

PSM Lecture Series: A Resounding Success

The Professional Science Master's Program concluded a successful lecture series focusing on the theme "Building New Jersey's Innovation Ecosystem." Kicking off the lecture series was a talk by **Dr. David Finegold**, Dean of the School of Management and Labor Relations and founder of the PSM Program. His topic was "Building High-Skill Ecosystems: Efforts to Foster a Bioscience Cluster in New Jersey."

Dr. Sol J. Barer, Executive Chairman of Celgene, described the transformation of a company into a world class leader in his presentation, "The Rise of Bioscience in NJ: Celgene – A Case Study."

John F. Crowley, Chairman and CEO of Amicus Therapeutics, spoke about his personal journey to save his children from a debilitating disease in his presentation "Chasing Miracles: The Crowley Family's Journey of Strength, Hope and Joy that Inspired the Major Motion Picture 'Extraordinary Measures.'" Communication is essential in any industry. Illustrating the potential conflicts that can arise between disciplines, **Dr. Peter Gillies**, founding Director of the New Jersey Institute for Food, Nutrition, and Health and **Dr. Felicia D. Stoler**, nutritionist and exercise physiologist spoke on the topic "Scientists are from Mars, Marketers are from Venus: Working at the Interface of Science and Business." Balancing environmental with economic issues in New Jersey is not an easy task. **Nicholas De Rose**, Senior Principal at Langan Engineering and Environmental Services described the delicate balance between these two issues in his presentation "Balancing Environmental Remediation and Economic Issues in New Jersey."

Rounding out the lecture series was a presentation by **Dr. Stuart W. Peltz**, co-founder and CEO of PTC Therapeutics. Dr. Peltz recounted the rise of his biotechnology company in "Making a Business a Cause: The Building of a Biotech Company – the PTC Story." Throughout the presentations, the general themes that emerged were hard work, perseverance, taking risks, focusing on the most serious diseases with unmet medical needs, and being open to novel ideas. The Professional Science Master's Program had seven extraordinary individuals share their life stories and experiences for the Distinguished Lecture Series. Please visit our website at psm.rutgers.edu for our upcoming lecture series.



*John F. Crowley, Chairman & CEO
Amicus Therapeutics*



*Dr. Felicia D. Stoler, Nutritionist and
Exercise Physiologist and Dr. Peter
Gillies, Director, New Jersey Institute
for Food, Nutrition, and Health*

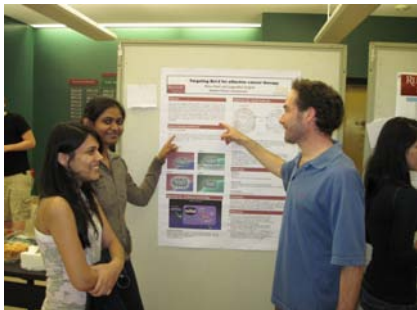


*Nicholas DeRose, Senior Principal,
Langan Engineering and
Environmental Services*

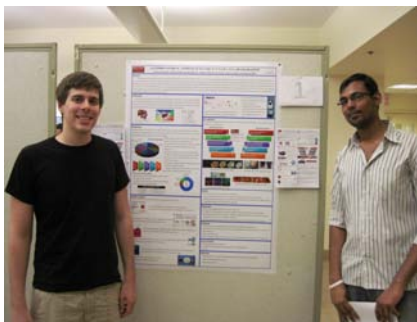


*Dr. Stuart W. Peltz, President & CEO
PTC Therapeutics*

PSM Photos



Professor Michael Lawton speaks to Sugandha Singhal and Rima Patel about their research on "Targeting Bcl-2 for Effective Cancer Therapy" during his NextGen Biotechnology and Genomics class poster session.



L to R: Anthony Marcketta and Manikandan Chandrasekharan present their research project on "A Combinatorial Approach to Treat Liver Cell Degradation."



L to R: Dr. Sangya Varma, Dr. Michael Lawton, Christina Pellicane and Michael Ulise. Students present their project, "CANARY Technology for the Rapid Identification of Pathogens."

Experiential Learning

One of the goals of the Professional Science Master's Program is to provide students with experiential learning that will enhance their graduate education. In addition to internships that provide relevant work experience, students gain important insights through field trips that help them translate academic knowledge into real world experiences. On February 18, 2011, PSM students visited the Rutgers EcoComplex in Bordentown, NJ. The EcoComplex is the nation's first research technology development and research center dedicated to enhancing the environment and agriculture through education, outreach and green business development. Students learned about cutting-edge research and start-up companies engaging in environmental and energy innovation.

On April 7, 2011, PSM students visited the Commercialization Center for Innovative Technologies (CCIT) located within the heart of the State's "Research Corridor" on the campus of the Technology Centre of New Jersey. The CCIT is one of the incubation facilities in the nation dedicated to life sciences and biotechnology companies. Students learned about the research and entrepreneurial plans of such start-up companies as Aestus Therapeutics, Neurotez, and Viya Pharmaceuticals.

As part of their summer course in Fundamentals of Intellectual Property, students visited the U.S. Patent Office Headquarters in Alexandria, VA. Students participated in seminars covering patents, trademarks, branding, copyrights, and trade secrets. Presentations were also made on how regulatory standards are developed and counterfeit and IP piracy from a global perspective. Please check the PSM website for scheduled field trips for the upcoming academic year.



PSM students visit the U.S. Patent Office Headquarters in Alexandria, VA on June 13, 2011 for the Fundamentals of Intellectual Property class taught by Dr. Dipanjan Nag.

PSM Program Partners with Karolinska Institutet

The Rutgers Professional Science Master's Program, signed a Memorandum of Understanding (MOU) with Karolinska Institutet in Stockholm, Sweden. The MOU allows the PSM Program and Karolinska Institutet to participate in student exchanges between the two programs. Karolinska Institutet is one of the leading medical universities in the world. The Institutet is known for its scientific breakthroughs and Nobel Prize winners. Since the early 1900's, Karolinska Institutet has been assigned to elect recipients of the Nobel Prize in Physiology or Medicine. One of the highest ranked medical universities in the world, Karolinska Institutet offers Master's programs in Bioentrepreneurship, Biomedicine, Global Health, Health Informatics, Public Health Sciences, Toxicology, and Medical Education. Its mission is to contribute to the improvement of human health through research and education. The PSM Program is expanding its outreach to other countries to give our students a global perspective in science and technology.

New Hybrid Course



L to R: Dr. Sangya Varma, PSM Associate Director for Academic Affairs and Kathryn McCaffrey, Ethics Officer, Lockheed Martin Corporation, Delaware Valley, PA

The Professional Science Master's Program introduced its first hybrid distance learning and on-site course, *Ethics for Science and Technology Management* during Spring, 2011. Developed and taught by **Dr. Sangya Varma**, PSM Associate Director for Academic Affairs and Curricula Development, the one credit course is mandatory for all students in the Master of Business and Science degree program. Dr. Varma requires all her students to "Do a FaVOR[®]" – an action based ethical due diligence process – find Facts, assign Value proposition, identify Options & Obligations and finally Rate, React and Reassess their decision. Three on-site interactive lecture sessions are held to reinforce concepts learned on-line.



Professor Barbara Zilinkas speaks to Mario Cornejo and Sahil Shah about their project at the poster session for Professor Michael Lawton's NextGen Biotechnology & Genomics class.



Dr. Deborah Silver, Executive Director of the PSM Program, speaks to prospective students at an Open House.



Chrystal McArthur, Senior Associate Director of Rutgers Career Services, role plays the interview process with Devraj Swaminarayan.

Professional Development Workshops

PSM students participated in a series of workshops that focused on helping them prepare for the workforce. **Chrystal McArthur**, Senior Associate Director of Rutgers Career Services, presented a number of effective strategies in her workshop, *"Interviewing Made Simple."* McArthur provided an overview on the purpose of the interview, types of interviews, preparing for the interview and the importance of first impressions. **Dr. Aleta You**, PSM Associate Director, presented a workshop on *"Professional Etiquette in the Workforce."* Dr. You spoke about social intelligence and the importance of being aware of verbal and nonverbal forms of communication. In their presentation on *"Dining and Professional Etiquette,"* **Doug Ricci**, Career Management Specialist and Licensed Professional Counselor and **Tina Vance-Knight**, Assistant Director with the Rutgers Office of Career Services reminded students that "It's not about the meal." Participating in a sit down dinner students learned the importance of dressing for the occasion, introductions and conversation, continental versus American style of eating, navigating the table setting, the art of handling certain types of food, and what *not* to order when a prospective employer takes you out to lunch or dinner. The final workshop on *"Mock Interviews,"* coordinated by **Chrystal McArthur**, consisted of representatives from L'Oreal and Cognizant who conducted actual interviews of PSM students. The interviews gave students an opportunity to hone their interviewing skills that they learned in an earlier workshop. A series of professional development workshops are now being planned for the upcoming academic year. The dates and topics for the workshops will be posted on psm.rutgers.edu.

New Concentrations Approved

New concentrations have been approved by the Rutgers Graduate School for the Professional Science Master's Program. Please visit the PSM website at psm.rutgers.edu for additional information about the concentrations. The new concentrations are:

- Engineering Management (New Brunswick)
- Pharmaceutical Engineering (New Brunswick)
- Personal Care Science (New Brunswick)
- User Experience Design (New Brunswick)
- Applied Computing (Camden)



Doug Ricci and Tina Vance-Knight review some helpful tips on Dining and Professional Etiquette .



Jerome Laday of L'Oreal and Jeff Comerford of Cognizant discuss the interview process with students from the PSM Program.



PSM student Vaidehi Parikh participates in a mock interview with Jerome Laday of L'Oreal.

NSF Fellows



NSF Fellows meet to discuss their research. L to R: Adolfo Pertuz, Marie Bolognini, Michael Bastidas, Gabriel Woldegebriel, Ellen Speace, Margaret Warren, Dr. Deborah Silver. PSM Executive Director

On May 7, 2010 the National Science Foundation awarded the Rutgers Professional Science Master's Program \$700,000 to fund the project "Science Master's Program: Fueling Innovation in New Jersey through Graduate Education." The goal of the new degree is to train the next generation of individuals to assume key integrator and leadership roles in science-intensive industries and to translate research into commercialization to fuel innovation and economic growth in New Jersey and the U.S. The project includes all three campuses in Newark, New Brunswick, and Camden.

The focus of the NSF SMP effort is to attract and recruit students from underrepresented groups in science, technology, engineering, and mathematics (STEM) fields for "green science" based concentrations including Sustainability, Biotechnology (especially biofuels), Urban Environmental Science, and Industrial Mathematics. NSF funds provide tuition fellowships and a stipend for two cohorts of students in the Professional Science Master's degree program. Students meet twice a year to talk about their research and present their findings.



PSM Program Coordinator Ines Czechowski speaks to a potential student at the BioNJ Career Expo on June 17, 2011.

Acknowledgement

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