

MAKING GREAT STRIDES

POWERBAR CO-FOUNDER JENNIFER MAXWELL’S DONATION FUELS INTEGRATED HEALTH RESEARCH



BY MARY MCNALLY

CAL POLY’S KINESIOLOGY DEPARTMENT is on the leading edge of a movement to change the way health care research is applied.

Traditionally, researchers have been at one end of the development cycle and health care practitioners at the other. But the need for the rapid development of health solutions is so great, it has become critical to merge research and application into an integrated process for better health care delivery.

Thanks to a \$250,000 donation from Jennifer Maxwell (co-founder of PowerBar with her late husband Brian), the STRIDE program (Science through Translational Research in Diet and Exercise) in the College of Science and Mathematics has become a model for an integrated approach.

“Everything we do has a direct impact in the community,” said the group’s director, Ann McDermott.

The student-run, interdisciplinary group includes students from 37 majors with teams that specialize in nutrition, health and activity.

Applying a comprehensive approach to their research, students assess the needs of their community partners, design customized research programs, assess the effectiveness of the findings in near real time, analyze the data, and develop and implement programs based on their findings. Their efforts also include branding, communications and fundraising – efforts critical to any health care organization in the real world.

One of their ongoing efforts is called FLASH. The largest study of its kind, it tracks college students’ health from their freshmen through senior years.

Each student is given a physical exam by a member of the student assessment team, measuring modifiable health factors such as weight and risk factors associated with chronic disease including resting blood pressure, cholesterol levels, body composition, resting energy expenditure and heart health.

Each participant also completes a survey that includes questions about nutrition, stress, sleep, technology use, activi-

ties, drinking, smoking, academic performance, drug use and medications taken.

STRIDE’s goal is to correlate behavioral and environmental influences with the results of the physical exam to develop recommendations that can be implemented across the country. STRIDE’s long-term efforts are built on the group’s own statistical research, because, said McDermott, “you have to have good research to make good decisions about where to put limited resources.”

Already the data indicates the alarming statistic that more than 70 percent of college-age males have elevated blood pressure, a leading indicator of heart disease.

To conduct a study of this complexity, most universities would have a team of full-time doctoral candidates, McDermott said. At Cal Poly, the research has been done primarily by more than 100 undergraduates, which means that training and logistics are a big component of the program.

Championing the undergraduates’ efforts, McDermott said, “This study wouldn’t have been done better by any other university in the United States.”

That kind of professional experience gives Cal Poly students the advantage. “Before I graduated, I already knew what it was like to test people in a medical setting and had performed management functions in a professional research study,” said Katlin Baumgartner (B.S., Kinesiology, 2011), who developed, implemented and managed the office administration and data management systems for the FLASH study.

The study is one of several STRIDE initiatives made possible through Maxwell’s gift. STRIDE also equipped their headquarters with a conference room, a test kitchen, health

Students demonstrate equipment used in the FLASH health study.



assessment exam rooms and administrative workspace, and launched several other programs.

Maxwell wanted to support STRIDE because, she said, “Cal Poly is an institution that gets things done.” She believed McDermott and the students would develop programs that made a measurable impact.

Trained in nutrition and food science, Maxwell’s interests align with STRIDE’s objectives of healthy weight and habits across the lifespan. With recent studies that indicate nearly 30 percent of children between the ages of 3 and 5 are considered obese or overweight, she said combating that trend “is about education and instilling good habits at a young age.”

To that end, the Maxwell family gift also supported STRIDE’s Farm Fresh Tastings and Botanical Gardens programs that educate elementary school students about the connections between food, agriculture, science and health; a high school boot camp program; and Pink and Dude Chefs, a six-week afterschool program that teaches middle school students how to prepare nutritious snacks and meals for themselves and their families.

STRIDE isn’t just applying the Pink and Dude Chefs programs in the immediate community. Student Health Ambassadors have developed an online webinar to teach others how to implement the program in communities across the country.

Maxwell and her husband, both competitive athletes, developed the recipe for PowerBar in their kitchen and marketed it from the trunk of their 1964 Ford Falcon. Like STRIDE students, she said, “we learned how to do it by doing it ourselves, and that makes you stronger because it makes you smarter.”

For more information about STRIDE, visit www.stride.calpoly.edu.

STRIDE students work with youngsters in the Pink Chefs program.



A STRIDE student in the center’s new test kitchen
(Photos courtesy of STRIDE)