

**THE JIMMIE PIGG MEMORIAL AWARD  
FOR OUTSTANDING SCIENCE TEACHING — 2006  
Betty A. Henderson**



2006 - Betty A. Henderson

Betty A. Henderson earned a BS in Biological Sciences, Cum Laude with minors in Chemistry and Education, from Northeastern State University in 1988 and a MA in Secondary School Leadership and Administration from Pittsburg State University in Pittsburg, Kansas, in 1993. She has been teaching Environmental Science, Anatomy and Physiology, and Advanced Placement Biology to 11<sup>th</sup> and 12<sup>th</sup> grade students at Bartlesville High School for the last 19 years.

During her tenure at BHS she has mentored and sponsored hundreds of students in numerous Oklahoma Junior Academy of Science competitions; district, state, and international science fairs; the Intel/Westinghouse Science Talent Search; and the Junior Science and Humanities Symposium. Her students' projects have earned tens of thousands of dollars in prizes and hundreds of district, state, and international awards, including four state science fair sweepstake trophies. To date she has had 22 students qualify to compete at the annual International Science and Engineering Fair. In addition, three of her students are patent holders as a result of research conducted in her program. She has also fielded teams for the state Science Bowl for ten years, with past teams ranking second and third in the state against magnet school teams from metropolitan areas that dwarf Bartlesville's population of 35,000.

Mrs. Henderson received a Mentor Commendation from the King and Queen

of Sweden when a student won the first Annual Stockholm Junior Water Prize for his research on the *Synergetic Effects of Herbicides, Fungicide and Pesticides on Gamete Production*. She has also received the Schmoldt Memorial Teaching Award and Golden Apple Teaching Awards of Bartlesville schools. Betty's many successful grants for equipment for student research as well as classroom instruction led to her being invited to participate at a state meeting of Oklahoma public school foundation officials.

Betty is a mentor teacher at Bartlesville High School and her materials form the basis of all life science curricula at her school. In 2000, she was instrumental in having land set aside, improved with a large pond, and maintained for the school's land lab. She has conducted workshops on toxicity and the environment, adaptation and diversity, and helping students recognize pseudoscience. Betty regularly writes and receives grants to attend summer training. Her foremost workshop experience was work on the Human Genome Project in a NSF Summer Teachers' Institute at OU's Advanced Center for Genome Technology with work in genetics, applied biotechnology, and recombinant DNA science.

In addition, Betty was fortunate to have met Jimmie Pigg at the beginning of her teaching career. He helped teach and inspire her to require competitive student research in her science classes. She feels that Mr. Pigg's influence provided an exemplary role model via his dedication in bringing out the best in students by guiding them through authentic scientific research which reaches beyond the classroom.

Betty lives in Caney, Kansas, with her husband John, who is a foreman for the Union Pacific railroad. They have two grown children, Elizabeth and John Roy.