

# SOONER SPOTLIGHT • Pamela McCauley

Pamela McCauley is living proof that good ideas and hard work don't always go unnoticed.

A recent graduate of OU's College of Engineering, McCauley is the recipient of a \$90,000 National Science Foundation Fellowship. The fellowship's title — National Science Foundation Creativity Award for Undergraduate Engineering Students — speaks volumes about McCauley and her work.

Creativity drew the 24-year-old Oklahoma City native to her chosen field of industrial engineering with an emphasis in human factors. In short, McCauley wants to make the world — and in particular, the working world — a better place.

"What appealed to me so completely about human factors is I could see that I could directly help others, and that's important to me," she says.

McCauley believes the workplace should be designed to fit the people who work there. Too often, she contends, the opposite is true.

Her ideas are outlined in a 10-page paper which made her one of 30 NSF fellows across the nation. The paper introduces new ways to assess employees' qualifications and to design a workplace compatible with those findings.

A comfortable workplace means comfortable workers and more productivity for the organization, McCauley says. And as she points out, the workplace is not always a desk.

"It could be the inside of a police car or a restaurant counter," McCauley explains.

Currently, her graduate studies are focused on improving the environment and efficiency of manufacturing industries. She already has designed a plan to achieve that goal. The fellowship, to be paid over a three-year-period, will permit McCauley to pursue this idea and many others.

"It will allow me more time to express my creativity as an engineer," McCauley says. "I'll be able to give it my undivided attention, and I believe I'll be able to be more creative and innovative."

The fellowship also will finance a trip to Japan to observe that country's methods of designing for the human factors in industrial engineering.



But for McCauley, a former model and waitress, the most exciting aspect of the fellowship is the freedom it will allow her from juggling work, studies and her greatest love, her nine-year-old daughter.

Life as a single mother led McCauley to organize Motivation of Moms, a program to encourage teenage mothers and pregnant teens to get an education. The program already has resulted in two young women enrolling in college. McCauley also is a founder of Engineers Who Care, a volunteer group devoted to helping the elderly.

Her outside commitments apparently were as impressive to the NSF selection committee as her classwork.

"They were very interested in my activities outside the classroom," she says. "I think that's really good. So many times, people are interested in book learning and not what's inside."

Support from those surrounding her has made a world of difference in McCauley's work. She credits her fam-

ily, the OU School of Industrial Engineering and industrial engineering professor Jerry Purswell for their encouragement and understanding during her studies.

Although the NSF fellowship specified that she could attend any accredited engineering school in the country, the support system and the quality of the College of Engineering tipped the scale in OU's favor.

McCauley also credits the OU Minority Engineering Program for giving her a great deal of support and encouragement. The program provides advisement and scholarships for minority students in the College of Engineering.

Wayne Steen, director of the program, says that McCauley is one of several minority engineering students recognized for their work this year.

Brian Argrow, an OU aerospace engineering student, recently was presented the national Black Engineer of the Year Award in the student leadership category. The prize is sponsored in part by the Mobil Corporation, and the winner is selected by a panel of deans from prominent black colleges.

Steen adds that Argrow will be among approximately 15 black engineering students across the nation to earn a Ph.D. this year.

Marilyn Grass, an American Indian student in OU's chemical engineering school, is another minority student with distinction. This year Grass earned the College of Engineering's Senior of the Year Award for having the highest grade point average in her class.

"We do anything we can to help students meet their academic and social potential," Steen says of the program. However, he refuses to take any credit for the achievements of McCauley and her classmates.

"They deserve all the credit," he insists. "I'm just happy that we were here to be a part of it."

Steen praises McCauley for overcoming "astronomical odds" and succeeding in a discipline as demanding as engineering.

"Perseverance, motivation, the will to succeed, by whatever name you call it, she has it," he says. "Ninety-nine out of 100 don't make it. She's that one in a hundred."

—ANNE BARAJAS