



The Voice of the PSM

Winter/Spring 2012

Volume 5, Issue 1

*Please Join Us*

**September 27-28, 2012**  
**NPSMA Best Practices Workshop**  
**Hosted by CSU—Monterey Bay**  
**Theme: Environmental**  
  
**Portola Hotel and Spa**  
**Monterey, California**



- More Details Coming Soon on NPSMA Website-

*Save the Date*

**November 7-9, 2012**  
**NPSMA National Conference**  
**Denver, CO**

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**NPSMA President Bogdan Vernescu Outlines 2012 Goals**



Thank you for expressing your confidence in my ability to lead the National Professional Science Master's Association in 2012. Thanks are due to Dagmar Beck, our Immediate Past President, for her outstanding contribution to, and leadership of, our association during this past year. At the same time, the success of the PSM movement is due to each and every one of you, so it is a good time to acknowledge all of you for your contributions in 2011.

In 2012 we are determined to expand NPSMA's national role as the principal supporter and promoter of PSM programs, build new collaborations with existing national organizations, gain significantly more corporate involvement, and garner the support of a wide range of educational institutions. We will stay true to our motto established at the inception of the NPSMA, to be **The Voice of the PSM**.

Traditionally, we have grown the NPSMA by providing support to new and developing programs. With a critical mass of PSM programs in certain disciplines, we are now able to facilitate discipline-specific meetings, such as the November 2011 NSF-supported workshop in Niagara Falls, NY, focused on the needs and interests of our mathematics PSMs. This successful workshop will be followed in 2012 by workshops dedicated to biology/biotechnology and environmental sciences. Additionally, we will continue to provide individualized support for programs, by providing them with access to the expertise of our members.

We will expand our work with alumni by engaging them at the national level in our marketing and advocacy efforts. In addition to connecting alumni with one another, tracking grads will give NPSMA stakeholders demonstrable evidence of the impact of PSM programs, and provide us with important data and information about national trends.

We will work to engage our current and future stakeholders in industry, business, government and non-profits, who are potential employers of our PSM graduates. We will continue to collaborate and engage with the various groups involved in the PSM movement, including other professional societies, as these collaborations serve to grow the movement. Of great significance is the system-wide and state-wide adoption of the PSMs, which represents both a quantum leap and a positive trend in the PSM movement.

It is important, as we continue to grow, for all members to be actively participating and actively engaged in our association. I am inviting all of our institutional and individual members to share in the responsibility of reaching our goals, and hope to see all of you in November at our Annual Meeting in Denver, Colorado to celebrate our achievements and plan for the future.

**NEW OFFICERS ELECTED TO THE NPSMA BOARD OF DIRECTORS**

President: Bogdan Vernescu, Worcester Polytechnic Institute  
 Vice President: Jean Schaake, University of North Texas  
 Treasurer: Cynthia Bainton, Northeastern University  
 Convener: Ching-Hua Wang, California State University at Channel Islands

Each officer will serve for a term of one year.

### NPSMA Activities During the Second Half of 2011

By Dagmar Beck, PSM Program Director, Rice University and NPSMA Immediate Past President



As your outgoing president, I am honored to have served the NPSMA and am very proud of our many accomplishments in 2011. It is with great anticipation that I turn over the presidency to Bogdan Vernescu, who will be leading us forward to exciting developments in 2012.

This past year, the NPSMA held well-attended Regional Best Practice Workshops in Baltimore, MD, Bloomington, MN and Niagara Falls, NY. The Niagara Falls

workshop was supported in part by an NSF grant awarded to Bogdan Vernescu of WPI and Joaquin Carbonara of Buffalo State College. We also participated in a variety of national conferences such as SACNAS, HENAAC, and AESS/CEDD.

During the year we added two new Advisory Board members: Shane Barrow from the American Conservation Experience and Jerry Rovner from Chevron, increasing the NPSMA Advisory Board membership to 14 members. The annual Advisory Board Meeting was held at the Education Trust Fund in Washington DC in November with the highest attendance in the recent history of these meetings.

NPSMA Board of Directors member, Michael Morad, is actively focusing his attention on engaging PSM alumni nationwide. Other NPSMA activities included the creation of a speakers bureau, updates to the bylaws, stabilization of NPSMA financials, start-up of a nationwide marketing campaign, and creation of new regional and national relationships.

As 2012 begins, we welcome two new Board of Director members. David King, Dean of Graduate Studies and Research at the State University of New York at Oswego, is responsible for promoting and enhancing two dozen graduate programs at SUNY Oswego which enroll about 1,000 students. He also has general oversight for the varied sponsored research programs on the Oswego campus. Dr. King studied at the University of Rochester, the University of London, and SUNY Stony Brook, earning a PhD in modern European Intellectual and Cultural History. He is also Director of the SUNY PSM Consortium which is comprised of 17 of the senior campuses in the SUNY system, including the four major research universities.

Ching-Hua Wang's educational background includes an MD from Beijing Medical College, an MS from Beijing University Health Science Center, and a PhD from Cornell University. She has been a professor in the California State University System since 1990 and was recruited as a founding faculty member at California State University Channel Islands in 2001. During the last 10 years, she has been heavily involved in curricular development and implementation of undergraduate degree programs in biology, chemistry, environmental science and resource management, nursing, health science, and the liberal arts. Dr. Wang was instrumental in developing the professional science master's MS in Biotechnology and MBA dual degree programs and serves as director for the MS in Biotechnology and Bioinformatics program at CSU Channel Islands.

Last year was indeed a very busy year for the NPSMA Executive Committee and the Board of Directors, and I would like to recognize the hard work every single member put into furthering and strengthening the Association and its mission to support PSM programs, its students and alumni.

Many thanks to our three Board Members whose terms ended in December 2011: **Elizabeth Friedman** (former NPSMA president), Illinois Institute of Technology; **Kevin Sightler**, University of Illinois at Urbana-Champaign; and **Kirk Jordan** of IBM.

### First Best Practices Workshop Focused on Mathematics Professionals a Big Success

By Joaquin Carbonara, Professor of Mathematics and PSM Faculty Coordinator, Buffalo State College

The first NPSMA Best Practices Workshop which focused on a single discipline, "Creating Tomorrow's Mathematics Professionals," took place on October 13-15, 2011, in Niagara Falls, NY. Buffalo State College hosted the event. The conference co-chairs, NPSMA's current president Dr. Bogdan Vernescu and Dr. Joaquin Carbonara, Professor of Mathematics and Faculty Coordinator of Buffalo State College's PSM program, obtained a generous grant from the National Science Foundation (NSF) to support the meeting. The proceedings for the meeting are expected to be ready by the summer of 2012.

The keynote speakers presented a wide range of current topics in the area. Sheila Tobias opened the series of keynote speakers with a cutting edge presentation on tracking PSM graduates using programmer internet tools. Bill Kolata from SIAM talked about the current state of math in industry. Myles Boylan and Carol Stael from NSF spoke about innovation in graduate education, and finally Birgit Schoeberl from Merrimack Pharmaceuticals talked about the role of mathematics in scientific discovery. In addition, there were 12 presentations and a poster session that highlighted the needs and potential of PSM in mathematics and statistics.

The need for mathematics professionals (MP) to broaden their expertise with "real world" interaction became evident in several of the presentations. Courses such as Project Management are becoming an essential tool in the bag of tricks of MP. Another paradigm shift in the math landscape was presented by North Carolina State University's Analytics Program (where the entire academic program is completed in just 10 months, with a 40 hrs/wk in class schedule) and Buffalo State's Professional Applied and Computational Mathematics PSM (where 2/3 of the courses are broken up into 1-cr modules which allows for a great deal of flexibility in the content, the scheduling and the staffing).

The conference worked quite well as a networking opportunity for students, faculty, deans, PSM program officers, NSF representatives, NPSMA members, NPSMA directors, and others. The entire program benefitted from the skilled work of NPSMA's Coordinator, Debra Warren-Hite.

Presentations from the workshop are posted on the NPSMA's website.

### Keck Graduate Institute Selected to Administer PSM Affiliation Process

In Fall 2011, the Council of Graduate Schools (CGS), who had until recently guided an approval process for PSM programs, requested the submission of proposals for an organization to take over the affiliation process. The responsible organization will review new programs and ensure that they adhere to the PSM curriculum and quality standards developed by CGS and the Alfred P. Sloan Foundation. Once affiliated, programs may use the PSM logo and be listed on the PSM program website.

In January, CGS announced that Keck Graduate Institute was selected to administer the PSM affiliation process.

"The Keck Graduate Institute is honored to be selected and we look forward to providing leadership for this important degree program which we consider an essential component in the U.S. innovation agenda," said Sheldon Schuster, President of the Keck Graduate Institute.

CGS will continue to manage and staff the existing affiliation process until the transfer of responsibility has been completed. This transition is expected to be completed by July 2012.

## PSM Program News

*This newsletter serves as a venue for universities to make program announcements and attract national visibility. To receive full benefits and best practices advice for new programs, we encourage all non-member institutions to join the NPSMA.*

### Update from Michigan State University

*By Peiru Wu, Program Director, PSM in Industrial Mathematics, Michigan State University and NPSMA Board Member*

The Professional Science Master's (PSM) in Industrial Mathematics at Michigan State University (MSU) is in its 13<sup>th</sup> year of operation with 14 students enrolled in Fall 2011. Last September our annual Welcome Dinner was held at Old Chicago Restaurant, Okemos, Michigan which is one of our program's traditions. It was a wonderful evening of socializing where new students met with seniors, graduates, and the program director. We chatted and shared our summer experiences (e.g. summer jobs and internships) and helped new students to become familiar with the program.



The PSM program is designed for industrial mathematics students with two years of training in mathematics, statistics, and cognate course work plus various business components. Our annual Industrial Advisor Contact Day (IACD) held on MSU campus in November provided students with opportunities for mock interviews to learn about careers in industry, internships and job information. Students met with the industrial advisors from local companies: Auto-Owners Insurance Company, Blue Cross Blue Shield of Michigan, Chrysler LCC, The Dow Chemical Company, Ford Motor Company (Scientific Research Laboratory), Ford Motor Credit Company, General Motors Company, and Towers Watson & Co. Our industrial advisory board has been a valuable resource of support to the industrial mathematics program at MSU for over a decade.

We have a history of seventy successfully completed projects for local industries from 2000-2011. At present, four student teams are working on industrial projects proposed by Consumers Energy Company, the Dow

Chemical Company, Ford Motor Credit Company, and Herman Miller Inc. and the projects will be delivered at the company sites at the end of the spring semester. About eighty students graduated from the program have been employed by a wide range of industries or industrial firms of various sizes nationwide. Six students will be graduating in Summer 2012. The program continues to flourish as a successful model to produce generalized problem solvers of great versatility, capable of moving within an organization, from task to task at industrial positions in their career paths.

### University of Massachusetts

*By Susan Lawton, Professional Science Master's Program, University of Massachusetts, Lowell*

University of Massachusetts currently has 20 Professional Science Master's programs with the most recent CGS recognition of MS Environmental Studies, PSM option in Atmospheric Science from Lowell campus. Our MS Applied Biotechnology, MS Computer Science, Boston campus and MS Industrial and Systems Engineering, Dartmouth campus are pending CGS PSM affiliation approval.

The UMass PSM initiative with funding from UMass Online is developing new online courses to address a universal need for PSM students to be well grounded in communications, project management, and leadership.

John Duff, Assistant Professor, Environmental Law, UMass Boston; Catherine Houser, Professor, English, UMass Dartmouth; and Theresa George, Adjunct Faculty, Management, UMass Lowell are working collaboratively to offer Professional and Scientific Communication in Summer 2012. This course draws upon these faculty members' expertise in science and communication and their experiences with the media, academia, and industry. The course will familiarize students with the wide range of models, methods, and media that are employed in professional and scientific communication. Students will analyze and evaluate a variety of communications strategies and develop skills to create and deliver written and oral presentations in the formats required of professionals working in science and technology.

Kit Scott, Assistant Professor, Business and Economics, Boise State University and Adjunct Faculty, Management, UMass Amherst; Noushin Ashrafi, Professor of Management Information Systems, UMass Boston; and Yuzhu (Julia) Li, Assistant Professor, MIS, UMass Dartmouth are working collaboratively to offer Project Management for Scientists in Summer 2012. This course draws upon case studies, industry input and project management certification expertise. Students will engage in discussion and work together on a project to learn to be more effective team members and to take on the role of project manager. Other courses, which include leadership and business analytics, are planned.

On March 30, 2012, UMass 3<sup>rd</sup> "Annual" Professional Science Master's (PSM) Conference will be held at UMass Medical School in Worcester, MA. Faculty, students, and representatives from industry will convene to share ideas and input for strengthening the PSM programs, particularly in regard to opportunities for PSM students to intern in industry and with medical school faculty. Please contact Susan Lawton, email: [susan\\_lawton@uml.edu](mailto:susan_lawton@uml.edu), phone: 978-934-2299, for additional information and if you are interested in having students participate in online courses.

## Does Knowing Your Business and Social Competencies Enhance the PSM Experience?

By Randall Ribaud, President and CEO, Human Workflows, LLC

Would a self-assessment that identifies skills in social and behavioral competencies valued by industry be valuable? If you missed us at the NPSMA best practices workshop in Niagara Falls, NY last October, here is the accelerated learner version of our efforts to transition academic researchers into competitive industry positions. "SciPhD" has one goal: help scientists (graduate students and postdocs) recognize the social and business skills they have acquired during their scientific/technical training, and understand the importance of all those skills in becoming *competitive* for industry jobs and being *successful* in those jobs. Just as PSM shares focus on science and business skills, we do the same, and in a complementary way-- not through the acquisition of knowledge, but through the discovery and articulation of already developed social and business skills. Our workshops and online assessment focus on 24 business competencies that help the scientist identify and articulate basic skills desired by industry for most entry level science-based positions. PSM is clearly a proactive discipline to professionally develop a much more socially and business balanced scientist. SciPhD says that experienced academic researchers (such as graduate students and postdocs) have already started to develop social and business skills; they just are not cognizant or capable of articulating their competencies.

PSM programs address the critical need for academic scientists given the realities of the current job market. The transition from student to employee is an enormous step for any individual. The practical considerations of expanding the job search from academic positions to industry jobs competes with social and intellectual obstacles and prejudices that make the whole experience very unsettling. Transferrable business skills such as leadership, empathy, rapport, social intelligence, emotional intelligence, tactical and strategic thinking, and finance are the foundations for working in the cross-matrixed teams common to virtually all industry work environments and are the basis of SciPhD training.

With a PSM education, the outlook can be much brighter. The breadth of job types available to academically trained scientists and engineers opens new opportunities often never considered during one's typical academic career. Applications specialists, project and program managers, technical writers, business development, and intellectual property experts are just a few examples of job types that broaden the career opportunities beyond the more traditional bench scientist positions that represent the entire industry opportunity world in the eyes of many academicians.

If you are planning to start a new PSM program and need help with your "plus" courses, we would like you to consider our training programs and workshops that could provide you with a ready course to be offered in the first few years of your program until your university has developed their own course work.

In the past twelve months we conducted SciPhD training workshops across the country at leading universities including Stanford, USC, UCLA, Columbia, Johns Hopkins, University of Alabama, Scripps, Keck Graduate Institute and others. We have also delivered SciPhD as a 40-hour certificate program for the New York Academy of Sciences as well as locally here in Montgomery County, Maryland. We are currently in discussions with several Pharma exploring the use of SciPhD as an "onboarding" assessment for newly hired scientists to help define their social and business competencies.

We would be happy to learn how SciPhD could be "onboarded" with your PSM programs. For more information visit our website: [www.sciphd.com](http://www.sciphd.com) or email: [randall@sciphd.com](mailto:randall@sciphd.com).

## News from the SUNY PSM Consortium

By David King, NPSMA Board Member and Dean of Graduate Studies, State University of New York, Oswego

The State University of New York (SUNY) PSM Consortium of 18 campuses met for their biannual meeting on October 12, 2011 at SUNY System Headquarters in Albany, NY. SUNY PSM Director, Dr. David King, convened the representatives from each of the 18 participating campuses, as well as numerous leaders who have been involved in the success of the SUNY PSM initiative. Among those participating in the meeting were SUNY Provost David Lavallee, the Alfred P. Sloan Foundation PSM Program Officer Michael Teitelbaum, the Council of Graduate Schools National PSM Director Carol Lynch, and other SUNY System administrators.



The PSM Consortium is pleased to announce the addition of SUNY Old Westbury as the newest member of the Consortium with new PSM programs in development. SUNY Plattsburgh has begun actively enrolling students in their new Environmental Policy PSM program and Cornell University has begun actively enrolling students in their Applied Statistics PSM program. These additions bring the number of active Consortium campuses to 18, the number of active programs to 20, and the number of programs in development to 16.

Much of the meeting was focused on the Consortium's goals at both the individual campus level and the larger SUNY System level, the development of another RFP to fund awards from our second Alfred P. Sloan Foundation grant, and the relation of the SUNY PSM initiative to the national PSM goals. The meeting also offered the members of the Consortium an excellent opportunity to discuss best practice methods and to exchange resources on the development of new or existing programs. Furthermore, there was an emphasis during the meeting on expanding the number of online PSM course offerings to provide students both in and outside of the SUNY system a wider range of options, particularly focused on specialized online PLUS course offerings. The Consortium participants also discussed the continued development of the SUNY PSM website ([www.psm.suny.edu](http://www.psm.suny.edu)), including site structure, content, usability, and other features.

Other discussion topics included marketing, recruiting strategies, branding, internships, business advisory councils, assessment procedures, and the collection of enrollment and job placement data. There was concern expressed about the impact of the discontinuation of Sloan funding and phasing out the leadership role of the Council of Graduate Schools in the PSM movement. We will seek new ways to enhance affiliation with NPSMA.

### Alum Testimonial

**Avinnash S Ravindran**  
**University of Maryland, Baltimore County 2011**  
**PSM Biotechnology**  
**Occupation: Quality Assurance/Regulatory Affairs Associate**  
**Goodwin Biotechnology Inc.**



"After finishing my undergraduate studies in biotechnology engineering, my next step was to pursue a master's degree focusing more towards the management line but at the same time not digressing from my science background. A Professional Science Masters (PSM) program had the course structure which satisfied this criteria and I opted to join the PSM biotech program at UMBC in August 2009. The time I spent there was well worth it, gaining a

new perspective of biotechnology, strengthening my core sciences, and developing my management thinking. The quality of the PSM program was impressive and the courses I took in Quality Assurance and Regulatory Affairs helped me land an internship last summer and now a full-time job.

One thing unique about the PSM program is that the huge number of presentations molds oneself into an excellent communicator and strong verbal skills gained adds value to the existing knowledge and specialty. The total exposure and network I obtained during the two years eased my way towards the management division of the biotechnology industry."

### Alum Testimonial

**Sabra Miller**  
**Creighton University 2011**  
**Occupation: Marketing Product Specialist, Biotechnology**  
**LI-COR Biosciences**



"Success has always been a main goal in my life and in order to fulfill this goal I knew it was essential for me to not only enter a field that I am passionate for, but to obtain a job that I love doing. The dual PSM/MBA program offered at Creighton University has given me the opportunity to reach this significant goal. As a graduate student enrolled in the dual PSM/MBA program I have acquired various desirable work skills that are essential to have in today's

competitive job market. I now have the ability to present myself as a science and business trained professional; with the unique combination of these skills I am given the opportunity to explore various career fields.

I entered the program with a BS in Biology so I was eager to learn the disciplines of business and to understand the importance of the integration of business and science. Having a science background I believed it would be significant to obtain more experience in the business field; this lead me to find a Marketing Internship at LI-COR Biosciences. I have since been offered a full time position as a Marketing Product Specialist in the Biotechnology division of the company. With the knowledge that I have gained through the dual PSM/MBA program I am able to thrive in my marketing role. Not only do I understand the importance of a marketing department but I have the skills that allow me to comprehend the science and technology involved in the products that are being produced at LI-COR Biosciences. In the end, not only did I receive a job offer but I ended up with a job that is fun and exciting every day!"

### Research Ethics Education Plus (REEP+) Responsible Conduct of Research for Professional Science Master's Programs

*By Camille Nebeker, Research Associate, Center of Education, Leadership, Innovation and Policy, San Diego State University*

With funding from the National Science Foundation (NSF) four California State University science master's degree programs are participating in a project to integrate research ethics education into exciting PSM courses and/or internship experiences. *The Research Ethics Education Plus (REEP) program* has benefited from the leadership of Drs. Jose Castillo (SDSU Computational Sciences), John Nishio (CSU Chico, Environmental Sciences), Ching-Hua Wang (CSU Channel Islands, Biotechnology) and Usha Sinha (SDSU, Medical Physics) as well as PSM students and industry partners who have been instrumental in this initiative. The goal of REEP is to provide an industry-relevant Responsible Conduct of Research (RCR) educational experience whereby students learn about applied ethical and responsible research practices within a professional environment in which they may be employed. The REEP model uses experiential learning as an instructional strategy and culminates with development of an industry-relevant instructional case created with input from PSM students, faculty and industry partners. The industry-relevant instructional cases developed to date focus on topics associated with RCR (e.g., research subject protections, conflict of interest, data management, collaboration, etc.) and reflect ethical dilemmas within environmental sciences, medical physics and biotechnology settings. Upon project completion, these case studies will be available for use by PSM programs as an RCR teaching resource. For more information, please contact Camille Nebeker, Principal Investigator, San Diego State University Research Foundation, email: [Camille.Nebeker@gmail.com](mailto:Camille.Nebeker@gmail.com).

### NPSMA Alumni Connection Seeks Students, Alumni, and PSM Program Directors to Interview

*By Michael Morad, Quality Assurance Manager, Abbott Vascular, Structural Heart Division and NPSMA Board Member*

The NPSMA is currently engaged in interviewing students, alumni, and PSM Program Directors across the country to better understand what the NPSMA Alumni Connection can provide to students as they go through PSM programs and when they graduate and become alumni.

The NPSMA is seeking input to put together a charter to help PSM Program Directors establish local chapters of the NPSMA at universities across the country that have PSM programs. We will encourage students and alumni to join and participate in events, networking, mentoring, etc., at a local level.

The information we will be collecting in the next few months will help the NPSMA build a successful charter program and provide more valuable resources to our members as we continue to grow our membership to support the PSM movement.

We are looking for students, alumni, and program directors to be interviewed for this exciting project. We would love to hear from you. Please send your contact information (email and phone) to Debra Warren-Hite at [admin@npsma.org](mailto:admin@npsma.org) and we will be sure to get in touch with you.

**Preview Powerful Video**

By Sheila Tobias, NPSMA National Advisory Council Member

VOLI Video Productions videotaped an extraordinary session of five employers and the PSM students they hired. The employers featured are: GlaxoSmithKline, Ventana Medical Systems, the State of Connecticut Forensic Lab, Putnam Investments (Financial Math), and the U.S. Patent Office.

This video will be extremely useful in recruiting students. It shows the types of jobs PSM grads can expect and the kinds of PSM graduates they will be joining in the professional work force. The video will be equally interesting and inspiring to employers and advisers of your programs.

There are five segments to the video, each of which can be edited if necessary. Please take the time to preview the video and provide feedback. Would you suggest that the segments be edited and made shorter? If the DVD is sold (cost would be approximately \$5.00 per segment), might you be interested in purchasing a copy to distribute? What distribution method would you use? Preview the copyrighted video for FREE here:

<http://www.meetingslive.net/psm/launch.htm>.

Send feedback and any questions to the author at [sheilat@sheilatobias.com](mailto:sheilat@sheilatobias.com).

**Competitive Technical Intelligence  
A New Opportunity for PSM Programs**

By Brad Ashton, Society of Competitive Intelligence Professionals

How do technology companies anticipate disruptive technologies or surprise competitor moves? The NPSMA President's Message in the Summer 2011 Newsletter provides a clue - Competitive Technical Intelligence (CTI). PSM students can add an important element to their science and business training by building proficiency in CTI – making themselves more attractive to potential employers. With new technologies arising from across the globe, many high tech companies keep track of emerging product or process technologies and competitor moves using CTI to help prevent technological surprise and gain advantage over rivals. CTI provides early warning of threats and opportunities, helps guide research and development (R&D) strategic plans and supports product development and marketing programs. Many high tech firms in the US and abroad, from industries like pharmaceuticals, chemicals, consumer and defense electronics, to communications, information science and transportation, have established successful CTI efforts. CTI roles are often fulfilled by experienced science professionals who have demonstrated an aptitude for exploring their company's competitive position and outlook.

Competitive Technical Intelligence consists of analytical information on science and technology threats, opportunities or developments that can affect a company's competitive situation. It is produced using some basic steps – first assessing company intelligence needs and then gathering information from multiple sources, analyzing collection results, and disseminating prepared intelligence to internal company managers, product teams, and marketing staff. Typical CTI activities include monitoring competitors and scouting for new technologies, markets, organizations or trends that can affect company business prospects. The goal: timely insights for intelligence consumers facing a dynamic, uncertain, and risky competitive marketplace that enable better decisions R&D investments, future market strategies or technology partnerships. A good example is when a manufacturing company is considering an expansion of their R&D budget to commercialize new applications and markets from an existing product platform. For PSM students, CTI is a valuable topic for their business coursework and team projects. More information on CTI and its value for PSM programs can be obtained from the author, email: [ashtonw@ctc.com](mailto:ashtonw@ctc.com) and visit our website: [www.scip.org](http://www.scip.org).

**Announcements**

Look for NPSMA on Facebook, Twitter, and LinkedIn.

Do you have a book to recommend that would be of interest to the PSM community? Send the information to Debra Warren-Hite at [admin@npsma.org](mailto:admin@npsma.org) and it will be posted on our website.

**NPSMA Executive Committee and Staff**

President: Bogdan Vernescu (Worcester Polytechnic Institute)  
 Vice President: Jean Schaake (University of North Texas)  
 Convener: Ching-Hua Wang (California State University at Channel Islands)  
 Finance Officer: Cynthia Bainton (Northeastern University)  
 Director of Strategic Planning and External Projects:  
 Donald N. Langenberg (Chancellor Emeritus, University System of Maryland)  
 Coordinator: Debra Warren-Hite

**Newsletter**

Editors: Peiru Wu, Elizabeth Friedman, Amy Dauernheim  
 Layout: Debra Warren-Hite

Send newsletter submissions to [admin@npsma.org](mailto:admin@npsma.org).

**University Videos on NPSMA Website**

All universities are invited to send us a link to their PSM video clip. Videos will appear on the [resources page](#) of our website and each month we will feature one of the NPSMA university member videos on the home page (right column). This is just one of the many benefits of your university membership. For the month of February, we are spotlighting **Rutgers, The State University of New Jersey**. In March, the **University of Illinois, Urbana-Champaign** will be featured.



**Membership**

(The NPSMA is a 501(c)(3) Nonprofit Organization; Tax ID # 20-8766099)

**Please Check One:**

New       Renewal

- Academic Institution (1 non-voting membership per PSM program)      \$2,000
- Academic System (min. of 6 campuses/institutions; 1 full membership per campus/institution)      contact NPSMA for rates
- Individual      \$ 75
- PSM Alum      \$ 75  
(if your institution is a member – 1 year FREE)
- Student      \$ 50  
(if your institution is a member – 1 year FREE; 2<sup>nd</sup> year \$25)

Please make payments to the National Professional Science Master’s Association.  
 Mail form with check to: NPSMA, 100 Institute Road, Worcester, MA 01609.  
 To pay online, go to [www.npsma.org](http://www.npsma.org). Thank you for your membership!

**Please Provide Information Below**

Name and Title of Individual Member (include contact information for institutional and system membership).

\_\_\_\_\_

Program \_\_\_\_\_

Academic Institution \_\_\_\_\_

University System (if applicable) \_\_\_\_\_

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Phone \_\_\_\_\_

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