William Campbell Elected Trustee

William V. Campbell, CC’62 and TC’64, has been elected a trustee of Columbia University. A former Columbia head football coach, Campbell has also been the recipient of the 2003 Mitsuyoshi Tanaka Dissertation Award for work with neutrinos and the recipient of Columbia University’s Double Discovery Students Receive College Scholarships

Double Discovery Students Receive College Scholarships

Sam Zeller Receives 2003 Mitsuyoshi Tanaka Dissertation Award for Work with Neutrinos

BY JASON HOLLANDER

A s a sophomore intern, Geralyn “Sam” Zeller would drive an hour from the Northwestern campus to Fermilab, a particle physics research center outside Chicago. She would work there with high voltage supplies building hardware and crawling on her stomach to lay cables in a hall on the site of the lab’s accelerator—the world’s largest—which totals four miles in circumference. The effort was all in preparation for a groundbreaking experiment testing the parameters of neutrino particles.

Less than a decade later, Zeller, currently a post-doctoral research scientist for Columbia University, is the recipient of the 2003 Mitsuyoshi Tanaka Dissertation Award, given by the American Physical Society to the best graduate thesis in high-energy physics. Zeller’s winning thesis, written while a graduate student at Northwestern, is one of the many results from the experiment that launched her physics career as an undergraduate.

The Society cites Zeller’s “contribution to the precision measurement of the weak mixing angle in neutrino-nucleon interactions.” Results from the experiment are actually in disagreement with the standard model of particle physics and, thus, Zeller, who is working with Columbia University physics professors Michael Shaeveitz and Janet Conrad, has sparked international interest by helping to shed light on the behavior of one of the fundamental particles that make up the universe. Her findings from the experiment, titled NeEv, have already motivated facilities in California and Virginia to begin running tests to confirm the results.

“Neutrinos have surprised us before and continue to surprise us,” says Zeller, who is already part of a team running another neutrino experiment, called MiniBooNE, which requires her to put in 12-hour days (including weekends) and stay on her toes. “If MiniBooNE finds evidence that neutrinos oscillate, the standard model of physics might need to be adjusted to include a fourth type of neutrino, adding two to the three that have already been named.”

Not bad for someone who had no experience with physics until her senior year of high school. In fact, until then, Zeller says she found science “boring.” However, in the 12th grade, Zeller took a class trip to Fermilab and immediately became enchanted by the facility, which surprised her in many ways. “I pictured it would be a bunch of beakers and people in white coats,” says Zeller, who instead found a place bustling with energy and was excited by the “real science” she saw workers experimenting with. She decided to focus more on science than the humanities and has been majoring in, and has since set out to unravel the mysteries of the particle world.

In the few free hours she gets outside the lab, Zeller spends her time racing on an autocross track in the Chicago suburbs. A car fanatic as long as she can remember, Zeller says she enjoys working out every day and not being behind the wheel. Although she notes there is a similarity between her racing around a track and particles moving around in an accelerator, Zeller is more comfortable keeping her speed to a minimum, usually sticking to the 70 mph range.

My Thanh Nguyen and Clifford Simmons, both seniors at Manhattan Center for Science and Mathematics High School, on East 116th Street, and Double Discovery participants, recently garnered merit college scholarships that will help them join the first generation in their families to attend a four-year college.

Nguyen is one of 20 New York City students selected to receive the fifth annual The New York Times College Scholarship Program award, and Simmons is one of 15 students to receive a one-time $5,000 McDonald’s Student Athlete Scholarship Award. Both participate in Columbia’s Double Discovery Center (DDC) Upward Bound Program, which annually offers 1,000 low-income, highly motivated high school students after-school tutoring and academic classes on Saturdays. The program also provides academic, career, and college counseling services and a six-week residential summer academic program at Columbia.

Chosen from a pool of 1,400 applicants citywide, Nguyen will receive $7,500 a year for four years toward her college tuition at Columbia University, and a $500-a-week summer job at the Times, as well as exposure to its journalism and other local cultural attractions.

Born in Vietnam, Nguyen moved to New York City six years ago, and since 2001 has participated in afterschool and Saturday programs through Columbia University’s Double Discovery Center. Besides her dedication to academics, Nguyen also diligently helps her family. Before arriving each morning at school on E. 116th Street from her Bronx apartment, Nguyen detours to Queens to help her father, a fruit vendor, pick up his cart and set it up on his Midtown corner.

The prospect of attending college in the United States is particularly meaningful for Nguyen. At the age of three, her family attempted to escape from Vietnam by boat and was subsequently imprisoned for a near-fatal disaster at sea.

Nguyen is interested in a career in medicine and has been accepted to Columbia College and the Sophie Davis School of Biomedical Education at the City University of New York. She is the second Double Discovery Center student to garner the New York Times scholarship. Denise De Las Nueces, CC’03, was among the first recipients in 1999.

Simmons was selected as a recipient of the McDonald’s Student Athlete Scholarship Award. The Ronald McDonald House Charities/African American Future Scholars Scholarship Program sponsors two scholarships to acknowledge one male and one female outstanding scholar-athlete within their Public School Athletics League (PSAL) varsity basketball programs. In addition to their achievements on the court, scholarship recipients are selected based on academic achievement, financial need, community involvement and personal qualities and strengths.

Simmons, who assisted the 13-1 Manhattan Center in winning the Manhattan Division 1-A title, has been a Columbia Double Discovery Center student since the summer of 2000. He participated in the intensive six-week residential summer program and his Saturday coursework has focused on math and science. This semester he is studying calculus and physics.

When asked to reflect on his award, the Harlem resident replied, “It’s a dream come true. I want to show that I am deserving of this scholarship.” He will begin studies at Monroe College in the fall where he hopes to study mathematics and engineering while continuing to play basketball.

The Double Discovery Center’s Executive Director, Oliver C. Tynner, III, said of the students' success, “My Thanh and Clifford exemplify what DDC is all about. They are hard-working, energetic, and committed to succeeding in college and beyond.” The students’ DDC counselor, Rachel Ford, echoed that sentiment. “Clifford is a very focused young man. He defined goals for himself, and this scholarship will be a great help for him to reach those goals and My Thanh is an enthusiastic and diligent student, and is highly deserving of the New York Times scholarship.”

Each year, approximately 96 percent of DDC seniors graduate from high school, and 93 percent enroll in college.