Changing hands—Subsurface Geoscience track gets new director

After 12 years of involvement with the Professional Science Master’s program, Dr. Dale Sawyer is a well-deserved break from teaching and other assignments in the form of an extended sabbatical away from campus which will allow him to focus his attention back to his research.

To thank Dr. Sawyer, the program held a luncheon in his honor at the Cohen House. Without Dr. Sawyer, the SG program would not have become the success it has turned out to be. His support, commitment and guidance of the program and its students have been exceptional! We thank him in the name of SG alumni and students. He will be missed by all!

The good news is that the program has found an excellent replacement, Dr. Andre Droxler, to take on the responsibilities of track director for the subsurface geoscience program. Dr. Droxler will be working with Dr. Steve Danbom to advise and guide subsurface geoscience students during their time in the Earth Science Department at Rice.

Corporate scholarship program going strong

Corporate support for the PSM programs has been strong and we want to thank our scholarship sponsors: Houston Airports, Baker Hughes, Schlumberger and Chevron. Award luncheons were hosted by Chevron, Schlumberger, and Baker Hughes.

Corporate support is essential for the program and its students and we hope others will join these corporations in supporting an education that prepares students for positions in industry and business. Corporate support will also help attract high-quality students to our program.
ENGINEERING UPDATE

The majority of programs offered in the Brown School of Engineering now includes electives in business, communication and management as part of the curriculum. Students can choose from a variety of courses and workshops offered on campus.

Serving EPMP students

As part of our commitment to strengthen the community of professional engineering master’s students and to provide more professional development training, we continued our EPMP speaker series, hosted student socials and brought together professional master’s students from science, engineering and business.

This newly established Professional Development Speaker Series lined up a variety of professionals to pass on their advice and insight. We would like to thank:

- Arnaud Chevalier, Rice University
- Chris Colville, Edge Environmental, Board Member
- Vishal Gupta, Apocell, Board Member
- Thomas Halsey, ExxonMobil, EPMP Board Member
- Jan Hewitt, Engineering Communication
- Jackie Hing, Rice Career Center
- David Nino, Rice Center for Engineering Leadership
- Nicole van den Heuvel, Rice Career Center
- Aamir Virani, Dropcam

We finalized the assembly of a new board made up of corporate representatives from companies hiring engineering students from the disciplines offered at Rice, such as Apocell, BP, Edge Engineering, Intel, Pros Pricing, ViaSat, Trellis Ware, Two Sigma Investments, Shell, ExxonMobil, Schlumberger, Epic Systems, Occidental Petroleum, and Baker Hughes. Many are Rice alumni, but a good number are professionals interested in mentoring and engaging with the university.

The first meeting of the new Engineering Professional Master’s Board took place in fall 2014. After an active meeting with engaging discussion and feedback from industry, students had the opportunity to get to know new board members and the dean while practicing their networking skills.

Dual programs popular

The dual MBA/PSM or EPMP Program, which is available for students in science and engineering, has experienced greater interest by incoming students. Students need to apply to both programs at the same time to be able to qualify for this opportunity.

On the science side, we have two NP students enrolled, one EADM student graduating this spring, and one MBA student joining the dual program aligned with the SG track. On the engineering side, we have three students enrolled in the dual program.

Guest speakers engage students

The F13 Master’s Seminar had a line-up of engaging speakers and we want to thank both our seminar and luncheon speakers who made time in their busy schedule to come to campus.

Lunch Presenters

- Allison Roberts and her team from CGG US Imaging
- EADM Alum Natalie Irwin with Valero’s Environmental group
- Madison Mauze from Celltex
- Jacqueline Northcut and her team at BioHouston
- N3D Biosciences CEO Dr. Glauco Souza
- Randy Lack and his team from Element Markets
- Dr. David Schubert from HATRC
- Dr. Don Lyons with InterOperant

Due to the size of the PSM student groups, we split the seminar in two parallel series, one for the BHP, NP and SPS students:

- Mike Bloomfield, Oceaneering
- Jackie Hing, CCD
- Dr. Billy Cohn, Texas Heart Institute and BoA Member
- Kyle Kissell, Nanoridge
- John Scott, NASA
- Steward O’Dell, Halliburton

And one for the SG and EADM students:

- Frank Roberto, ExxonMobil
- Mary Purugganan/Liz Eich, Rice Communication
- Graeme Martin, Shell Energy
- Alan Cohen, Ion Geophysical
- Steve Merritt, Ion Geophysical

Students had the opportunity to visit one-on-one with corporate representatives and learn more about a variety of industries and organizations. The spring seminar welcomes speakers from HUCO Consulting, ExxonMobil, Talisman Energy, HOK, GSI Environmental, Repsol, Berg &Androphy, MD Anderson, Lockheed Martin, NASA, Procyron, Lexicon Pharmaceuticals and Nanotox. Students will also have the opportunity to participate in a field trip to tour Baker Hughes Center of Technology Innovation.
RECRUITMENT & MARKETING

Fall ’13 and Spring ’14 have been focused on recruitment efforts for both the Science and the Engineering professional master’s programs. Director Dagmar Beck, PSM administrator Emalie Thok and EPMP coordinator Agustina Fernandez-Moya have been busy attending graduate fairs at Cornell, Princeton, Binghamton, Rose-Hulman, Purdue, University of North Carolina, George Washington University, Texas A&M, Trinity University, Tulane, LSU and the University of Houston.

In addition we represented Rice and our programs at the Advanced Manufacturing Trade Fair and Conference in fall 2013, local BioHouston and Greater Houston Partnership meetings, and the Annual NPSMA conference. Internationally we were at the International Graduate Fair in Monterrey, Mexico and have been collaborating the Brazil@Rice office to market our programs to Brazilian universities.

Our print marketing campaign included ads at Texas A&M, UT, Baylor, Trinity, Texas Tech, LSU, Oklahoma State, Monterrey Tech, Binghamton, Rice Thresher, Rice/First Look, Harvey Mudd, Georgia Tech, Berkley, Oklahoma University, California Tech, APS Conference and others.

Rice offers more avenues to improve communication skills

Our program has provided more opportunities for students to improve their communication skills, largely due to the university’s expansion of services in this realm. The new Center for Written, Oral, & Visual Communication, under the leadership of Jennifer Wilson, is now offering a variety of communication courses aimed at improving student writing, language, and presentation skills. In addition, the Office of Graduate Studies is offering workshops to improve graduate student communication skills to better prepare them for academia and the real world.

Science and Engineering lecture capture fulfills program goals

In 2013, we recorded five courses which:

- Allow employed/part-time students to view lectures when missed due to business meetings/travel
- Allow students to review for exams using captured discussions
- Attract more employed professionals to enroll in our programs

Actual experience in the classroom confirmed that lecture capture has fulfilled our main goals.

Our video assets help students who miss class due to a doctor’s appointment, students with learning disabilities associated with short attention span, part-time students unable to attend due to corporate meetings or other commitments, and foreign students who can review lectures to help with language difficulties. Students said that they did not find the equipment and personnel at all distracting.

Faculty also responded positively to the experience. There was no decrease in student attendance, students were better-prepared for class, they had greater classroom participation and less advising time was needed. Faculty did not feel inhibited by the recording process and the video assets could be reused for flipped classroom usage for another semester.

This spring we are recording nine courses with an expanded team—a collaboration between Shari Smith, our E-education administrator, Rice IT and student helpers. Thank you to this hard-working group who faced many hurdles, not just with technology issues, but also with lighting and equipment, video asset storage, and room assignments.

Ultimately we are seeking greater support from across campus, as we believe every classroom should be equipped with easy-to-use technology for recording and other classroom teaching tools.
STUDENT ENGAGEMENT

This year, our students stepped up participation in professional meetings, workshops and conferences related to their chosen course of study.

Anubhav Dixit, president of the Rice RUNPSMA Student Chapter and student in the nanoscale physics program, and John Varghese, graduate of bioscience and health policy, represented Rice and our program at the annual National Conference of the NPSMA held in Arlington, VA in November.

Ornsiree Junchaya represented the bioscience and health policy student group at a BioHouston breakfast event in fall. Manasi Chaubal, Yiping Zhu and Rong Liu attended the Water and Nano Summit this spring.

Michele Espin and Daini Wang represented the EADM program at the latest NSCE Conference in Washington D.C. in January.

Curtis Johnson, Dilan Derici and Selin Temil volunteered at the recent IRESS (Industry-Rice Earth Science Symposium) on campus.

Students fly high

PSM students have stood out in their internships and time spent away from campus.

Song Lu, current subsurface geoscience student, excelled at her internship presentation at Halliburton Landmark. She was recognized during her internship by President Gene Minnich, Landmark Software & Services, who published this announcement:

“We just wrapped up the 2013 ‘Go Innovate’ Summer Internship Program this past week and, wow, what an infusion of energy and innovation that was! For two months, 52 interns from 21 universities brought infectious ingenuity, excitement and creativity to five different groups within Landmark. The purpose of our internship program is to identify and develop high-potential students, to bring innovative ideas and fresh thinking to our technology and services, and to create ‘brand ambassadors’ who go back to their universities—and other companies when they graduate—filled with enthusiasm about their Landmark experience.”

Song Lu was one of the top six project presentations, and Minnich said, “I was extremely impressed by the quality of the presentations, the competence of the presenters, and the compelling stories they had to tell.”

Congratulations, Song, for representing Rice and our program so well!

Nanoscale physics alumni David Timm and Jianbo Chen published a scientific paper in Scientific Reports on their research while interning at N3D Biosciences

Melissa Lopez, in the BHP program, published an article in the Houston Chronicle about her research on diabetes and obesity.

Several PSM students participated in the Rice University Technology Entrepreneurship Class Company Presentations in December. Included were eight new venture presentations from the Jones School Management Course (MGMT 734), taught by Dr. Tom Kraft and designed to start real companies by commercializing Rice and regional technologies. Last summer, a group of Rice Alliance interns and venture fellows, under the guidance of Dr. Kraft, evaluated several hundred technologies from local academic and research groups that were determined to be in need of focused commercialization efforts. The most promising technologies were chosen through a complex assessment process and presented to the class, from which they could select their class project. The summer program was supported by the Rice Center for Engineering Leadership (RCEL) and Shell Gamechanger.

About 40 students were enrolled from Rice’s MBA, engineering and science masters and doctoral programs. Eight teams were formed and eight commercialization opportunities were chosen from the candidates. The eight teams finalized their company formation process. They studied the needs, users, customers and value propositions, as well as the competition and markets. Students formed business models, market and sales strategies, and they spent time on financial profiling, funding and exit strategies. After they completed the business model canvass and business plans, they made presentations of their work.
The progress and promise of the PSM degree was the focus of a special event on Capitol Hill in November 2013. This event celebrated the 300-plus PSM degree programs and their role in preparing the next generation of STEM professionals.

The PSM initiative began 15 years ago and continues to promote partnerships with business and government to prepare the highly-skilled talent the nation needs to be successful going forward. Increasing the number of U.S. citizens who pursue education and subsequent careers in STEM fields is a national priority focused on enhancing U.S. competitiveness. The November briefing included policy makers, academic leaders, business leaders and PSM graduates. Each of these stakeholder groups provided a perspective on PSM and its centrality to workforce development and economic development. The Advisory Group to the PSM National Office in collaboration with the National Professional Science Master’s Association (NPSMA) provided leadership in organizing this milestone event.

At the national conference this year, Program Director, Dagmar Beck was recognized for her efforts, involvement and continued support of the National Professional Science Master’s Association with the 2013 Board of Director’s Award for Outstanding Contributions to the Professional Science Master’s Initiative.

Rice student chapter representative Anubav Dixit engaged in informative discussions with program directors about the benefits of creating NPSMA student chapters on their campus.

The National Professional Science Master’s Association recently began offering a new membership benefit to its members and alumni of university members—a location-based online alumni networking directory. PSM alumni can now see who’s living or working in their area or worldwide, providing them with visual access via map to important people in their industry, personalized introductions to other members based on location and career commonalities, access to LinkedIn information from each profile, and potential job openings in their area. They can also find mentors or co-conspirators, improve career networking opportunities, gather for reunions, and see if any alumni live in their new town after a relocation. This benefit, rolled out recently, is being offered at no charge to NPSMA members through IntroMaps (https://intromaps.com/). No one from outside NPSMA membership can search for information.

To keep this service current, the NPSMA reminds members to send their updated alumni information (minimum of email address, work or home address) to make the directory as usable as possible. The NPSMA is excited to offer this opportunity. They believe the service will allow programs and their alumni to network in a meaningful way, build a community, and find jobs in their field.

Last but not least, the NPSMA Board of Directors is pleased to announce the election of the following individuals as officers for 2014:

**President**
Marilyn Wells, Minnesota State University, Mankato

**Vice President**
Deborah Silver, Rutgers, The State University of New Jersey

**Convener**
Sheila Thomas, California State University System

**Finance Officer**
Joaquin Carbonara, State University of New York, Buffalo

**Immediate Past President**
David King, State University of New York, Oswego

**Rice NPSMA student chapter active**

RUNPSMA—short for the NPSMA Rice Student Chapter Organization—has been very active under the leadership of President Anubhav Dixit and his team Ornsiree Junchaya, Connie Fu and Alfredo de los Reyes. Last fall they hosted several professional development sessions with panels consisting of program alumni and experts from Rice.

Their first S14 workshop prepared students for the corporate reception and how to get ready for the big event. They took time to practice the professional elevator pitch and learned the logistics of the event to maximize their networking efforts and enable them to connect with people who matter most in their chosen industry.

Professor of communications, Beth O’Sullivan, from the Jones Business School coached students in:

- Navigating a large crowded room
- Introducing yourself to a new group
- Gracefully exiting a group to go join another
- Corporate Reception do’s, don’ts and more
Be sure to check our web sites regularly for new information, resources, and upcoming events:

NSCI  www.profms.rice.edu
ENGI  www.epmp.rice.edu

For comments or questions, please contact us at:

NSCI  profms@rice.edu
ENGI  af15@rice.edu

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

NSCI  www.facebook.com/professional.science.masters
ENGI  www.facebook.com/epmp.rice.edu