

## DOCUMENTS OF THE GENERAL FACULTY

**REPORT OF THE MEMORIAL RESOLUTION COMMITTEE FOR  
AUSTEN F. RIGGS II**

The special committee of the General Faculty to prepare a memorial resolution for Austen F. Riggs II, professor emeritus, neuroscience, has filed with the secretary of the General Faculty the following report.



Hillary Hart, Secretary  
General Faculty and Faculty Council

**IN MEMORIAM  
AUSTEN F. RIGGS II**

Austen Fox Riggs II, beloved teacher, researcher, colleague, father, and husband died on May 11, 2015. Austen received his Ph.D. in biology from Harvard University in 1951, which he followed with postdoctoral studies in the laboratory of eventual Nobel Prize winner George Wald, also at Harvard from 1952 until 1956. In 1956, he joined the zoology department and retired after fifty years of service to the University as professor emeritus in 2011.

**SCIENTIST, TEACHER**

During his time at UT Austin, Professor Riggs won several awards for his research and teaching. He was awarded a Guggenheim Fellowship for work with Dr. Max Perutz at Cambridge University from 1960-61, one year before Perutz won the Nobel Prize. He was given a National Institutes of Health Research Career Development Award from 1962 to 1972. He received an Outstanding Graduate Teaching Award from UT Austin in 1989 and a College of Natural Sciences Teaching Excellence Award in 2002 for his undergraduate teaching. In 1991, he was elected Fellow of the American Association for the Advancement of Science.

Professor Riggs' research focused on the relationship between structure and function in the immense diversity of hemoglobins and other globin proteins found in organisms ranging from yeast to worms to frogs to humans. Hemoglobins transport oxygen to body tissues and other globins bind oxygen within tissues. Specific globins have evolved to adapt to the metabolic needs of each organism. One organism he studied was a carnivorous nemertean worm of the genus *Cerebratulus*. He investigated the structure and function of a highly unusual neuroglobin found in this worm's brain, which appears to give it the ability to hunt prey in anoxic marine muds. Beyond globins, he was a font of knowledge about protein structure and function in general. His rigorous classes on cell biology were a treat for undergraduates.

Science was an interest of Riggs from an early age when he spent many long days exploring meadows, woods and streams in the Connecticut countryside. However, his path was ultimately forged by an eye-opening biochemistry course with George Wald during his junior year at Harvard. He was hooked and soon joined Wald's laboratory as a graduate student. At Wald's suggestion, he studied the metamorphosis of hemoglobin in the tadpole as it transformed into a frog. He found that while the tadpole's hemoglobin was virtually pH independent, the adult frog's hemoglobin was very pH dependent. This led to his lifelong fascination with the relationship between structure and function in hemoglobin in a wide array of organisms.

**ADVENTURER**

An adventurous spirit is another aspect that Professor Riggs cultivated all of his life. He had a love of mountain climbing that began his junior year, when he was invited to go winter camping in the White Mountains of New Hampshire. Three years later he was helping organize an expedition to Peru to climb Yerupaja, at the time, the highest unclimbed peak in the Western Hemisphere. That adventure has been immortalized in the 1952 book, *The Butcher - The Ascent of Yerupaja* by John Sack. He was on the first ascent teams that conquered a number of peaks. In 1952, he dreamed of taking aerial photos of the mountains of Peru. He proceeded to learn how to fly a Piper Cub and tackled this dream head on and nurtured a fondness for flying ever since. During that same year, he met his future wife, Claire Killam, a graduate student at Radcliffe. It was when he married Claire that he began what he called "the most wonderful adventure of all."

Professor Riggs is survived by his wife of sixty-two years, Claire Riggs, by his children Hal Riggs, Ann Griggs, and Jennifer Riggs, by his grandchildren Russell, Hannah, and Whitney, and by his nieces and nephews Louise, Bobbie, Jay, Elizabeth, David, Nancy, and Gordon, and by their children.

This memorial resolution was prepared by a special committee consisting of Professors Harold Zakon (chair), Larry Gilbert, and George Pollack.

Distributed to the dean of College of Natural Sciences on May 27, 2016, and posted under "Memorial Resolutions" at <https://wikis.utexas.edu/display/facultycouncil/Wiki+Home>.