When the “father of stereology” wants to make you his protégé, you accept.

Peter R. Mouton did just that and is now one of the few experts worldwide in stereology, with big name pharmaceutical companies like Pfizer and Merck, university researchers and government agencies seeking his help to unravel mysteries and treatments for human disease.

Stereology translates into the study of 3-D objects in Greek. Stereologists analyze tissue samples and use mathematically rigorous approaches to quantify structural characteristics of a disease. Mouton’s research focuses on brain changes in aging and age-related diseases, such as Alzheimer’s and Parkinson’s.

As a graduate student, he analyzed alterations in rat brains infected with an experimental form of Alzheimer’s and became frustrated with primitive methods to study physical changes in the brain. He decided to find a better way and accepted an invitation from Denmark to learn stereology after graduation.

Mouton studied with Hans J. Gundersen, “the father of stereology,” in Denmark for two years. Upon returning to the U.S. for a neuropathology fellowship at the Johns Hopkins University School of Medicine, he quickly found researchers and faculty members seeking help with research projects. In response, Mouton founded the Stereology Resource Center (SRC) to help disseminate stereology-related solutions to the global community of biomedical researchers. These resources include computerized stereology systems (Stereologer™), professional contract services, comprehensive workshops, grant writing support and peer-reviewed textbooks.

Mouton remains one of few American-born scientists skilled in the theory and practice of stereology. With strong and growing worldwide demand for stereology in biomedical research, he continues to follow Gundersen’s advice—“stand firm on your tile and the rest will follow”—meaning rely on good stereology principles and you will improve our understanding of human disease.