



KGI Celebrates 10th Commencement

Keck Graduate Institute will mark its 10th annual commencement on May 14 in an historic ceremony that celebrates the success of the nation's first graduate institution devoted solely to bioscience education.

The ceremony will feature an address by a leader in the bioscience and pharmaceutical worlds, James M. Cornelius, chairman of the board of Bristol-Myers Squibb.

The 11 a.m. ceremony will take place on the KGI Campus Lawn, with a reception following.

The ongoing professional success of KGI graduates shows just how insightful and timely its creation was for the life sciences industry, said President Sheldon M. Schuster, PhD.

"This is a special event that honors our new graduates and celebrates our continued achievement as an institution dedicated to promoting innovation in the life sciences," Schuster said. "We are really leading the pack. If you can accuse us of anything, it's of being really daring in education. That's what has been said ever since the day we were formed."

Members of the Class of 2011 will be honored at an awards ceremony on May 13 that recognizes their work in the Master of Bioscience (MBS) and

other academic programs. That event will be held at noon, also on the KGI Campus Lawn.

This year's graduating class will present KGI with two large digital screens that will better inform the campus community about year-round events taking place. "The class gift was the result of a great collaboration," said Cindy Cordova, student chair. "I am proud to say that we had 100% participation of the graduating MBS students."

For a decade now, KGI has attracted students who value its innovative degree programs. The curriculum fuses science and business to take discoveries seamlessly from the lab to the market.

James D. Sterling, PhD, vice president for academic affairs and dean of faculty, who joined KGI in 2000, recalled how innovation was a key aspect of the institution from the very beginning. "We were at

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Students Aid Search for Lymphomatic Malformation Cure

Three KGI pre-med students turned a classroom assignment into a successful effort that could eventually help save the lives of hundreds of small children suffering from lymphomatic malformation.

Daniel Burke, Laura Wilson and Rudy Tsay wrote an Orphan Drug Designation Application on behalf of researchers at the University of Iowa hospitals and clinics for OK-432, a substance that has proven to be effective in treating lymphomatic malformation, a rare and fatal disease that causes large growths on the heads and necks of young children who eventually suffocate from constricted airways.

The students wrote the application for Norris Professor Ian Phillips' "Writing an Orphan Drug Designation" course last semester.

Phillips is director of KGI's Center for Rare Disease Therapies, which is dedicated to educating and advocating for therapies for rare diseases, which afflict nearly 30 million Americans. Of the 7,000 identified rare diseases, many have no treatments. For those that can be treated, the cost to the patient is often prohibitive.

"This fits exactly with the mission of the Center for Rare Disease Therapies," said Phillips, adding that he was proud of the students' accomplishment.

To receive orphan designation, the proposed drug therapy must target a rare disease (one with a patient population of 200,000 or less) and it must show promise for treating the disorder. OK-432 is manufactured in Japan and was originally developed to treat certain forms of cancer, with moderate success.

While U.S. Food and Drug Administration (FDA) approval of the application does not guarantee the drug itself will be approved, it allows researchers to seek grant funding to conduct further clinical trials and provides incentives to the existing manufacturer to increase production of the drug or for other companies to develop the treatment.

Burke, whose mother is a research nurse at the University of Iowa, took the lead on the project. She coordinates clinical trials and studies on OK-432 for Dr. Richard Smith, who has been testing the treatment under an FDA Investigational New Drug application for more than a decade.

"This opens up a lot of opportunities for that drug that has been stuck in clinical trials for the past 10 years," Burke said.



Rudy Tsay, Professor Ian Phillips and Laura Wilson. Not pictured, Daniel Burke.

Tsay said his group benefited from an orphan drug designation application workshop conducted by the FDA at KGI last November. They used a checklist provided by the FDA as a template for their application. Some of the rest of it was luck.

"The situation just fit perfectly for us," Tsay said. "We had a good sponsor drug for a very small subset of the population."

Wilson was surprised at the number of drugs that might benefit from orphan drug designation if more people were aware of and understood the process, how easy it is to write an application and how satisfying success feels.

"It's a very disfiguring disease that this drug helps to treat," Wilson said. "What more can you ask for in terms of having a real world impact."

Wilson and Tsay have landed internships with the FDA this summer and will be working with the FDA's Office of Orphan Products Development.

All three students came to KGI for the Postbaccalaureate Premedical Certificate (PPC), a one-year program designed to give premed students the competitive edge in getting into the medical school of their choice. And all three have decided to take advantage of the PPC program's option of staying an additional year to earn a Master of Bioscience degree while applying to medical school.

Burke, Tsay and Wilson are not the first KGI students to be involved with successful orphan drug designation applications. Silviya Meletath (MBS '11) helped obtain FDA approval last year for BPT Pharmaceuticals in Irvine for a drug called ProEnzy that shows promise in treating pediatric Multiple Sclerosis.

By Elaine Regus

KGI Forges Partnership with ChinaBio® to Offer Summer Internships

KGI students will have the opportunity to spend their summer internship in China under the new ChinaBio® Life Sciences Summer Work-Study Program in Shanghai.

Under the new agreement with KGI, the consulting firm ChinaBio® LLC will host up to 15 students this summer. The program also will be open to students from other universities and early-career professionals in the life sciences, engineering, business management, economics, international relations, law and public policy fields.

ChinaBio® has sponsored two internships for KGI Master of Bioscience students the past two summers. The new agreement establishes a formal relationship between the company and KGI and expands the internship possibilities.

“We view this as first step toward greater collaborations with China,” said James D. Sterling, PhD, KGI’s vice president for academic affairs and dean of faculty. “We’re not only providing an opportunity for our students to go to China, but we’re also establishing a presence and reputation in China so we can recruit students from there and perhaps involve companies in China in some of our entrepreneurship activities at KGI.”

Students will have the opportunity to work on projects with ChinaBio® and with multinational pharmaceutical companies in China. Weekly meetings with guest speakers from the life science industry will bring the participants together to share their experiences, said Greg Scott, president and founder of ChinaBio®.

KGI students who participate in the program will receive academic credit for the internships. Others who complete the program will earn the ChinaBio/KGI China Life Science Business Certificate.

KGI alum Robert Rankin (MBS '09) knows firsthand how valuable the ChinaBio® internship can be. While in China, Rankin worked on a variety of projects, including consulting with startups and identifying novel technologies from Chinese universities for multinational pharmaceutical companies such as Pfizer. Additionally, he coached one startup on its presentation about a product to identify liver cancer in patients with cirrhosis. The presentation received a positive reception at the 2009 ChinaBio Investor Forum where startups presented their business plans to an audience of industry professionals, venture capitalists and other investors.



Greg Scott



Randy Berholtz

“Coaching the startup was pretty amazing,” Rankin said. “It was great working directly with the founder, exchanging email and interacting about the business plan presentation. Then, I got to watch the presentation in person. It was pretty gratifying.”

Randy Berholtz, an adjunct professor at KGI and a co-partner in ChinaBio® Education, will teach a three-day, pre-travel course at KGI in May providing a comparative review of law and business regulations relating to the life sciences in China and the United States. The class, “China and the U.S.: Comparative Biotech Business, Law, and Regulation,” is considered beneficial not only for students and faculty but current life science practitioners, Chinese and American, as well.

“China has been in an enviable position. It has been able to take the best from each country and go forward,” said Berholtz, who was general counsel for a group of life science companies in China and San Diego before partnering with Scott to found ChinaBio®.

“China is on everybody’s radar screen right now,” Berholtz added. “If your practice is in life sciences, you will normally hit China at some point.”

By Elaine Regus



KGI to Unveil First Donor Wall

To create a more permanent and visible means of honoring the generous benefactors who have helped Keck Graduate Institute flourish, KGI will establish its first donor recognition wall—to be located at the west entrance of the main building, adjacent to the Office of the President.

“This new recognition wall will help underscore the importance of donor support to everything we do at KGI,” says KGI President Sheldon M. Schuster, PhD.

Initially, the wall will recognize 165 individual, foundation, and corporate donors who have contributed \$5,000 or more cumulatively to KGI since the institute’s founding in 1997.

“Our supporters are extremely important to KGI, and we look forward to acknowledging them in a much more public way for their generosity and belief in our mission,” says Karen Schneider, vice president for advancement. “The response we have received to date for this effort has been extremely positive.”

Following are the giving levels that will be recognized on the donor wall:

Cornerstone Founder \$1M +	W. M. Keck Foundation Founders’ Circle
\$500,000 - \$999,000	Chairman’s Circle
\$250,000 - \$499,999	President’s Circle
\$100,000 - \$249,999	Dean’s Circle
\$50,000 - \$99,999	Leadership Circle
\$25,000 - \$49,999	Patrons’ Circle
\$10,000 - \$24,999	Stewards’ Circle
\$5,000 - \$9,999	Ambassadors’ Circle

For more information, please contact Schneider at 909-607-0139 or karen_schneider@kgi.edu.

By Susan Wampler



John D. Leland, Jr.

Leaving a Legacy

John D. Leland, Jr. joined Keck Graduate Institute’s Board of Trustees shortly after KGI’s founding in 1997. What he lacked in the way of a scientific background, he more than made up for with his investment acumen.

A founding partner of RCM Capital Management in the early 1970s—now part of Allianz, one of the world’s largest money-management and insurance firms—Leland chaired KGI’s investment committee for more than 10 years, helping grow the endowment to its current value of more than \$45 million.

“As a brand new school, starting out with no tuition, KGI was highly dependent on its endowment,” recalls Leland. “In the early years, our focus was preservation of capital, because we didn’t have income from another source.” With other generous donors building upon the W. M. Keck Foundation’s initial investment, the endowment continued to grow under the custodianship of Leland and the rest of the investment committee.

“In the 2010 calendar year report, KGI’s investment performance for the most recent quarter, the most recent year, the past three years and the past five years was No. 1 among The Claremont Colleges,” notes Leland.

Now an emeritus member of the board of trustees, Leland initially was inspired to become involved by his longstanding friendship with KGI’s founding president, Henry “Hank” Riggs. The pair first met as undergraduates at Stanford University and later at Harvard Business School, where they both graduated in 1960.

Through the years, Leland not only has lent his personal expertise but also his financial support to help ensure KGI’s growth. He and his wife, Sandra, are inaugural members of the new Legacy Society for donors who have made provisions for KGI in their estate planning.

“KGI is beginning to bloom in terms of applications, a strong faculty, and a very fine student body,” says Leland. “And I hope to see KGI continue to build on the record of success that so many people have helped to establish.”

By Susan Wampler

KGI Launches Legacy Society

The KGI Legacy Society recognizes those donors who have remembered Keck Graduate Institute as part of their estate planning.

“Members of the Legacy Society are helping to ensure KGI’s resources keep pace as the institute continues to grow,” says KGI President Sheldon M. Schuster, PhD. “We are infinitely grateful for their visionary support.”

Inaugural members of the Legacy Society are:

Robert and Bette Finnigan
David Galas and Diane Isonaka
H. Victor Hansen
John and Sandra Leland
Stanford and Elizabeth Phelps
Hank and Gayle Riggs

DONOR PROFILE:

Daniel M. Bradbury

Working his way up through the executive ranks of Amylin Pharmaceuticals, Inc. and serving on the boards of numerous industry organizations, Daniel M. Bradbury hasn't just witnessed the rapid evolution of pharmacy to the front ranks of direct patient care—he's also been instrumental in promoting that progression.



Daniel M. Bradbury

“The pharmacist is in the ideal position to educate patients and make sure that patients get access to the best possible care and the right medications,” explains Bradbury.

Now Amylin's president and chief executive officer, he credits one of his neighbors—a pharmacist—in his native England with introducing him to the field as a teenager. Bradbury worked for a year in the industry before entering the University of Nottingham to pursue his pharmacy degree. He later earned a diploma in management studies from Harrow and Ealing Colleges of Higher Education.

After 10 years in sales and marketing with SmithKline Beecham Pharmaceuticals, he joined Amylin Europe in 1994 and, following completion of a collaboration with Johnson and Johnson in 1995, was promoted to chief commercial liaison officer—a position that meant being based in the United States. He's been at Amylin's headquarters in San Diego ever since. He also serves on the boards of BIOCUM, the San Diego Regional Economic Development Corporation, and Illumina, Inc.

It was Jay Flatley—Illumina's president and CEO, and a member of the Keck Graduate Institute Board of Trustees—who first introduced Bradbury to KGI. In 2004, Bradbury joined KGI's Advisory Council, which consists of leaders from biotech, pharmaceutical, medical device, and other industries, as well as academia. He joined the board of trustees two years later and has been a strong advocate of and participant in KGI's student mentoring program. In addition to sharing his time,

he also supports KGI financially through the Bradbury Endowed Fellowship Fund.

“For me, the most rewarding part of my involvement with KGI has been seeing over the years how graduates from the Master of Bioscience program have gone on to launch successful careers,” he says. “KGI's record in placing alumni in industry positions is remarkable. And I've also personally had the experience of working with several KGI alumni and watching them contribute to the life sciences industry.”

KGI was a strong fit for Bradbury's own background in both biopharmaceuticals and business.

“One of the biggest challenges we face in the life sciences is developing scientists who also have broad business acumen,” he says. “People tend to have careers within a single specialty track in the sciences and then they're put into a broader business role but don't have the necessary training or background to succeed. KGI is pretty unique in the kind of education it provides. I don't know of anywhere else in the world that has a program like KGI.”

While Bradbury appreciates KGI's entrepreneurial spirit, its leading-edge research touches an even deeper chord in his heart. “I've always had a passion for the life sciences industry and the importance of translating new science into products that can really make a difference in people's lives.”

By Susan Wampler

KGI Approved for GI Bill and Yellow Ribbon Programs

Keck Graduate Institute is now participating in the GI Bill and Yellow Ribbon programs administered by the U.S. Department of Veterans Affairs, helping KGI offer increased educational access and financial support to military veterans.



KGI received approval from federal officials following a lengthy certification process led by admissions and financial aid Counselor Amy Carrillo, with assistance from Stella Marks, assistant vice president for academic affairs and associate dean of faculty, and James D. Sterling, PhD, vice president for academic affairs and dean of faculty. Over a four-month period, staff created a special student handbook for veterans, received additional training and arranged a site visit for the California State Approving Agency for Veterans Education.

The request for certification initially came from Wendy Milling, a Master of Bioscience student and U.S. Army veteran who plans to work at a biotech company after she graduates.

“KGI is a community. When one person in the community needs assistance, we’re there to help,” Carrillo said.

The Post-9/11 GI Bill provides support for individuals honorably discharged after at least three months of aggregate service on or after Sept. 11, 2001, or discharged with a service-connected disability after 30 days. The program provides all in-state tuition and fees at public institutions. At private institutions, it caps annual tuition at \$17,500 and provides a living allowance.

To bridge the gap, KGI also applied to participate in the VA’s Yellow Ribbon Program, allowing the institute to make additional funds available with a VA match. Milling will receive full tuition during her two years at KGI, along with a housing allowance.

“Once we received the GI Bill designation, we turned in our Yellow Ribbon application the next day,” Carrillo said. “We helped Wendy and fulfilled a need on campus.”

Daniel Chatham, dean of admissions and financial aid, thanked the various departments for their coordination in helping KGI achieve this milestone.

“These programs really take the financial burden of going to graduate school off the table for this group of veterans,” he said. “Now that we are an approved school, we will begin to do concerted outreach to the veteran community.”

KGI is now advertised on the VA website as an approved institution, joining more than 400 colleges, universities and institutes in California alone. All members of the Claremont University Consortium participate in the GI Bill Program.

Campus News

NEW TRUSTEES/AC MEMBERS



The newest member of the KGI Board of Trustees is Richmond Wolf, vice president and investment analyst at Capital World Investors, a division of Capital Research and Management Company. Formerly the assistant vice president for technology transfer at the California Institute of Technology, Wolf managed the technology licensing and venture activity at both Caltech and NASA's Jet Propulsion Laboratory. He has a PhD from Caltech and is a cum laude graduate of Princeton University. Wolf is also a registered patent agent.

Joining the Advisory Council are:

- **Vanessa King**, PhD, vice president of business development for deCODE. King previously handled business development for PerkinElmer, BioScale and the J. Craig Venter Institute. She also was head of scientific and strategic operations at the Novartis Institutes for Biomedical Research. King received her PhD in molecular genetics from the University of Cambridge and her AB in molecular biology from Princeton University.
- **Lyle Peschek**, national biotech sales manager at Nova Biomedical. Since 1998, Peschek has been involved in product development and marketing of analytical and automation systems exclusively for the biotech industry. Prior to that, he spent 20 years in clinical analytical systems. Peschek holds a degree in medical technology and analytical chemistry.
- **Harmeet Sidhu**, chief scientific officer for OxThera, where she oversees the company's clinical program. Before that, Sidhu spent almost 10 years at Ixion Biotechnology, advancing from director of research to chief operating officer. She has been listed as an inventor on more than 10 issued patents as well as on several patents under prosecution. Sidhu's MS and PhD are from the Postgraduate Institute of Medical Education and Research in India, and she received her BS (with honors) in chemistry from Delhi University.

Faculty News



Sheldon M. Schuster, PhD, KGI's president, has been elected to the National Organization for Rare Disorders (NORD) Board of Directors, joining other noted leaders in the rare disease community. NORD provides incentives to pharmaceutical companies

to develop drugs for the thousands of identified rare diseases that affect nearly 25 million Americans. "It's an organization with a very special mission, and it's great to be a part of that," Schuster said.



Matthew Croughan, PhD, the George B. and Joy Rathmann Professor and director of the Amgen Bioprocessing Center, gave the keynote address in April at the Northern California chapter of the American

Institute of Chemical Engineers' (AIChE) 49th Annual Symposium in Berkeley, California. Croughan spoke on "Therapeutic Proteins, Specialty Chemicals, and Biofuels: The Past, Present, and Future of Biofactories."



Animesh Ray, PhD, KGI's faculty chair as well as director of the PhD program and the Center for Network Studies, was the keynote speaker at the CalTech/MIT Enterprise Forum in February in Pasadena. He addressed the forum's main topic:

"Synthetic Biology Today and Tomorrow: The Way Entrepreneurs and Visionaries Want the World to Be."



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the time seeing the start of a growing movement—that this century would be dominated by the life sciences,” Sterling said.

Though other universities have started similar programs, KGI remains a leader, he says: “It’s been a lot of fun seeing this institution grow and establish itself.”

Innovation is what attracted students to the new institution.

Sudhanshu Patwardhan (MBS ’02), MD, said he became part of the inaugural MBS class of students in 2000 because “it was the right step for me. I don’t think the enthusiasm ever died down or slowed down among my fellow students in the two years I was there.”

Another early student was Tina Song, a graduate from 2004. “There definitely were not that

many other programs out there similar to this,” she said. “I don’t think I would have been able to get my first job without my KGI education.”

Since beginning with its MBS, the school has added several other degrees, including a Postdoctoral Professional Masters (PPM), aimed at giving PhD scientists and engineers the business skills needed to pursue senior management positions within the life sciences or to embark on entrepreneurial ventures. KGI also now offers a Postbaccalaureate Premedical Certificate (PPC) for students aiming to prepare and polish for medical school applications.

“Our graduate program was innovative from the start, and the degree programs added since then have only added to that legacy,” Schuster said.