Acknowledging Academic Excellence and Leadership

The six students who received the Charles E. and Sue K. Young Student Awards were recognized for the many achievements that set them apart.

By Robin Heffler

As the largest and most comprehensive academic organization in the University of California System, the UCLA College enrolls some 21,000 undergraduate students and about 3,000 graduate students. So it is a formidable challenge each spring to single out six of those talented students—three undergraduates and three graduate students—to receive the Charles E. and Sue K. Young Student Awards.

“The winners of the Young Awards represent everything about excellence and commitment that are the hallmarks of the UCLA experience—as superb students, as researchers, and as leaders in campus service and community outreach,” said Patricia O’Brien, executive dean of the College. The winners are chosen based on their distinctive academic achievements, research accomplishments and community service.

In 1996, Evelyn and Louis Blau ensured perpetual funding for the awards by establishing an endowment in honor of UCLA’s chancellor emeritus Charles E. Young and his late wife, Sue.

This year’s six student winners, profiled here, were honored at the March 21 College Awards Dinner, along with Lloyd Coting, winner of the College’s Honorary Fellow Award, which recognizes an alumnus or friend who has demonstrated philanthropic and volunteer leadership in the College (see page 3).

For the Young Awards, it seems that 2005 is the year of the female and the year of the scientist. Four of the College’s student award winners are women and five of them are engaged in scientific research.

Understanding the Mechanisms that Regulate Emotion

By eighth grade, MOLLY CROCKETT knew that science was her calling. In her senior year of high school she had narrowed down her choices to studying neuroscience at UCLA, Harvard or Stanford. She called Matthew Lieberman, assistant professor of psychology, to inquire about studying the subject at UCLA.

“Molly persuaded me of how impressive a student she was going to be, so I recruited her as quickly as I could to work in my lab,” said Lieberman. “Molly has a true joy in everything she does, and especially in all the different kinds of learning that I’ve seen her partake in. Molly has no fear that she’ll fail because she know she’ll try hard enough to make it all work.”

As an undergraduate psychobiology major, Crockett has conducted research in the growing area of social cognitive neuroscience, which uses neuroimaging techniques such as magnetic resonance imaging (MRI).

“I’m interested in the brain mechanisms underlying emotion regulation and how these systems go awry in various forms of psychopathology,” Crockett said. “It’s incredibly rewarding to be recognized for pursuing my passion.”

That passion includes a strong interest in the role that dysfunctional emotional processing and cognitive control play in mood and anxiety disorders.

Crockett has presented her work at three professional conferences and assisted graduate students with their research. She also has been involved on campus as a volunteer for the UCLA Peer Helpline and as president of the Alumni Scholars Club. She plans to earn a Ph.D. in neuroscience and psychology and pursue a career as a researcher and mentor.
Discovering Common Links Underlying Social and Physical Pain

NAOMI EISENBERGER also began her academic career in psychobiology, earning a B.A. summa cum laude from UCLA in 1997. Now, as a graduate student in social psychology, she is already a leader in the field of social cognitive neuroscience. She has lectured on three continents and has received numerous awards, including a National Science Foundation Graduate Fellowship and a UCLA dissertation year fellowship.

"Naomi leapt to prominence last year when a groundbreaking paper of hers appeared in the journal Science," said Anne Peplau, professor of psychology. "Her discovery was that social pain and physical pain actually have the same neural underpinnings. She shows how brain scans can be used to understand our intensely personal everyday experiences."

Eisenberger's dissertation research examines how neural responses to social threats may help trigger neuroendocrine and immunological responses. "It is my hope that by continuing to investigate the social experience, I can help to understand the power of social relationships and how they influence our health and well-being," she said.

Eisenberger also serves as a graduate mentor in the undergraduate Psychology Research Opportunity Program. Recently, she was awarded a fellowship to conduct postdoctoral work at the UCLA Cousins Center for Psychoneuroimmunology, where she will examine the links between human sociality, the brain and the immune system.

Technology to Detect Disease Sooner

The latest imaging methods also play an important role in the research of SUSIE HUANG. As a doctoral student in physical chemistry, this National Science Foundation fellow has developed many internationally-recognized contributions to the area of nuclear magnetic resonance spectroscopy.

At UCLA, Huang is collaborating with faculty and surgeons at the UCLA Medical Center in developing MRI technology that will enable scientists to investigate the molecular mechanisms of disease and detect tumors at an early stage.

"Just as disease pathways don't care which tools from what disciplines are used to unlock their secrets, I want to transcend the artificial boundaries of different sub-fields of science in my future career," said Huang, who plans to pursue a medical degree, and then teaching and biomedical research.
Huang came to UCLA after graduating summa cum laude from Harvard in 2002, where she earned B.A. and M.A. degrees in chemistry as well as several prestigious awards. At UCLA, beyond her research she is an enthusiastic teaching assistant in quantum mechanics, and assists families as a volunteer in the surgical waiting area at the UCLA Medical Center.

“In the last two years, Susie has published five important papers in well-known journals and given talks at three international conferences. She also has received probably a record high rating from students for her teaching in our department,” said Yung-Ya Lin, assistant professor of chemistry and biochemistry. “But what truly impresses me and touches my heart are the unique strengths I have observed in Susie’s character. She cares deeply about the concerns and needs of those around her.”

Math Models to Regulate a Cancer-suppressing Protein

ROBYN JAVIER is both a gifted scientist and a gifted musician, and sometimes she is able to blend the two.

A third-year undergraduate in the Cybernetics Interdepartmental Program with a double major in cybernetics and neuroscience, Javier is among only seven others who were selected for a two-year intensive program that gives undergraduates the opportunity to conduct in-depth research in preparation for graduate school. As part of this program, UC LEADS, Javier conducted research involving math modeling of the regulation of a tumor-suppressing protein.

“Robyn’s got everything going for her, certainly the intellect, the synthetic abilities, intense motivation, and intestinal fortitude for creative research, and she’s already demonstrated this in my lab,” said Joe Di Stefano III, professor and chair of the Cybernetics Interdisciplinary Program. Di Stefano also plays saxophone and sometimes holds jazz jams in his lab with Javier, who plays trombone.

“I found my home here, conducting creative research, learning from the experts, and playing music with the masters,” Javier said. Her goal is to pursue an academic career, teaching and conducting research focused on Alzheimer’s disease, and playing music on the side.

Javier is a member of several jazz ensembles, teaches music and for the last two years received a Herb Alpert Foundation scholarship. She also established the Maria Javier Memorial Scholarship for music students at her alma mater of Long Beach Poly High School.
Studying International Treaties and Failed States to Alleviate Suffering

ABRAHAM TABAIE has something highly unusual on his resume as well: the fourth-year political science and history major is one of the few undergraduates to serve as a teaching assistant in an undergraduate class. Tabaie's dedication and creativity in researching international treaties led to his selection as a T.A. in a course on international law. He also has a strong interest in the causes of state failure, and is using quantitative methodology to examine the subject in his senior honors thesis.

"I feel this kind of research is necessary to help alleviate the massive human suffering taking place due to political violence," Tabaie said.

"I knew when I first met Abraham that this was someone astonishingly special," said Ronald Rogowski, professor of political science. "In class you know that you have to be completely on your toes. He's going to be two steps ahead of you on the material. I'll be pretty surprised if he doesn't go on to a top-flight legal and perhaps political career."

After graduating summa cum laude, Tabaie plans to attend law school and specialize in international law and mediation. At UCLA, he has served as president of Sigma Alpha Epsilon, the largest fraternity on campus, which received a humanitarian award for philanthropy during his tenure. He also has volunteered with Habitat for Humanity, and has tutored children with learning disabilities.

Aiming to Apply Computations and Math to Cancer Therapies

Outstanding communication and interpersonal skills make ANDY YIP well-suited for his role as a mentor and supervisor of a first-year Ph.D. student in mathematics.

The Ph.D. candidate's research interest is applied mathematics, and he has initiated innovative joint research projects with biologists and geneticists in the School of Public Health and the human genetics department of the David Geffen School of Medicine.

Using computational biology and mathematical methods, Yip has identified genetic elements of special interest. "Ultimately we hope the methods could lead to a design of therapeutics for cancer," said Yip, a Hong Kong native. "It's truly exciting to do interdisciplinary research because I learn a lot from people of different departments and different cultures."

Before entering the Ph.D. program, Yip earned a master's degree at UCLA in 2002, a M.Phil. degree in mathematics at the University of Hong Kong in 2000, and a B.Sc. degree at the Chinese University of Hong Kong in 1998. "In Andy I see a profound theoretical knowledge, creativity and mathematical knowledge," said Steve Horvath, assistant professor of human genetics and biostatistics. "I also don't know anyone who's as fast at thinking of an idea, working it out, coding it, and at the same time writing it up in a format that you can almost submit. He already has many publications to his credit. He's ready to jump directly from graduate student into an assistant professor position, and would have no problem succeeding."