UCLA CHEMICAL ENGINEER REGAN PATTERSON TAKES THE INTERNATIONAL STAGE IN GENEVA

Regan Patterson is a UCLA junior majoring in Chemical Engineering with an interest in international environmental policy. She is an active member of CAMP and SACNAS and is currently a MARC (Minority Access to Research Careers) trainee researching in the laboratory of Dr. Yifang Zhu. Her project integrates her engineering foundation with her environmental interest. Patterson simulates and assesses the deposition fraction of ultrafine particles in the lung airways of school-age children, 5 to 18 years old.

Patterson was encouraged to study abroad to widen her perspective and gain worldly experience. In summer of 2011, Patterson traveled to Geneva, Switzerland, with UCLA’s Global Change and Environmental Governance Program. She researched environmental policy by engaging in discussions with UN diplomats. Bringing her unique perspective, Patterson is bridging the gap between STEM fields and environmental policy.

Her heightened interest in traveling and international cultures is leading her abroad again in summer 2012, when she will be researching in China. She will work alongside her PI, Dr. Yifang Zhu, to conduct air pollution measurements in Beijing. This research is conducted as part of the Joint Research Institute between Peking University and UCLA.

Patterson continues to reach out both globally and locally. She is currently the President of National Society of Black Engineers at UCLA and an active member of the American Institute of Chemical Engineers, Society of Women Engineers and Center for Excellence in Engineering and Diversity. Regan Patterson clearly will not be confined to the US. She aims high to be a skilled engineer who can impact environmental policy worldwide.

Regan Patterson, First Person

Can you briefly describe your research/travel study?

The program showed how environmental governance works in practice, analyzed global economic structuring and resulting environmental impacts, and allowed me to engage in discussions with policy makers and diplomats in international institutions, such as the United Nations, UNEP (United Nations Environment Programme), and the WHO (World Health Organization).

What impact did your experience abroad have on your perspective and future goals?

This travel study increased my interest in traveling and immersing myself in other cultures. It also solidified my desire to engage in international environmental policy. Engaging in discussions with diplomats sparked a desire to be a player on the international stage.

Do you have plans to pursue graduate studies, and do you have a career goal in mind?

I would like to pursue a Ph.D. in Environmental Engineering to gain expertise in environment and in training that doctorate level provides. The technical knowledge will prepare me for my career goal of engaging in environmental policy.

“Travel study solidified my desire to engage in international environmental policy... and be a player on the international stage.”
Matthew Pimentel, First Person

“After conducting research at various academic institutions and at a biotech company in the US, I still felt like something was missing in my research experience. Having never traveled too far outside of the US and its neighboring countries, I really wanted to go abroad for a significant length of time and immerse myself in the culture and still be productive towards accomplishing my goals, namely conducting biomedical research and understanding immunology better.

So far my experience has been incredible. Australia

Matthew Pimentel continues on page 50

MATTHEW PIMENTEL DOWN UNDER

Matthew Pimentel recently graduated from UCLA in Fall 2011 with a degree in Microbiology, Immunology and Molecular Genetics and a minor in Biomedical Research. Along his path, Pimentel engaged in extensive research, and has sought out unique opportunities to pursue research from different angles. He participated in several research programs at UCLA including MARC, CAMP, SACNAS and ABRCMS and interned at a biotechnology company in the California Bay Area. Currently, Pimentel resides in Melbourne, Australia, where he is a research assistant at the Monash Institute of Pharmaceutical Sciences (MIPS) of Monash University.

Pimentel explains that his research group at UCLA had international collaborators in Australia. His lab gave him the opportunity to travel there in December 2010 to bring back valuable research skills. His positive trip inspired him to return to Australia after graduation to continue research on breast cancer.

UCLA SPOTLIGHT ON CARISSA HEATH, FUTURE PROFESSOR

Carissa Heath, UCLA Class of 2012, plans to become a professor of molecular biology. She completed a B.S. degree in Molecular, Cellular and Developmental Biology, and is enrolling in the Ph.D. program in Interdepartmental Biological Sciences at Northwestern University, Fall 2012.

“The opportunity to do research as an undergraduate helped me decide to pursue a Ph.D., and has greatly prepared me for graduate school,” she says.

Heath was an undergraduate research assistant in the lab of Dr. Patricia Johnson. Among her accomplishments, she created two expression vectors, and “stably transfected parasite cell lines.”

She won Special Merit in Research at the 2012 CAMP Statewide Undergraduate Research Symposium for her work with Dr. Johnson (see page 12).

She also presented at the Bruin Day Undergraduate Research Fair and Science Poster Day at UCLA.

Her inspiration for her undergraduate major came from her high school biology teacher. “I had an excellent biology teacher in high school,” she says, “and while taking her classes I realized that I enjoyed studying science.”

In addition to academics and research, Heath was on the NCAA Women’s Rowing team, Varsity 4 Boat.

A graduate of Gilroy High School, Heath was an Advanced Placement Scholar with Distinction and a National Hispanic Recognition Program Scholar, both in 2008.

In the future, she hopes to lead a cellular biology lab that researches an aspect of the cellular basis of disease.