PSM activities to all programs, and to solicit feedback. Since the last report, CGS used the listserv to send information regarding a *Washington Post* article highlighting the PSM locally, an update of the federal appropriations process as it related to the PSM, information from a member institution looking for a PSM Director, a link to the Pilot Survey report, a “help wanted” ad that specifically mentioned a MBA, MS, MA or **PSM** degree as a qualification for employment, a link to an article in *Science* and a related Blog, and a request for participants to send letters to their members of Congress in support of legislation favorable to the PSM. The staff also continued to maintain and update the sciencemasters.com website.

Carol was quoted in *The Washington Post*, which profiled a number of local PSM programs as its top “Metro” section story on January 28. Eleanor did an interview and was quoted in a March 7 article in the Careers section of *Science* magazine entitled, “Mastering the Job Market” that highlighted the growing appeal of the PSM degree to employers.

Carol did an interview with a reporter from *Chemical & Engineering News*, the journal of the American Chemical Society, on the PSM. The article will appear in a future issue.

We continue to work with Gehrung & Associates to aid in the promotion of the PSM nationally. We have suggested that they work on doing stories in certain locales as a follow-up to the article in the *Washington Post* highlighting the PSM programs in the DC metropolitan area. CGS suggested doing a story around the number of PSMs in Michigan since there are seven at Michigan State, three at Grand Valley State University, one at Eastern Michigan University and one at Baker College, and they are currently working on this.

The CGS PSM Team continues to distribute the three flyers on the PSM (one for students, one for employers and one for policymakers). Bulk copies of each of these flyers are distributed to the program directors of all newly approved PSM programs and are available electronically from the sciencemasters.com website. They are also distributed at every opportunity by the PSM team.

PowerPoint Presentations – The CGS PSM team is updating a PowerPoint presentation providing an overview of the PSM for use by Deans and PSM program directors that is easily downloadable from the sciencemasters.com website. It will be updated as new information becomes available and can be adapted by PSM program directors for their own programs.

Staff Changes

Helen Frazier relocated to California with her family and her position was filled by Nancy Vincent who had been working with the Government Relations staff. Nathan Bell has joined the PSM team and came to us from the Commission on Professionals in Science and Technology.

Future Activities

The CGS PSM team is working on securing a location for the 2009 PSM biennial program directors meeting in Washington, DC.

The fifth meeting of the CGS PSM Advisory Board will be held just prior to the opening of the CGS New Dean's Institute at the Summer Workshop on July 12, 2008 in Vail, Colorado.

A town hall meeting on master's education will be held at the CGS Summer Workshop in Vail. One of the topics of discussion will be professional master's education. In addition, one of the "hot topics" sessions at the workshop will be on the PSM.

As part of the national recruitment effort, CGS again secured a booth at the Society for Advancement of Chicanos and Native Americans in Science (SACNAS) conference from October 9-12, 2008 in Salt Lake City, Utah, and arranged for two PSM directors to attend and staff the booth – Dagmar Beck from Rice University and John Nishio from California State University, Chico. Additionally, a proposal to have a session at the SACNAS conference was submitted. No word yet as to whether it was accepted.

Over the next few months, the CGS PSM team will be working on a "mergers and acquisitions" project. The PSM team will identify existing programs at CGS-member institutions that have most of the qualities of PSM programs, work with them to adapt their existing program(s) to the PSM model, and invite these institutions to apply for PSM affiliation.