



Meet Katherine Schwetye, MD, PhD **Division of Neuropathology**

Like my longtime Neuropathology mentor, Dr. Bob Schmidt, I am a (mostly) lifelong St. Louisan. I love sharing the best of our city, not the least of which is Washington University. I never imagined that I would be on faculty, but – here we are.

I grew up with my parents and two younger sisters. My dad was the principal of a small architectural firm. My mom, formally trained in music education and music therapy, ran the business and later spun off a building management software. We spent a fair amount of time at “the office”. My favorite magazine was *Fine Homebuilding*. I drew floor plans. I also learned about the demands and flexibility of running a small business, working long hours towards a goal, and how to care for coworkers – for example, offering paternity leave and work-from-home before it was common. Wisely, my parents subtly steered me away from architecture as a career (lack of talent among the deterrents!); however, I believe that the practice of anatomic pathology shares with architecture the primacy of spatial organization and visual experience. The apple falls not so far from the tree.

Inspired by a talented high school teacher, I decided to major in physics at Bryn Mawr College – *per capita* they graduated the most female physics majors in the US. After a hard-earned, but mediocre, C+ in Quantum Mechanics, I explored other career options. Medicine seemed an ideal combination of intellectual stimulation, altruism, and job stability, so I set off on this path and matriculated at WUSM.

During the 1st year curriculum, professors not only taught the basics, but incorporated their own, original, relevant work. I wanted to be part of it – and so applied to the MSTP. Predictably, the committee rejected my initial application (I had done a single summer of research, measuring the function of C-peptide as a chloride channel in Paul Schlesinger’s lab in Cell Biology & Physiology). They encouraged a Master’s program instead, and I reached out to Karen O’Malley of Anatomy & Neurobiology, who was lecturing around that time. I proposed a project based on her recently published study of nuclear mGluR5, extending the approach to mGluR1, which became my Master’s thesis. The O’Malley lab taught me essential techniques of bench research and how to present one’s work. Invigorated by this experience, I was then accepted to the MSTP. Rotating in Dave Holtzman’s lab introduced me to his post-doctoral fellow, Dave Brody, whose translational work connecting traumatic brain injury, dementia, and potential therapeutics was inspiring. I joined the Brody lab in its infancy and was part of its journey to R01-funded independence. In time, I published my own translational project, describing dynamics of the amyloid-beta peptide after injury and the correlation with neurologic activity in a mouse model – a companion piece to the lab’s seminal work in human patients. Bob Schmidt was on my thesis committee.

Pathology was my first rotation upon return to 3rd year. Synthesizing clinical data with histomorphologic analysis of a tissue sample – being the detective that solves the puzzle – was such fun, it didn’t even seem like work. My experience with lab staff, residents, attendings, and program directors Phyllis Huettner (residency) and Bob Schmidt (fellowship) pushed me to continue my AP/NP training at WUSM.

My first position at Saint Louis University as an academic anatomic pathologist allowed me to cement my skills, teach residents and medical students, and experience a variety of practice settings. In 2019, I was invited to join a project by a former thesis committee member, Randy Bateman of Neurology. The project turned into a job opportunity working with my now-mentor in neurodegenerative pathology, Rick Perrin, and I returned to WUSM as faculty in 2021. My days now consist of a balanced mixture of neurodegenerative research, surgical neuropathology, and other surgical and autopsy pathology.

Outside of work, I spend time with my family: my husband, Flavio Esposito, PhD, a computer science professor and researcher, and children, 8-year-old Martina and 6-year-old Francesco. We love the various parks in St. Louis, especially Forest Park, and the Botanical Gardens; and when not in St. Louis, we are visiting Flavio's family in Italy. An erstwhile road runner and triathlete, these days I am thrilled to run a few miles, weight-train, and ride my bike to work when possible.

