

**DONNA
J.
NELSON**
1969-



**AWAKENING
SCIENCES
TO
DIVERSITY**

The AMC series “Breaking Bad” boosted interest in the science of chemistry. Teacher Walter White, diagnosed with lung cancer, produced and sold crystallized meth to fund his treatment. “Breaking Bad” made chemistry cool for everyone, and it was partially thanks to University of Oklahoma chemistry professor Donna Nelson, the show’s science adviser. “I watched the first five episodes and realized that the show didn’t glorify meth or drug culture.” Nelson believes “Breaking Bad” may have done more for attracting young people to science fields than years of public relations.

Donna Nelson was born in 1969 in Eufaula. She was greatly influenced by her step-father who was the town’s only physician. Her parents taught her to believe that she could do anything she wanted. Early on Nelson knew she enjoyed math and science. In her Creek heritage, boys and girls were equally encouraged. She was never made to feel that because she was a girl that she couldn’t succeed in math or science. In fact, in her advanced math class, there were five girls and only one boy!

Before arriving at the University of Oklahoma to major in chemistry, she never felt out of place. However, it was a huge shock for her when she discovered that she was the only Native American and sometimes the only woman in her science classes. After graduation, she continued her education at the University of Texas at Austin, where she received her Ph.D. in Chemistry in 1980. After doing research at Purdue University, she returned to OU to become a professor of chemistry. She was the only Native American and one of only three women in her department.

From 2001 to 2004, Dr. Nelson conducted research on university faculty members in the top fifty science departments in America. Data was collected about race/ethnicity, gender, and rank. It became known as the Nelson Diversity Surveys. She determined that there were no African American, Hispanic, or Native American tenured or tenure-track women faculty in the top fifty science departments. She also found that more immigrants were being hired as faculty than American females and minorities combined.

Because of her research, Dr. Nelson received the 2004 National Organization for Women “Woman of Courage Award”. Nelson’s research has been cited by dozens of newspapers, magazines, and journals, including “The New York Times”, “Nature”, and “The Christian Science Monitor”. The Government Accountability Office used Nelson’s data for its 2004 report to Congress on Title IX, specifically women’s access to opportunities in the sciences.

Nelson’s goal is that future minority women scientists will not have to turn to history books to find a role model – instead they will find role models all around them. “Breaking Bad” earned respect for getting the science right thanks in big part to Dr. Nelson. “We need shows where scientists are heroes. These television shows come into our homes every week, and we can influence culture that way to make science more appealing to the masses.”