Rice’s Wiess School of Natural Sciences to Offer New Program Track in Bioscience Research and Health Policy

The Rice Faculty Senate has approved a new track into the professional science master’s program with the focus on training students in bioscience research and health policy. The goal of the program, a collaboration between the Wiess School of Natural Sciences and the James A. Baker III Institute for Public Policy, is to create new options for science students interested in working in government as well as governmental relations positions in nonprofit organizations, industry and academic institutions.

The new track is part of three existing Professional Science Master’s (PSM) degrees housed in the Wiess School of Natural Sciences: Environmental Analysis and Decision Making, Nanoscale Physics and Subsurface Geoscience.

The proposal for the new track noted “a critical need for well-trained health policy professionals interested in seeking solutions to problems affecting human health.” The innovative plan aims to provide students with advanced science, writing, research, and analytical and communication skills needed for work in bioscientific research, public health, health care systems and health-related industry. These skills will be increasingly useful as the U.S. health care industry undergoes reform.

Kirstin Matthews, fellow in science and technology policy at the Baker Institute, helped in the development of the new track. “This new track will allow more students to link science with public policy. It will complement the Science and Technology Policy program goals to bring together science and policy. It also complements the Baker Institute goal to engage the next generation of policymakers. With this new degree, we hope to build leaders in science and health policy who will create and promote science and medicine.”

The collaboration between the School of Natural Sciences and the Baker Institute will give students the opportunity to deepen their science background and, at the same time, to interact and learn from experts in academia, government, the media, business, and nongovernmental and private organizations.

Dagmar Beck, PSM Program Director at Rice, thanks all who participated in developing this program. “This new track is built parallel to the existing PSM degrees at Rice and will require a minimum of 42 credit hours, plus a three to six month internship. It is still open for fall 2011 enrollment.”

Two more tracks (one space-related, the other energy-related) are currently under consideration, and we will report on their progress in our next newsletter.

NATIONAL PROFESSIONAL SCIENCE MASTER’S ASSOCIATION NEWS

NPSMA Activity Highlights

The Board members of the NPSMA have been extremely busy these past few months participating in a variety of activities on behalf of its membership. We are in the process of creating small working groups to address imminent issues such as: developing steps to reach financial sustainability, intensifying our membership drive, finding suitable grant opportunities, building a science organization consortium, linking NPSMA with stakeholder groups in economic and workforce development, identifying a marketing group to help with promoting NPSMA/PSM to industry, creating a career ladder document, and organizing the 2012 Bi-Annual NPSMA conference. We invite the membership to volunteer for these task-oriented working groups. Make sure to join the NPSMA and become part of this initiative! Visit www.npsma.org.

Upcoming event: NPSMA Best Practice Workshop, Buffalo, NY, Creating Tomorrow’s Professional Mathematicians
CORPORATE NEWS

February 2011 Corporate Reception burst out of its seams!

If you attended our annual event, you experienced a high-volume, high-intensity networking event that even our new space in the Bioscience Research Collaborative couldn’t contain. We opened the doors to the outside patio so people could spread out to continue their discussions and visit with our PSM faculty, students and alumni. We received a lot of valuable feedback, and the dialogue buzz after the event was high and continued a long time. The support and the interest from corporate representatives were highly appreciated and our students made good use of the new contacts they were able to secure. I can report now that all our students achieved their objectives to be placed into internships, and most of our graduating students secured employment after their May graduation. If you are interested in learning more about our students, please do not hesitate to contact us!

Antara Goswami, Jayshree Jarivasan, Shilpi Desai, Robin Soares, Dagmar Beck, Ainur Koshkinbayeva, Jenny Kowall, Emalie Thok

Scholarship received from BAKER HUGHES

Baker Hughes, a long time supporter of the PSM Program and its students at Rice University, has offered two scholarships to our students. Baker Hughes is in the process of strengthening its relationship with the university and completed a visit in April exploring future collaborations with Rice, its faculty and its programs.

Current and incoming PSM students will be able to submit applications for these scholarships by the end of this summer. We are looking forward to hosting a luncheon for Baker Hughes and our students to thank Baker Hughes for their support and generous donation.

Wesley Vestal, Tauseef Salma, Sidney Burrus, Dagmar Beck, Derek Mathieson, Rod Larson, Dan Carson

2011 Corporate Spring Luncheons

Students had the opportunity this spring to meet representatives from a variety of corporations at the Monthly Corporate PSM Luncheons. Participating companies were: Baker Hughes, Brown & Gay, Element Markets, Hart Energy, Argent Consulting, and NASA/Johnson Space Center.
CORPORATE NEWS

February 2011 Annual Advisory Board Meeting

The Corporate Reception was followed by the annual Board of Affiliates Meeting, this time held in the Huff House on Rice Campus. The meeting consisted this year of a review of the progress over the year, plus break-out sessions by track with faculty, board members and students participating in discussion and review of each track.

Highlights from the EADM Round-table:

The Board fully supported the curriculum changes and was especially pleased with the new course EBIO 570 Ecosystem Management which complements the existing course work. They all agreed that the program produces very well qualified and prepared students. The Board urged faculty to make sure that coursework includes the global perspective and continues to enhance the critical thinking abilities and communication skills of its graduates.

The Board felt that the program needs to be marketed more to industry, letting companies in the environmental realm know about the program and its students. There is often a bias towards hiring people with traditional degrees because many managers and human resource people do not understand Professional Science Master's degrees.

NP Round-Table:

- It was concluded that the Alumni in general are happy with their education. The board felt that the need for more hands-on lab experience has been served with the re-instated instrument course, and suggested to add training in understanding of manufacturing scale-up, and to integrate solar and energy topics in the curriculum. Business classes continue to be excellent additions to the curriculum.

- Industry needs invention and innovation. The high-tech industry faces many challenges such as securing new materials, mastering global security (beyond defense), finding new propulsion technologies, and many others and, therefore, needs to collaborate with scientists in labs, universities and corporate high-tech centers.

- The Board suggested making our track curriculum more appealing to a broader audience by renaming it “Nanoscale Science”. The curriculum could be expanded into more focus areas and we could spread teaching responsibilities to include other departments. PhDs will always be needed, but so will be master’s students, especially when they know the business management side, enhancing their overall understanding and preparedness for industry. This has become an essential part of what employers want.

SG Round-Table Discussions:

- The Board pointed out possible ways to enhance the SG program: Offer field experience for all SG students; develop a survey course to expose students to all aspects of geoscience for oil and gas (drilling – production – economics)

- Other possible curriculum improvements were suggested by adding courses/topics in subjects such as Information systems (modern IT/Simulation), data management, visualization, reservoir characterization, inversion, 4D, unconventional resources, etc.

- At this time, the SG faculty is reviewing and working on enhancing the curriculum. Dr. Alison Henning has joined the SG team in Earth Science and will assist with student advising, course teaching and program outreach and marketing.

We will report back on progress we are making with implementing the Board’s suggestions.
**Spring 2011 project presentations and semester-end reception**


**Environmental presenters: Reshmy Mohanan, Shilpi Desai, Board Member and Internship: Provider Dr. Tom McHugh, GSI, and Chris Campbell**

**Spring 2011 seminar speakers**

Thank you to all our speakers of this spring’s seminar for their interest in Rice and the time they took to join us on campus: Audrey Riegling, Helium Resources; Ron Huijsman, HUCO Consulting; Robert Sandilos, Chevron; Rod Larson, Baker Hughes; Bryan Dansberry, NASA; Steve Ramsey, Environ; Carsten Hein Westergaard, Vestas Technology; Jack Agee, LANCER; Steve Anton, Halliburton; Liz Eich and Mary Purugganan, Rice PSM Communication faculty.
STUDENT RECRUITMENT

Rice PSM Preview Days 2011

This year’s Preview Days were very popular and students traveled from all over the U.S. and from Canada to attend our program of faculty visits, tours, student and alumni gatherings, program information, and experiences outside the “hedges.”
GRADUATION CELEBRATION MAY 2011

Graduates at Rice University’s 98th Commencement

Rice showed itself at its best during the recent commencement ceremony!

Under beautiful blue, sunny skies and mild temperatures with a breeze, hundreds of graduates and their families enjoyed the wonderfully orchestrated ceremony of the Rice Graduation. President Leebron commented that “They must clearly be the best class in our history, for why else would they have this weather for their commencement?” Fourteen PSM students walked the stage and received their diplomas; 13 of them have already secured employment and are heading out to start a new chapter of their lives, or continue on with their companies better equipped to climb the career ladder! Congratulations to all our students, we are very proud of you!

Not only was happiness in the air at Rice University’s commencement on May 14, but it was also the subject of New York Times columnist David Brooks’ address to members of the 98th graduating class and their families.

Brooks talked about two paths to happiness more in tune with modern times. Rather than pursuing the material life, he suggested graduates would find satisfaction from being enmeshed with family and friends. “Happiness at this level is a group activity. It doesn’t come from outside, it comes from the inside,” he said.

Graduating PSM students walking the stage were: Ryan Jarvis, Shibu Mathukutty, Greg Shipman, Brandon Mooney, Chris Campbell, Ramnik Singh, Reshmy Mohanan, Mengqi Huang, Shilpi Desai, Esther Rios, Ainur Koshkinbayeva, Julian Talley, Liang Ge, and Hyangseon Park.

Graduation celebration with graduates, family, faculty and students

Dale Sawyer, Alison Henning, Susan Danbom, Steve Danbom

Liang Ge, Brandon Mooney, Reshmy Mohanan, Ramnik Singh, Esther Rios, Ainur Koshkinbayeva, Shibu Mathukutty, Dagmar Beck, Mengqi Huang, Shilpi Desai, Chris Campbell
PSM PUBLICITY

Check out our Rice PSM Facebook Site and become a friend: www.facebook.com/Professional.Science.Masters

New virtual tour about the School of Natural Sciences includes Professional Master’s Seminar: see Virtual Tour of School of Natural Sciences

PSM program staff and faculty participated in a variety of events geared to spread the word on our program to corporate representatives and prospective students:

- Rice Alliance hosted the February 2011 Nanotechnology and Sustainability Venture Forum. PSM program volunteers distributed PSM brochures, and students took advantage of the networking opportunities offered at the company showcase directly following the forum.

- Brochures were distributed at the Innovation & Successful Partnership Summit held at the BioScience Research Collaborative. This event was sponsored by the Greater Houston Partnership and the Texas Workforce Commission and focused on collaboration with NASA and the Johnson Space Center.

- Brochures were displayed at the NanoJapan IREU program table at the UH Research Career Information Day in March.

- 2011 Offshore Technology Conference: Rice University/PSM staff and student participated in this year’s three-day exhibition booth offering information on Rice and the PSM program tracks, and meeting corporate representatives.

- 2011 Rice Alliance Life Sciences Technology Venture Forum: The PSM distributed brochures and fostered networking opportunities with corporate representatives.

- Brochures were distributed at Nanotech 2011 Conference and Expo in Boston in June 2011.

- Program staff, PSM alumni and faculty attended the AAPG Conference and Reception in Houston’s George R. Brown Convention Center

Rice Spring PSM Recruitment Trips and NPSMA Workshop Speaking Assignments:

- Visit to Portland, Oregon to meet with Portland State University faculty, and to present at a NPSMA Regional Workshop

- Visit to Minneapolis/ St. Paul to visit Macalaster College, Minnesota State Universities, and present at NPSMA Regional Workshop.

BOARD NEWS

We would like to welcome our new board member, Mary Woolley, representing the new Bioscience Research and Health Policy Program.

Mary Woolley is the president of Research!America, the nation’s largest not-for-profit alliance working to make research to improve health a higher national priority. Under her leadership, Research!America’s publications and initiatives have been honored by leading communications and advocacy organizations. Woolley is an elected member of the Institute of Medicine and serves on its Governing Council. She is a Fellow of the American Association for the Advancement of Science and serves on the National Academy of Sciences Board on Life Sciences. She is a Founding Member of the Board of Associates of the Whitehead Institute for Biomedical Research. Mary has an honorary doctoral degree from the Northeastern Ohio Universities Colleges of Medicine and Pharmacy. She has served as president of the Association of Independent Research Institutes, as editor of the Journal of the Society of Research Administrators, as a reviewer for the National Institutes of Health and National Science Foundation, and as a consultant to several research organizations. Woolley has a 30-year editorial and publication history on science advocacy and research related topics. She is a sought-after speaker and is frequently interviewed by science, news, and policy journalists.
PROGRAM NEWS

PSM Student Club

PSM students took time for some fun and recreation! Our Texas students took their fellow students to Houston’s great “cultural” event: The Rodeo and Livestock Show. Students had a great time learning about customs carried over from the “Wild West”, trying unusual foods and listening to Country Music. Students also gathered during the summer to attend an Astros Baseball game, exchange news on their internship experiences and meet some of the incoming students.

ALUMNI NEWS

Bill Schleizer (EADM ) reports from the Delta Institute in Chicago

“The team that I lead at Delta just received a very competitive USDA Conservation Innovation Grant to look at nutrient management practices in agriculture and reducing N2O emissions (a very potent GHG). We also helped the Standard Register Company complete their carbon footprint and helped them achieve a top score on their Carbon Disclosure Project submittal. Visit www.delta-institute.org to learn more about these and other examples capturing the exciting innovative work I am helping lead at Delta.”

Damir Aidarkanov (NP 2008)

“After working almost 2 years in energy consulting, I wanted to try myself in hands-on development of renewable energy sources (solar cells). I accepted a job offer from Nazarbayev University, Astana, Kazakhstan as junior researcher in their photo-voltaics lab of the Center for Energy Research (http://eng.nu.edu.kz/Research-policy/Center-for-Energy-Research). Now I am a colleague of Dana Akilbekova who has been working here since graduating from the NP Program at Rice in 2009.”

Another PSM couple announces their wedding plans

Carol Liu (EADM 07) and Brian Cornette (SG 08) announced their wedding to take place in November 2011!

STUDENT NEWS

Students’ efforts have paid off and internships have been secured for summer/fall 2011 with Halliburton/Landmark, Shell, PGS, Hart Energy, Schlumberger, Baker Hughes, Element Markets, Huco Consulting, Kerogen Explorations, Lockheed Martin, N3DBio, Nanoridge, Trinity Consulting, and the Methodist Research Center. Visits to interns at their internship sites are in progress.

Graduates secured employment with Baker Hughes, CDM Environmental, Chevron, ERM, ExxonMobil, the Federal Government, Gamesa, Halliburton, ION Geophysical, the Kazakhstan Government, Korea Gas Company, and Schlumberger.

Incoming Fall 2011 Students

We are welcoming thirteen new PSM students who will be starting their studies in the fall—enrollment is still open for spring 2012.

Important Events for Incoming Students

MARK YOUR CALENDARS

PSM Communication Assessment Workshop
August 12 • 9 am to 3 pm

Orientation Week
starts August 15

PSM Orientation
August 16 • 12 noon to 5 pm

Classes start
August 22
RICE NEWS

Rice dedicates state-of-the-art physics research facility

NIST director, NASA astronaut unveil Brockman Hall for Physics

In March, more than 150 gathered to celebrate the official dedication of Brockman Hall for Physics, Rice’s new state-of-the-art home for fundamental and applied physics research. A delegation of officials from the National Institute of Standards and Technology (NIST) joined Rice Board of Trustees Chair Jim Crownover, Rice President David Leebron, astronaut and Rice alumna Shannon Walker and others in unveiling the 111,000-square-foot, four-story building. “Since its founding, Rice has cared so much about architectural beauty, cutting-edge research and environmental sensitivity,” Crownover said. He noted that all three of those principles are evident in this “magnificent building.” “Brockman Hall enhances Rice’s status as one of the nation’s premier research universities, and it ensures that Rice will remain a leader in fundamental and applied physics research for years to come,” Leebron said. “The impact of Brockman Hall goes beyond bricks and mortar. This facility forges new pathways between science and engineering, between theory and practice and between Rice’s first and second centuries.”

One of the primary challenges faced by architect Kieran Timberlake was to provide such specialized and sophisticated research facilities within a context that could meet the U.S. Green Building Council’s standards for Leadership in Energy and Environmental Design (LEED). Brockman is expected to contend for LEED Gold status. Energy-saving and environmental features of the building include an energy-recovery system—the largest in a single air unit in Texas—that will save as much as 30 percent of the energy needed to cool the building in the summer. Another green innovation is the building’s de-humidification system, which turns Houston’s legendary humidity into an asset by capturing and returning 100,000 gallons of pure, clean water to Rice’s central plant each year.

“…and it complements the excellent work of the physics community at Rice University. The future for science is extremely bright, and Brockman Hall is a clear demonstration of Rice’s commitment to scholarship and achievement in the physical sciences.”

Dan Carson
Dean, Wiess School of Natural Sciences

Make sure to check our web site regularly as we keep it updated with new information, resources, and upcoming events:

www.profms.rice.edu

For comments or questions, please contact us at:

profms@rice.edu

And don’t forget to check out our Rice PSM Facebook Site: