Students arriving for the Stanford Medical Youth Science Program (SMYSP) describe feeling out of place and intimidated when they first see the carefully clipped lawns and imposing buildings of the Stanford campus. Marilyn Winkleby can relate. When she accepted a professorship there, she describes wryly, she had a difficult transition. “Here I was coming from a small farm and really modest background, and suddenly my colleagues’ fathers had buildings at Harvard and Yale named after them. I knew then that I had to find a way to stay connected to my roots.”

She did not have to wait long for the opportunity: Shortly after starting at Stanford, she was approached by two pre-med students who wanted to start a mentoring program. The students hoped to reach out to bright, committed students from low-income families who were not on track for college, and offer them resources and opportunities to put them on the path towards higher education. The idea appealed to Winkleby, and she and the students founded the Stanford Medical Youth Science Program.

This desire to bring health professionals closer to the communities they serve runs throughout Winkleby’s career. She was raised on a two-acre farm in Vista, California, and her father took on jobs at night in order to make ends meet. When Winkleby mentions her “roots,” it is her experience growing up in a low-income farming community that she recalls.

She completed high school and received a bachelor’s degree in social science and master’s degree in clinical psychology from Sacramento State University. She was introduced to epidemiology when she began work on a cervical cancer study at UCLA. The investigators for the study, which collected data from community clinics in East and South Central Los Angeles, had a difficult time finding researchers willing to go to these areas in the post-Watts-riot climate. For Winkleby, this experience of witnessing health disparities proved formative. “Women in these communities were very genuine; they were hard-working; they had a strong sense of community. And they also had little access to health care and a very high risk for cervical cancer.”

Her interest in epidemiology led her to pursue her doctorate at Berkeley. The School turned out to be a perfect match for her. “My time at Berkeley was truly a gift,” she says. “I will always look back to that opportunity because it allowed me to do my life’s work.” She found that the study of health disparities was integrated throughout the epidemiology curriculum, and the social activism at the Berkeley campus mirrored Winkleby’s own drive towards public service.

After receiving her Ph.D., Winkleby began working at Stanford, where she leads a research group whose work focuses on the health of medically underserved communities. In her “free” time, she has been the main visionary of the Stanford Medical Youth Science Program. Today, almost 20 years later, the program continues to help low-income and ethnic minority teens gain admission to college and receive hands-on training in biology and medicine. High school students from Northern and Central California live on the campus for the summer, learn from faculty, receive mentoring from undergraduate students, and gain the skills necessary to apply for and succeed in college. SMYSP has been highly successful, and 99 percent of the 405 students who have completed the program have been accepted to college. Of those, 81 percent have graduated from four-year institutions. Even more impressive, among college graduates, 54 percent are attending or have graduated from medical or graduate school.

Juan Ibarra, M.P.H., M.S.W., who as a high school student completed the program in 1990, credits Winkleby with his first introduction to the field of public health and the topic of racial and ethnic disparities in health. The youngest child of migrant farm workers, Ibarra is currently a student in the Dr.P.H. program at UC Berkeley’s School of Public Health. Winkleby, he says, has been a mentor. “After I finished my undergraduate work and was working in public health, she was the one who encouraged me to go to graduate school.”

Winkleby’s voice takes on a tone of urgency as she talks about programs like SMYSP increasing ethnic diversity in the health professions. This diversity, she believes, will be key to reducing health disparities, as people from underserved groups complete education and become health professionals. “They will be the leaders in reducing disparities, because they have the passion, they understand diverse cultures, and they are most likely to form hypotheses that are pertinent to health disparities. Those that choose to become clinicians are likely to choose primary care, and return to low-income communities to serve.” Programs like SMYSP are a critical way to achieve that diversity, states Winkleby, and she has 18 years of research and public service to prove it. “We know what works.”

—Kelly Mills