



KGI is dedicated to education and research aimed at translating into practice, for the benefit of society, the power and potential of the life sciences.

Fall 2009

KGI Launches New Academic Programs

Keck Graduate Institute (KGI) continues to redefine higher education in the life sciences with two innovative new academic programs: the first-ever professional master's program providing

industry training for postdoctoral students, and a unique post-baccalaureate program that will give students an edge in applying to medical school.

The one-year Postdoctoral Professional Masters in Bioscience Management (PPM) is designed to instill business skills not included in traditional science and engineering PhD programs but essential for success in the life sciences industry. Like KGI's flagship Master of Bioscience (MBS) degree, the PPM is breaking new



KGI's inaugural class of PPM students (from L to R): Biranchi Patra, Yvonne Klaue, Linda SooHoo, and Claudia Lee. Not pictured is Rami Hasan.

ground in better preparing life sciences professionals for senior management positions and entrepreneurial ventures.

“What we have observed — and had validated in our conversations with industry leaders and postdoctoral students themselves — is that there is a significant gap in most post-docs’ understanding of the business side of the biotechnology industry, compared with the science they know so well,” says KGI President

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Supporting Our Students

We deeply appreciate the contributions from supporters who helped us meet our Annual Fund goal of \$700,000 for the fiscal year ending June 30, 2009. **Thank you.** Your contributions made a direct impact on KGI's ability to provide fellowships to students and grow our programs.

Moving forward your help will be even more important to KGI's success. This fall we welcomed our largest incoming class of MBS students to date. Obviously, this is great news! With growing enrollment, however, comes the need for more fellowship support. Since KGI's inception, the W. M. Keck Foundation's generosity has helped KGI provide more than \$1.5 million in student support

each year. Over the next two years, however, our Keck Challenge Grant will come to an end.

As you review your year-end giving, we ask you to consider making a gift to KGI's Annual Fund to help us continue to provide much-needed fellowship support and build upon the institution's strong legacy of innovative education in the life sciences.

KGI's Annual Fund goal for 2009-10 is \$700,000. We invite you to make a gift now.

To donate, please visit <https://supportkgi.org/>.

Thank you again!

By Kerry Howell, Vice President for Advancement

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Nancy Lam Joins Faculty of KGI

Assistant professor Nancy Lam, KGI's newest faculty member, brings expertise in organizational behavior and management that will help KGI students

become effective leaders in the life sciences industry.

Lam, who holds a PhD in organizational management from New York University's Stern School of Business, is teaching organizational behavior to first-year KGI students this fall.

"We are very excited to have Nancy join us as a management faculty member," said James D. Sterling, vice president for academic affairs and dean of faculty. "She will prepare our students to understand the structure and dynamics of the workplace and to apply their knowledge as they advance in their life science careers. Her research in employee voice is especially important in life science companies that are in the midst of rapid growth and change that requires complex technical, regulatory, and managerial interplay."

Lam's teaching interests range from organizational behavior and leadership to creativity, while her primary research interests include employee voice and silence, and power dynamics.

"In organizational life, employees' decisions to speak up about relevant work issues have a significant impact on the ability of managers to make informed decisions," says Lam. "As the workplace becomes more complex and managers are challenged by increasingly intricate situations, it is becoming more imperative that decision makers utilize the appropriate information from their employees to guide them toward affecting favorable organizational change. Organizational success, then, hinges upon the continuous flow of employee voice as well as the voice recipient's adequate utilization of the available input."

In addition to her teaching experience at NYU and the University of California, Berkeley, Lam has also worked in industry for six years. "My work experience can help give students a more real-life perspective that is often the key to a more robust comprehension of management concepts," Lam says.

Lam, who received her undergraduate degree in molecular and cellular biology from UC Berkeley, is enthusiastic about KGI's approach to blending science and business. "I would have been interested in this program myself had it been available when I was choosing a graduate program," she says.

By Carol Sorgen

Grants and Achievements



Greg Dewey, PhD, Robert E. Finnigan Professor of Applied Life Sciences, and **Jim Osborne, PhD**, Industry Professor of Biophysical Chemistry, received a three-year, \$600,000 "Partnerships for Innovation" grant from the National Science Foundation to help develop the new Center for Biomarker Research (CBR) on the KGI campus. The grant will fund the development of a flow cytometry facility in the CBR, which will include a newly created 15,000-square-foot laboratory.



Animesh Ray, PhD, professor of systems biology, was awarded a one-year, \$100,000 National Science Foundation grant to study real-time coupling of gene networks in single cells. Ray will serve as principal investigator (PI) for the project, with **Ali Nadim, PhD**, professor at both KGI and Claremont Graduate University, serving as co-principal investigator.

Alum Chosen for Distinguished Panel Discussion



Hutch Humphreys, one of Keck Graduate Institute's most successful graduates, participated on a distinguished alumni panel this month at the Professional Science Master's (PSM) Sixth Biennial Meeting in Washington, DC.

Humphreys, manager of regulatory strategy at Amylin Pharmaceuticals in San Diego, talked about his career accomplishments since graduating from KGI with a Master of Bioscience (MBS) degree in 2003 as part of his presentation for the panel discussion.

Humphreys said being chosen for the panel was "a good reflection on the training and education I received at KGI." He added that the two-year MBS program was excellent preparation for a career in the regulatory profession.

"The training at KGI allowed me to hit the ground running here at Amylin," he said. "I was a lot more aware of all the various functions of the company and what their purpose was instead of feeling things out when I got there."

Unlike most people in the regulatory field who come from science backgrounds, Humphreys had the advantage of business training as well which gave him a better understanding of budgeting and market forecasting relevant to the company's work.

A former U.S. Navy Quality Assurance Officer on a nuclear submarine, Humphreys learned valuable leadership experience and skills interpreting Department of Defense regulations and applying them. Now, he essentially does the same with Food and Drug Administration rules.

"There are a lot of similar principles between the two," Humphreys said.

Humphreys received national recognition in 2006 when he was awarded the RAPS (Regulatory Affairs Professional Society) New Professional Award for exceptional service to the profession and the society.

Dan Chatham, dean of admissions and financial aid, said Humphreys' participation on the national panel helped represent all KGI alumni and more generally all PSM alumni from schools across the country.

"He's a good example for future PSM students," Chatham said.

The Professional Science Master's, dubbed the "21st Century MBA," is an innovative graduate degree designed to allow students to pursue advanced training in math and science while at the same time developing business skills that are highly valued by employers.

By Elaine Regus



Steven Casper, PhD, Henry E. Riggs Professor of Management and director of the Master of Bioscience program, published the findings of an 18-month study, "The Marketplace for Ideas: Can Los Angeles Build a Successful Biotechnology Cluster?" Casper's research was funded by an \$84,000 grant from the John Randolph Haynes and Dora Haynes Foundation.



Angelika Niemz, PhD, associate professor, has been appointed director of research, following her return from a six-month sabbatical at Roche Diagnostics in Switzerland. Niemz will work with faculty, staff, PhD students, and postdoctoral researchers to expand KGI's research programs.

KGI Welcomes Largest Incoming Class ... From Across the Globe



Ting Chen



J.P. Mac Donald



Neelima Kumar

The largest incoming class in KGI's history arrived on campus this fall, with students coming from Argentina to Thailand.

Fifty-five students will be pursuing a Master of Bioscience (MBS) degree, while five students enrolled in KGI's first Postdoctoral Professional Master's in Bioscience Management Program.

The students hail from four continents, ten countries (Argentina, China, India, Iran, Nigeria, the Philippines, Taiwan, Thailand, Uruguay, and the U.S.); 16 states; and 35 domestic and international colleges and universities. The students also come to KGI with an array of both undergraduate and graduate degrees in areas such as biochemistry, life sciences, biotechnology, and engineering, among others, says Sofia Loaiza, director of admissions.

New students experienced a round of activities that included a campus orientation, pool party and barbecue, team-building workshop, welcome address by KGI President Sheldon M. Schuster, and a reception with special guest Dr. Dennis Fenton, former executive vice president of Amgen and a member of the KGI Board of Trustees.

Schuster is impressed with the new class. "This is an incredible group of young people," he says. "They're communicative, outgoing, and 'on fire.' We're thrilled to have them."

Schuster is also pleased with KGI's growth. Though the school has the capacity to grow even more, he wants to ensure that it does so in a "slow, thoughtful way" that will continue to expand KGI's recognition as a gateway for scientists and engineers into the life sciences industry.

"Students are learning about KGI not only from word-of-mouth and personal referrals, but also from online research and articles in which KGI is mentioned," adds Daniel Chatham, dean of admissions and financial aid. "This year's class has taken many different paths to find their way to KGI."

The fact that 41% of the incoming class is made up of international students is no coincidence. Schuster explained that KGI is preparing students to enter a global industry, making it important for the school to have a strong international presence.

"Our students need to understand how to work in diverse groups in this country, as well as in other countries," he says. "We are helping to prepare a global community of individuals who want to contribute to both the life sciences industry and to the world."

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By Carol Sorgen



KGI Hosts Third Annual Next Generation Bioscience Leaders Conference

Keck Graduate Institute and Smith College will host Next Generation Bioscience Leaders (NGBL), the third annual executive education program for women in the life science industry,

from February 1-5, 2010. Classes will be held at the Kellogg West Conference Center in Pomona and at Claremont College sites.

NGBL is the only program focused exclusively on women science and business leaders in the life science industry, according to Diana Bartlett, KGI's director of corporate partnerships. The program is a partnership between KGI, known for its expertise in developing leaders in bioscience, and Smith College, recognized for its pioneering efforts in developing women leaders.

"Our unique program integrates functional expertise with leadership development to enable Next Generation Bioscience Leaders scholars to contribute more strategically to their organizations," says Bartlett.

"The program's all-women format enhances risk-taking and personal growth by providing women access to an environment proven to accelerate leadership learning," Bartlett adds.

NGBL brings together business leaders and top faculty and offers thought-provoking sessions that address the critical organizational and leadership issues facing today's life science executives. Conference topics include Business Models and Leadership Imperatives; Authentic Leadership; Negotiation; Finance and Compensation; Leading Teams; Networking; and Career Management Strategies. There are also separate overview tracks on pharmaceuticals, biotech, medical devices and diagnostics for individuals wishing to branch out to other industry sectors.

"For some attendees, the peer-to-peer and scholar-to-instructor networking is the most valuable aspect of the week," says Bartlett.

The program is designed for women with six to 12 years of career experience in the life science industry who are poised to assume higher level management positions.

The cost of the program is \$5,600 (which includes tuition, materials, lodging and meals).

For more information, contact Bartlett at 909-607-9864 or dbartlet@kgi.edu, or Iris Marchaj, director of Smith College Executive Education, at 413-585-2642 or imarchaj@smith.edu.

By Carol Sorgen

James Widergren and Karen Bernstein Join KGI Board of Trustees

Keck Graduate Institute has announced the appointment of James F. Widergren and Karen Bernstein to the KGI Board of Trustees.

Formerly an active member of KGI's Advisory Council, Widergren is corporate vice president for Asia Pacific and Latin America commercial operations for Beckman Coulter.

"As a member of the Advisory Council, Jim has been instrumental in helping KGI develop relationships within the life sciences industry," says KGI President Sheldon M. Schuster. "He is generous with his time, strong in his leadership, and focused in his commitment."

Widergren joined Beckman Coulter in 1992. He has been responsible for subsidiaries in Japan, China, Singapore, Australia, Mexico, Puerto Rico, Venezuela, and Argentina, plus dealer operations throughout these regions since 2006. Prior to this, Widergren was vice president and treasurer of Beckman Coulter from 2005 until April 2006, responsible for all treasury and risk management functions and corporate planning.

Widergren, a Registered Professional Mechanical Engineer (PE) in California and a past fellow of the Thomas J. Watson Foundation, holds a Bachelor of Science degree in engineering, a Master of Engineering degree from Harvey Mudd College, a Master of Business Administration degree from the University of California at Los Angeles, and has completed the Stanford Executive Program at Stanford University.

"I pursued two separate graduate degrees to get the same broad experience students can now get at KGI in the Master of Bioscience program," says Widergren who is enthusiastic about working with KGI to develop programs for future life sciences leaders.

Beckman Coulter has worked closely with KGI, sponsoring internships and scholarships, donating equipment, and hiring KGI graduates.



James F. Widergren and Karen Bernstein

Widergren believes his experience in international business will be an asset to KGI, helping the school to attract the "best and the brightest" from around the world.

"From a personal standpoint," he adds, "I enjoy supporting the growth of KGI as well as helping young people get started on their careers."

In regards to Bernstein, co-founder, chairman and editor-in-chief of BioCentury, Schuster remarked: "Karen is committed to the life sciences industry and is a highly respected opinion leader. She is enthusiastic, committed, and involved."

BioCentury provides business-oriented information services to a global audience of life science executives and investors from offices in the U.S. and Europe. Now in its 17th year of service, the company publishes *BioCentury*, *the Bernstein Report on BioBusiness®*, plus a translational science journal, *SciBX: Science-Business eXchange*, in a joint publishing venture with Nature Publishing Group.

Bernstein, who has been writing and publishing on biotechnology topics since 1987, holds a PhD in political science from Stanford University, and a BA in politics and history from Brandeis University.

"Jim and Karen's professional experience and their special personal qualities make them outstanding leaders, and we're thrilled to have them join the Board of Trustees," says Schuster.

By Carol Sorgen



KGI Welcomes Twelve Corporate Sponsors for TMPs

Twelve life science companies are sponsoring Team Masters Projects (TMPs) for 2009-2010.

Representing the capstone of the Master of Bioscience (MBS) program, TMPs consist of teams of three to five students who work with a corporate sponsor to address a real-world problem or opportunity facing the company.

This year, in addition to involving MBS students, TMPs will include members of KGI's Postdoctoral Professional Masters in Bioscience Management inaugural class, as well as a few select students from other Claremont Colleges.

"The unique thing about KGI and these projects is that corporate sponsors are able to utilize both the technical and business knowledge of our students," said James D. Sterling, PhD, vice president for academic affairs and dean of faculty and director of the TMP program. "This is a unique educational platform that has spread across the country, and we continue to make ours stand out."

Diana Bartlett, director of corporate partnerships and co-director of the TMP program, said that since the inception of the program, KGI has worked on 86 projects from 41 organizations. "We are pleased to have so many returning companies and some new faces as well," said Bartlett.

Among this year's returning sponsors, Beckman Coulter is sponsoring its eighth TMP, the most of any company to date. Two other returning companies—Gilead Sciences and Life Technologies—are each sponsoring their sixth project.

Three companies are first-time TMP sponsors: Allergan, PBS Biotech, and Sigma-Tau.

The complete lineup of sponsors and project topics are as follows:

- **Allergan:** Biologics Development Capacity Modeling and Analysis
- **Beckman Coulter:** New Automation Products
- **BioMarin:** Efficacy of Membrane Chromatography Sorbents for Removing Impurities from CHO Cell Line Derived Enzyme Therapeutics
- **Clear Springs Land Company:** Biofuels Economic Assessment
- **Gilead Sciences:** Due Diligence on Licensing Biologics and Fermentation Technologies
- **Illumina:** Consumer Genomics
- **Kinetic Concepts:** Wound Healing Diagnostic System
- **Life Technologies:** Maximizing Value for Life Technologies Through Business Relationships with Contract Research Organizations in China and India
- **PBS Biotech:** Single-use Bioreactor Systems
- **Pioneer Hi-Bred:** SNP Genotyping via Continuous Flow PCR
- **Sigma-Tau:** New Product Opportunities in Rare Disease Therapy
- **Veracyte:** New Product Launch Strategy and Market Opportunities

TMPs provide students with opportunities for learning problem-solving, project management, productive teamwork and effective communications. Each project is advised by a KGI faculty member and an industry liaison.

By Rachelle Fryd

New Academic Programs *continued from page 1*

Sheldon M. Schuster. “Companies want candidates with not only a strong scientific background, but also a deep understanding of how business operates. A superficial understanding is not enough.”

Courses in the PPM program combine traditional training in issues such as competitive strategy and marketing with specialized topics such as the role of regulation and medical reimbursement in determining the viability of life science market opportunities.

“We are gratified by the early interest in this program from some extraordinary young applicants,” adds Schuster.

Program fellows interested in launching their own businesses will be able to enroll in specialized courses in entrepreneurship.

The program has two entry points, August and January; the first cohort of five students for the pilot PPM program arrived in fall 2009. “We are focusing this year on optimizing and perfecting the program,” adds Schuster.

The new Post Baccalaureate Premedical Program (PBPM) is similarly unique. The program will offer a flexible curriculum to meet students’ specific interests and help them improve their MCAT scores and GPAs in preparation for the medical school admissions process.

Courses planned for the program include such offerings as Biology of Disease, Clinical Pharmacology, Rare Diseases, Ethics, and Medical Devices. With KGI’s strong ties with the biotech industry, students will benefit from potential industry internships and health profession volunteer experiences, as well as involvement in KGI’s strategic research centers — opportunities that will help students further distinguish themselves from other medical school applicants. The PBPM is also designed to allow students to continue their studies at KGI and complete an MBS degree.

“We are gratified by the early interest in this program from some extraordinary young applicants,” adds Schuster, who expects approximately 12 students per year will enroll in the program.

These two new academic programs are a progression of KGI’s longstanding leadership in life sciences education. KGI pioneered what is now the burgeoning Professional Science Masters (PSM) field — the first significant change in American science education in the last four decades. All of KGI’s academic programs are designed to train leaders in the profession who will be well-equipped to translate the potential of the life sciences into practice for the benefit of society.

By Susan Wampler



KECK GRADUATE INSTITUTE
of Applied Life Sciences

535 Watson Drive • Claremont, California 91711
www.kgi.edu