

# BIO SCI BRIEFS



A Newsletter for Alumni and Friends of the School of Biological Sciences

SUMMER 2010

## DEAN'S MESSAGE

The School has just concluded another academic year, and we have said farewell to the Class of 2010. This newest group of Bio Sci alumni includes 1,022 Bachelors, 9 Masters and 60 Doctorates awarded throughout 2009-10. The group represents the largest-ever class to graduate from our School. Our undergraduates represented 13.5 percent of all UCI undergraduate degrees awarded this academic year. We are proud to report that 110 of these received honors in research.

In just a few months we will welcome a new entering class that will be the largest in our history. Projections show that we will welcome 1,300 freshmen (up from 976 a year ago) and 225 transfers (up from 170) to the undergraduate program. These new students will study under our esteemed Bio Sci faculty, who continue to receive numerous awards and accolades which are included in the following pages.

Shortly after joining us, our new students will begin to look toward careers that will be of the highest importance to the U.S. and indeed, the global community. As I shared with the Class of 2010, the frontiers of biological knowledge have changed rapidly during the past few years. Headlines announce topics such as environmental science and policy, new techniques of genetic analysis, new pathogens such as the H1N1 virus, stem cell research and therapies, and new treatments for neurodegenerative diseases. The realm of Life Sciences is now firmly in place as a primary architect of our economy, and our work affects today's political scene, intellectual life, and medical advancement to name just a few areas of impact.

Because of our students' education with Bio Sci, they leave us well prepared for vigorous intellectual debate, keen scientific analysis, and responsible citizenship. The students, faculty, and alumni of our School are indeed making a difference today. My sincere thanks go to the many of you who are active with Bio Sci through your involvement in the Mentor Program, the Alumni Steering Committee, serving as guest speakers, and also through your financial contributions.



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I look forward to seeing you on campus soon, and thank you again for your support and active involvement.

Al Bennett  
Dean



# FACULTY IN THE NEWS



Faculty in the School of Biological Sciences were recently named as recipients of the three senior faculty awards given by the UC Irvine Academic Senate. **John Avise**, Professor of Ecology & Evolutionary Biology, received the Distinguished Faculty Award for Research. The Distinguished Faculty Award for Teaching went to **Peter Bowler**, Senior Lecturer in Ecology & Evolutionary Biology and Director of the UCI Arboretum and Herbarium. **Frank LaFerla**, Chancellor's Professor of Neurobiology and Behavior and Director of UCI MIND, was named the recipient of the Daniel G. Aldrich, Jr. Distinguished University Service Award. With these awards, Bio Sci faculty received three of the seven campuswide awards given by the Faculty Senate for 2010-11.

**Francisco J. Ayala**, University Professor, Ecology & Evolutionary Biology, received a *Doctor Honoris Causa* degree from the University of South Bohemia in Ceske Budejovice (Czech Republic) in May. In June he was awarded a *Doctor Honoris Causa* degree from Ohio State University. In July he is traveling to Spain to receive the COSCE Prize for the Public Understanding of Science, the first time that this Prize will be awarded by the Federation of Scientific Societies of Spain (COSCE). He will receive another honorary doctorate in October, this one from Universidad del Pais Basco (Bilbao, Spain). These accolades come in addition to the 2010 Templeton Prize, an honor detailed on the next page.

**Susan V. Bryant**, Professor of Developmental & Cell Biology and recently-retired Vice Chancellor for Research at UCI, has been named as a recipient of the 2010 Medal. Her longtime service to the campus, including as Dean of the School of Biological Sciences from 2000 to 2006, is recognized and celebrated through this honor. Dr. Bryant has been a widely respected teacher, researcher, administrator and leader at UCI since originally joining the faculty in 1969. Her leading work in the study of limb regeneration has resulted in over 100 publications and may one day lead to the replacement or repair of lost, damaged or diseased parts of the human body. The Medal will be presented to Dr. Bryant and this year's other recipients on Saturday, October 2, 2010 at the Bren Events Center. Hosted by the UC Irvine Foundation, "A Celebration of Stars - The Medal Awards" is one of Orange County's premier events, with proceeds going toward student support such as Regents' Scholarships.

**Tony James**, Professor of Molecular Biology & Biochemistry, along with colleagues from Oxitec Ltd. and the University of Oxford, has created a new strain of mosquitoes in which females cannot fly. This development may help curb the transmission of dengue fever, one of the world's most pressing public health issues. The virus is commonly spread through the bite of infected female *Aedes aegypti* mosquitoes, and there is no treatment. The new females are expected to die quickly in the wild, curtailing the number of mosquitoes and reducing - or even eliminating - dengue transmission. This approach offers a safe, efficient alternative to harmful insecticides. Study results appear in the early online edition of the *Proceedings of the National Academy of Sciences* for the week of Feb. 22. The research is being funded by the Foundation for the National Institutes of Health through the Grand Challenges in Global Health initiative. The current work focuses on the dengue fever vector, but the same approach could be adapted to other mosquito species that spread other diseases such as malaria and West Nile fever.

In May the Howard Hughes Medical Institute in Chevy Chase, Maryland awarded **Diane O'Dowd**, Professor of Developmental & Cell Biology and Anatomy & Neurobiology, a four-year award of \$600,000. This grant will continue Dr. O'Dowd's ongoing work to help science faculty develop effective teaching techniques while they maintain productive careers in research. She was originally named an HHMI professor in 2006. The new award is one of only 13 given nationwide, with recipients selected based on their proven success in promoting science education.

**Christine Sütterlin**, Assistant Professor of Developmental & Cell Biology, was selected as the 2010 recipient of the Golden Apple Award. A cell biologist studying centrosome and Golgi function, Dr. Sütterlin has actively supplemented her academic knowledge by seeking out new ways to be an effective instructor of undergraduate and graduate students. She receives consistently high instructor scores, and has been praised by her students with terms such as "excellent instructor", "great at explaining the concepts thoroughly" and "makes us think". She has strived to excel at teaching while setting up her research laboratory and building her publication stream since joining UCI in 2004. Dr. Sütterlin received the HHMI-UCI Faculty Fellow Award in 2007, a year after receiving the Bio Sci Dean's Honoree designation for the Celebration of Teaching awards.

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# BIO SCI NEWS

## Dr. Francisco Ayala Awarded Templeton Prize

UC Irvine and the John Templeton Foundation announced on March 25, 2010, that Dr. Francisco Ayala, Professor of Ecology & Evolutionary Biology, is the recipient of this year's Templeton Prize. This singular honor, awarded annually since 1973, recognizes a living individual whose work affirms the spiritual dimension of life.

The selection of Professor Ayala recognizes his career of over thirty years, during which time he has asserted that science and faith can co-exist, but should not mix or intrude upon the domain of the other. Denying that science contradicts religion, Ayala has stated that "If they are properly understood, they cannot be in contradiction because science and religion concern different matters, and each is essential to human understanding." The Prize was awarded on May 5th by HRH Prince Philip in a private ceremony at Buckingham Palace and carries a value of 1 million pounds sterling (around \$1.51 million).

*Francisco Ayala's ability to articulate how science and spirituality can coexist is part of what earned him the Templeton Prize.*



Photo by Daniel A. Anderson / University Communications

The Donald Bren Professor of Biological Sciences at UCI, Dr. Ayala is a pioneer of genetic research. He has conducted extensive research into parasitic protozoa, the study of which could ultimately lead to cures for malaria and other tropical diseases. He holds professorships in biology, philosophy, logic, and the philosophy of biology and is currently UCI's only University Professor, the highest faculty title within the UC system. In recognizing the Templeton Prize being bestowed upon Dr. Ayala, UCI Chancellor Michael Drake stated that "Francisco Ayala's thoughtful contributions to the science-religion

debate, along with his ground-breaking research and its implications for world health, exemplify the highest level of intellectual discourse and excellence at UC Irvine. No one is more deserving of this honor." Dean Al Bennett also shared that "We are very proud to count Francisco as a friend and colleague here in Bio Sci and at UCI. This tremendous honor is a fitting tribute to his long and outstanding career."

Shortly after receiving news of his selection, Dr. Ayala made clear his intention to donate the prize money to UCI. The funds have been used to establish an endowment that will provide fellowships for graduate students in the School of Biological Sciences. Recognizing this generous act, Chancellor Michael Drake announced that the UCI Science Library will be named in honor of Dr. Ayala. "The library in a university is the focus of academic research and study, and the repository of the wisdom of previous generations and our own," said Ayala. "It is a great and very rewarding honor to have the UCI Science Library named after me. I will treasure that honor with immense gratitude for the rest of my life."



Photo by Mark Finkenstaedt



# Undergraduate STUDENT AWARDS

**Brian Atwood Scholarship**

★ Neal Maler

**Brian Atwood Scholarship**

★ Tuan Ngo

**Robert H. Avnet Memorial Scholarship**

★ Christina Riffle-Yokoi

**Robert H. Avnet Memorial Scholarship**

★ Amanda A. Wong

**M. Marlene Godoy Scholarship**

★ Hea Jung (Jessica) Lee

**Dr. William F. Holcomb Scholarship**

★ Norman Chen

**Carol Becker McGaugh Award**

★ Yas Sanaiha

**Laurence J. Mehlman Memorial Scholarship**

★ Stephanie Purnomo

**Laurence J. Mehlman Memorial Scholarship**

★ Steven Maler

**Edward Mittleman Memorial Fund Scholarship**

★ Matin Khoshnevis

**Jayne Unzelman Scholarship**

★ Arielle Czerwinski

**Jayne Unzelman Scholarship**

★ Cyrus Farzaneh

**Jayne Unzelman Scholarship**

★ Diana Vu

**Jayne Unzelman Scholarship**

★ Aishwarya Sridharan

**Robert Ernst Prize in Biological Sciences**

★ Victoria Ngo

**Robert Ernst Prize in Plant Biology**

★ Annie Nguyen

**Howard A. Schneiderman Prize**

★ Bryan Ngo

**Dean's Leadership Scholars Award**

★ Jonathan Tucci

**Dean's Leadership Scholars Award**

★ Guneet Singh



Yas Sanaiha &amp; Dr. James McGaugh



Jewel Mehlman &amp; Steven Maler



Bryan Ngo &amp; Audrey Schneiderman





## STUDENT DONOR SPOTLIGHT

### Dean's Leadership Scholars

The Dean's Leadership Scholars program was established in 2008 through the Office of the Dean of Biological Sciences with the advice and assistance of the Dean's Leadership Council. The program supports gifted young biologists who receive financial assistance as recognition for high academic performance. Since its inception, the program has received generous financial support from Dean's Leadership Council members as well as many Bio Sci alumni who contribute through the Annual Fund's Telephone Outreach Program.

The first Dean's Leadership Scholar was named in September 2009 for the 2009-10 academic year. **Jonathan Tucci '10** was the inaugural recipient. He just completed a double major, earning a B.S. degree in Biochemistry & Molecular Biology and a B.A. degree in Political Science from the School of Social Sciences. To name just a few of his accomplishments, Jonathan was active in the Campuswide Honors Program, served as an Emergency Room volunteer, and conducted research in the lab of Ingrid Ruf in the Department of Molecular Biology & Biochemistry. He is beginning an MD/PhD program this fall at the University of Southern California.



Dean Bennett & Jonathan Tucci '10



Guneet Singh '11 & Dean Bennett

For the coming year, there were 40 outstanding applicants for the Dean's Leadership Scholars award. **Guneet Singh '11** was selected as the 2010-11 recipient. Guneet is entering his final year at UCI, majoring in Biological Sciences as well as Chemistry through the School of Physical Sciences. He is active in a number of honor societies, conducts research on Tuberculosis in the laboratory of Cecelia Goulding in the Department of Molecular Biology & Biochemistry, and volunteers in the Emergency Department at Saddleback Memorial Hospital. He will be applying to medical schools over the coming year as he looks toward his goal of becoming an Emergency Room Physician.

### Special Undergraduate Honor: 2010 Barry M. Goldwater Scholarship

**Yas Sanaiha**, Biological Sciences major, has been awarded a 2010 Goldwater Scholarship. Sanaiha is a Regents' Scholar and member of the Campuswide Honors Program, and has presented research at the Undergraduate Research Opportunities Program symposium. Her research with Christine Gall, Professor of Anatomy & Neurobiology, found that mental activity could stave off age-related cognitive and memory decline. Study results appeared in the March 1 online edition of the Proceedings of the National Academy of Sciences. Sanaiha, entering her fourth year, is planning to pursue an M.D. or M.D./Ph.D. program in preparation for a career that will blend her passion for medicine and scientific inquiry with her desire to contribute to local and international communities. The Goldwater Scholarship was designed to encourage outstanding sophomores and juniors to pursue careers in mathematics, the natural sciences, computer science and engineering. It covers the cost of tuition, fees, books, and room and board up to a maximum of \$7,500 per year.



# Graduate STUDENT AWARDS

## Robert Warner Award for Outstanding Achievement in Nucleic Acid Biochemistry

★ Stephanie Popson

## Fine Science Tools Graduate Travel Awards - Developmental Biology

★ Kevin Carbajal

## Fine Science Tools Graduate Travel Awards - Neurobiology

★ Michael Yassa

## Edward Steinhaus Teaching Award - DCB

★ Brett Barbaro

## Edward Steinhaus Teaching Award - EEB

★ William Van Trump

## Edward Steinhaus Teaching Award - MBB

★ Sally Lyons-Abbott

## Edward Steinhaus Teaching Award - NBB

★ Shawn Nielsen

## Graduate Fellowship Award

★ Christine Charvet



## Dr. William F. Holcomb Scholarship

★ John Eme

## Barbara K. Burgess Fellowship

★ Dr. Takayuki Nitta

## Dr. Paul H. Silverman Award

★ Kevin Carbajal

## Joseph H. Stephens Memorial Fellowship Award

★ Molly Burke

## Grover C. Stephens Memorial Fellowship Award

★ James Strother

## William D. Redfield Graduate Fellowship Award

★ Melissa Malvaez

## Howard A. Schneiderman Fellowship Award

★ Kirsten Johnson



Ann Stephens & Molly Burke



Kirsten Johnson & Audrey Schneiderman



# ALUMNI UPDATE

## Bio Sci Alumni Group Update

As reported in the last edition of this newsletter, a Bio Sci Alumni Group website is currently in development and alumni will be notified when the site goes live. Features will include a list of activities and events as well as other ways to become involved. The Steering Committee wants to hear from interested alumni from all class years as the group builds interest. **Please take a moment to update your Bio Sci Alumni profile at [www.krushcreative.com/uci](http://www.krushcreative.com/uci).** The Bio Sci External Relations office will maintain the information and use input and suggestions to plan future alumni activities. You will also be notified of upcoming Bio Sci Alumni group events. For any questions, please contact Alyssa Cruz in the Bio Sci External Relations office at [alyssac@uci.edu](mailto:alyssac@uci.edu) or 949.824.4742.

## Distinguished Alumni Award - Maria Minon, M.D. '76



Dr. Maria Minon was honored as the School of Biological Sciences Distinguished Alumna at the May 7, 2010 Lauds & Laurels Ceremony hosted by the UC Irvine Alumni Association. A native of Buenos Aires, Argentina, Dr. Minon currently serves as the vice president and chief medical officer at the Childrens Hospital of Orange County (CHOC), a position she has held since 1998. In this capacity, she works to facilitate the activities of the medical staff, quality assurance, medical education and pediatric residency programs. Dr. Minon's lengthy affiliation with CHOC also includes service on the hospital's Board of Directors for three years. She also became a member of the School of Biological Sciences Dean's Leadership Council during the 2009-10 academic year.

Holder of three UCI degrees (Humanities, Biological Sciences and Medicine), Dr. Minon has a strong commitment to helping the Orange County community.

For this she has been recognized with countless honors, including the 2007 OCMA Physician of the Year, a 2008 Pinnacle Award from ConquistAmerica Education Foundation and the Charlie Hester Philanthropy Award. Dr. Minon was appointed by Governor Schwarzenegger to the California First Five Commission in 2007 and she currently serves as vice chair of the Orange County Children and Families Commission.



Salvador Sarmiento '73, President, UCI Alumni Association, Doctor Minon, & Jorge E. Ancona, Executive Director, UCI Alumni Association

## Alumni Advocacy Update

Following two years of drastic cuts, California Governor Arnold Schwarzenegger has proposed some budget restoration for higher education for the 2010-11 year. At time of print, California's legislative bodies are still working through the budget. There is no question that budget shortfalls are still of huge concern to our leaders, but indications are that the active advocacy of UC alumni has helped to elevate the visibility of the UC system and its immeasurable educational and economic impact. Thanks go to the many of you who have written or called your legislators in support of UC Irvine. Please continue to make your voice heard as the budget process continues in the coming weeks.





# BIO SCI NEWS

## Commencement 2010



### Degrees Awarded by the School of Biological Sciences June 13, 2010

Bachelor of Science: 1,022  
Master of Science: 9  
Doctorate: 60

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