

Council of Graduate Schools



Advocacy, Research, and Innovation

PSM Activities Report Fall 2011

Council of Graduate Schools Professional Science Master's Project Team

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Overview

Since 2001, the Council of Graduate Schools (CGS) has been at the forefront of promoting the Professional Science Master's (PSM) program. CGS' current efforts include:

- participating in four regional CGS affiliate meetings and other meetings that maintain connections to the graduate education community
- providing consultation to program directors regarding the development of PSM programs
- engaging in efforts to broaden PSM outreach to system- and state-wide institutions
- reviewing applications and granting PSM Recognition
- developing quality assurance mechanisms to promote and support sustainability of the PSM brand
- advocating for PSM support to government leaders and policy makers
- increasing employers' awareness PSM programs through presentations and employer-focused meetings that offer opportunities to increase awareness regarding the PSM
- communicating PSM activities and developments via newsletters, email distribution lists, and contributions to relevant media sources
- supporting broad recognition of the PSM brand.

The following activities have been completed since the Spring 2011 PSM Activities Report:

Meetings and Presentations

- **June 5, 2011-**Sally Francis and Linda Strausbaugh presented on the PSM at the Federation of American Societies for Experimental Biology's Policy Committee Symposium in Bethesda, Maryland.
- **June 15-16, 2011-**Leontyne Goodwin presented a poster at the Naval STEM Forum in Alexandria, Virginia titled, "Professional Science Master's Programs: Training Tomorrow's Innovators."
- **June 27, 2011-** Carol Lynch moderated a breakout session on the PSM at the Annual Meeting of the Council of Environmental Deans and Directors.

- **June 23, 2011-**Carol Lynch delivered a presentation on the PSM at the Association for Environmental Studies and Sciences meeting in Burlington, Vermont.
- **July 7- 2011-** Carol Lynch organized and participated in a Colorado meeting on the PSM in Denver, co-hosted with the NCSL.
- **July 9, 2011** –Carol Lynch and Sally Francis convened the final PSM Advisory Board Meeting at the CGS Summer Workshop in Monterey, California.
- **September 9, 2011**-Carol Lynch and Leontyne Goodwin met with Susan Heller-Zeisler of the International and Academic Affairs Office at the National Institute of Standards and Technology (NIST) to consult regarding PSM programs and potential opportunities for PSM graduates.
- October 12, 2011-Carol Lynch provided an update regarding the national PSM Initiative at the SUNY PSM workshop.
- October 13-15, 2011-Leontyne Goodwin attended the NPSMA Best Practices Workshop which focused on the theme, "Creating Tomorrow's Mathematics Professionals," in Niagara Falls, New York.
- October 19, 2011-Sally Francis delivered a presentation on the PSM at the CGS Graduate Education Research and Policy Forum.
- November 8, 2011 Carol Lynch participated in the NPSMA National Advisory Board meeting.
- November 29, 2011 Carol Lynch contributed to the evaluation committee for the NSF SMP.
- **December 4, 2011** Carol Lynch gave a presentation on the PSM at the annual meeting of the American Society of Cell Biology in Denver, CO.
- **December 5, 2011** Carol Lynch attended the Nanoscience PSM Capstone Conference at ASU.

Engaging Universities

- **June 29, 2011** Administrators from American University visited CGS and met with Carol Lynch and Leontyne Goodwin about strengthening their PSM programs.
- August 8, 2011-Sally Francis met with administrators at Lewis University in Romeoville, Illinois to present information about the PSM and consult regarding PSM program development.
- October 19, 2011 Carol Lynch provided a PSM consultation to selected administrators at Purdue U., Calumet.
- October 28-29, 2011-Sally Francis presented information on the PSM at Saint Louis University.
- November 1, 2011 Carol Lynch consulted with administrators and gave a PSM workshop at UC Davis.
- November 30, 2011 Sally Francis presented a PSM workshop at Lewis University in Romeoville, Illinois.
- **December 7, 2011** A pre-meeting workshop was held at the CGS Annual Meeting in Scottsdale, Arizona, entitled "Building and Gaining Recognition for PSM Programs.

New PSM Programs

The CGS PSM team approved the following 12 PSM programs since the spring report:

- 1. Oregon State University, Applied Physics
- 2. Florida State University, Aquatic Environmental Science
- 3. Rice University, Bioscience Research and Health Policy
- 4. University of Illinois at Urbana Champaign, Plant Biology
- 5. State University of New York at Oswego, Human Computer Interaction
- **6.** University of Melbourne, Master of Biotechnology
- 7. University of Melbourne, Master of Operations Research and Management Science
- 8. Arkansas State University, Biotechnology

- 9. Kutztown University of Pennsylvania, Computer Science
- 10. Missouri State University, Natural and Applied Science
- 11. University of Massachusetts Lowell, Environmental Studies
- 12. University of North Carolina at Charlotte, Health Informatics

CGS staff reviewed applications for recognition to ensure that they met each of the criteria listed in the *Guidelines for CGS Recognition as a Professional Science Master's Program*, communicated with the programs, and referred applications to an external committee for a decision when necessary. If all criteria were met, the programs were approved for PSM recognition, listed on the sciencemasters.com website, permitted the use of the PSM trademark, and provided with promotional materials and support. The PSM team also participated in calls with many institutions seeking specific information about developing PSM programs as well as securing affiliation as a PSM.

PSM Affiliation RFP

The Council of Graduate Schools issued a Request for Proposals on September 19, 2011to invite proposals for assuming responsibility for the process of reviewing applications for formal affiliation of Professional Science Master's programs. The RFP is available online at www.sciencemasters.com. The deadline for submission was Thursday, December 1, 2011 at 5:00pm EST.

Through this competition, an organization will be selected to assume sole responsibility for sustaining the PSM Affiliation review process. CGS will continue to manage and staff the existing Affiliation process until the new organization is identified and the transfer of responsibility has been completed by July, 2012.

Other Outreach Activities

Society for Advancement of Chicanos and Native Americans in Science —October 27-30, 2011 — As part of the national recruitment effort, CGS secured a booth at the SACNAS National Conference. The theme of the 2011 conference was "Empowering Innovation and Synergy Through Diversity." Each year the conference attracts students, postdocs, educators, administrators, and researchers in science, mathematics, and engineering. John Nishio from California State University staffed the booth. Several programs contributed their own program brochures for the effort.

PSM Conference Calls – Monthly calls are organized by Michael Teitelbaum of the Alfred P. Sloan Foundation to provide an opportunity for organizations leading the PSM initiative to communicate about their respective activities. Participants include Carol Lynch and/or Sally Francis of the Council of Graduate Schools (CGS), Julie Bell and/or Michelle Liu of the National Conference of State Legislatures (NCSL), Erin Sparks from the National Governor's Association (NGA), Don Langenberg, National Professional Science Masters Association (NPSMA) and the National Association of System Heads (NASH), Dagmar Beck of the NPSMA, Beth Ambos from the CSU system, and Sheila Tobias (NASH). Leontyne Goodwin (CGS) prepares and distributes notes from these calls.

State-wide/System-wide Leaders Conference Calls-Carol Lynch and Sally Francis participate in a monthly conference call with leaders of system-wide or state-wide PSM initiatives to discuss common issues, concerns, and opportunities.

Email Communication –The CGS team continues to use an email distribution list to provide updates of PSM activities to all programs, to communicate information that may be of interest to the PSM

community, and to solicit feedback. Since the "2011 Spring Activities Report", the CGS PSM Initiative communicated the following via email:

- An announcement was sent to program directors/coordinators on behalf of the NPSMA that announced the NPSMA's Best Practices Workshop, *All Systems Go! How to Start and Manage PSM Programs Independently or Within a System*.
- Notification was sent regarding the work of Dr. Beverly Hartline, Associate Provost for Research,
 Dean of Graduate Studies, and Acting Dean of Engineering and Applied Sciences at the
 University of the District of Columbia, who spoke in South Africa about advancing women and
 minorities in science and engineering. At the African Regional Media Hub, Otae Mkandawire
 spoke to her about physics and her passion for empowering students. This was released through a
 podcast.
- Notification was provided regarding the 2011 AGMUS Research Symposium, organized by the
 Ana G. Méndez University System (AGMUS) and its Student Research Development Center
 (SRDC), along with the sponsorship of the National Science Foundation. This event, held on
 September 17-18, 2011 at the Caribe Hilton Hotel in San Juan, Puerto Rico, presented the results
 of the undergraduate research experiences of Science, Technology, Engineering and Mathematics
 (STEM) students during the summer of 2011 at universities and research institutions in the United
 States, Puerto Rico, and abroad.
- A "Report on PSM Activities" was disseminated to program directors/coordinators in spring 2011 from the CGS PSM Project Team.
- Information was disseminated regarding the Educational Testing Service's available summer internships that were relevant to a number of PSM programs. This message contained an email from a senior ETS staff member, along with a link to available internships. This communication urged program directors to pass this information on to students.
- An announcement that focused on new enhancements to the PSM website, <u>www.sciencemasters.com</u>, was forwarded to the CGS mailing list. Specific enhancements included a redesigned 'PSM Program List' with a new search function that allows visitors to choose their own search criteria and a more dynamic PSM Map with added functionality.
- An email was disseminated regarding the 'Request for Federal Appropriation for PSMs.' This email included information and language that could be used by those interested in contacting their representatives, as well as those on the House Science Committee who have the jurisdiction over the COMPETES authorization. An email template was offered by the California State System.
- Notification about the revised 'Guidelines for PSM Affiliation' was distributed via the CGS mailing list.
- A communication was distributed that announced the release of the latest Council of Graduate Schools research report, <u>Enrollment and Degrees in Professional Science Master's (PSM)</u>
 <u>Programs</u>. The report summarized the findings of the 2010 Professional Science Master's Enrollment and Degrees Survey, an Alfred P. Sloan Foundation-funded project to document applications, enrollments, and degrees in PSM programs.
- Program directors/coordinators received an announcement on behalf of NPSMA that announced the NPSMA's Best Practices Workshop, *Creating Tomorrow's Mathematics Professionals*.
- A communication announced the release of the latest Council of Graduate Schools research report, <u>Outcomes for PSM Alumni: 2010/11</u>. The report summarized the findings of the 2011 Professional Science Master's (PSM) Student Outcomes Survey, an Alfred P. Sloan Foundationfunded project to document employment outcomes for graduates of PSM programs.
- Information was shared about the 'Senate Appropriations Report' language that highlights the PSM and encourages inclusion in NSF budget. This communication urged directors to contact their Senators and Representatives and ask them to support this language and the reinstatement of the program at NSF.

- A survey, *PSM Survey: Fields of Study Verification*, was distributed via e-mail by the CGS PSM Project Team regarding concerns related to field of study classifications. Directors were given the opportunity to: confirm that the field of study for their program(s) is/are correct, and if incorrect, provide CGS with the correct field of study for their program(s); or propose a new field of study that would enable more accurate classifications of PSM programs (at this time PSM programs can only be assigned to one field of study category).
- A communication was sent to the PSM Distribution List announcing the *Request for Proposals:* Affiliation of Professional Science Master's Degrees. This RFP is part of the commitment to ensuring continued quality assurance, promotion of the PSM degree, and management of the affiliation process as the Council of Graduate Schools transitions out of its current role.
- An announcement was sent about the release of the publication, <u>Professional Science Master's:</u>
 <u>A Council of Graduate Schools Guide to Establishing Programs</u>, which presents best practices and other experience-based information for developing and operating Professional Science Master's (PSM) programs.
- A communication was distributed that informed program directors/coordinators that the Office of Science and Technology Policy has issued a Request for Information to solicit input regarding recommendations for the development of a National Bioeconomy Blueprint. The central focus is on harnessing biological research innovations to meet national challenges in health, food, energy, and the environment while creating high-wage, high-skill jobs. A link was provided in the email.

*Use of Social Media-*The CGS PSM Initiative also maintains social media presences on Facebook and Twitter to increase access to information about the PSM and related activities.

PSM Press Releases

- A press release was issued by CGS on August 9, 2011that announced the results of its first Professional Science Master's Enrollment and Degrees Survey. The Professional Science Master's Enrollment and Degrees Survey is disseminated annually and documents applications, enrollments, and degrees awarded.
- A press release was issued by CGS on August 23, 2011regarding the results of the first Professional Science Master's Student Outcomes Survey. This survey provides the initial hiring outcomes for 2010-11 graduates and reports perceived satisfaction with the PSM degree.
- CGS issued a press release on September 20, 2011 about the publication of a new comprehensive guide to developing and managing PSM programs titled, *Professional Science Master's: A Council of Graduate Schools Guide to Establishing Programs*.

PSM Publications

The following publications were authored by the CGS PSM team since the spring report. All articles relative to the PSM are listed on www.sciencemasters.com.

- The monograph titled, *Professional Science Master's: A Council of Graduate Schools Guide to Establishing Programs*, was released in September 2011.
- An article titled, "Enrollment and Degrees in Professional Science Master's Programs," was published in the August/September edition of the *Communicator*.
- An article titled, "History of the Development of the Professional Science Master's Degree," was published in the October edition of the *Communicator*.

- A third *Communicator* article, "Automation of System-wide PSM Program Management, Advertising, Professional Skills Assessment, Academic Planning, and Electronic Mentoring," was published in November 2011.
- An article titled, "Professional Science Master's Programs: An Emerging Innovation in Graduate Education will be published in the winter issue of *Perspectives*, the journal of the National Association of Graduate Admissions Professionals.

Promotional Materials – Flyers tailored to the needs of employers, policy makers, and students continue to be distributed to new PSM programs and are available on the sciencemasters.com website.

The CGS PSM team provides a speaker's packet and other resources on the sciencemasters.com website. This information is regularly updated.

Josh Mahler maintains and regularly updates the sciencemasters.com website.

Future Activities

Carol Lynch will present on the PSM at the Conference of Southern Graduate Schools (CSGS) in Jacksonville, Florida on February 23-26, 2012.

Carol Lynch will organize a session at the Western Association of Graduate Schools (WAGS) in Ft. Collins, Colorado on March 19-21, 2012.

Sally Francis will attend the Midwestern Association of Graduate Schools (MAGS) in Chicago, Illinois on April 11-13, 2012.

Sally Francis will deliver a presentation about the PSM at the Northeastern Association of Graduate Schools (NAGS) in Halifax, Nova Scotia on April 19-21, 2012.