



Office of Faculty Development

Pathology & Immunology

Dr. Jackie Payton grew up in the St Louis area as the oldest of 6 children. (Answer to the quintessential St Louis question: McCluer North.) Jackie loved Spanish and her high school exchange program experience in Saltillo, Mexico, and initially planned to study international relations in college. Attending Bradley University in Peoria, IL on a National Merit scholarship, Jackie was fortunate to be exposed to research opportunities and a great advisor, Kelly McConnaughay, who later became chair of the Biology Department.

Seeking more research experience, Jackie spent a summer in the lab of Carl Smith, who was a pediatric clinical chemist and former medical director at SLCH. That summer was eye-opening, not just for the thrill of learning to perform metabolic radiolabeling experiments in placental cells, but for her discovery of physician-scientist as a career path.



As she apparently hadn't had enough of the central Illinois prairie, Jackie matriculated to the MD/PhD program at UIUC, where she joined the labs of David Clayton and Julia George. There she met her future spouse, Richard Perrin, another MD/PhD student in the lab. Jackie's thesis focus was defining the function of a newly identified neural protein, alpha-synuclein, and she designed experiments that were as high-throughput and computational as possible with equipment from the late 1990s, beginning her lifelong love of data tables.

Initially an applicant to AP/CP, one meeting with Jack Ladenson was enough to convince her to switch to the CP track. She and Rick matched to WU (he in AP/NP) and they moved to St. Louis in 2004. Jackie loved lab medicine for its quantitative nature. Continuing her passion for heme malignancy, she joined the lab of Tim Ley, who was pioneering the field of high-throughput sequencing in cancer. In that exciting environment, she became a self-taught bioinformaticist (with help from many colleagues, including Mark Watson, and a few short courses), focusing on the role of gene expression alterations in AML.



Upon completing her postdoc, she became the Medical Director of the BJH Molecular Diagnostics Lab and started her research lab, where she expanded her focus to lymphoma and the role of the epigenome in transcriptional control. Over several years, the lab's work has evolved to now include the impact of viral proteins on host transcriptional immune response and mechanisms of lymphoma immune evasion. Outside of work, Jackie enjoys spending time with her family, now including 3 children (Ezri, 15, Nicholas, 13, and Madeleine, 7), running half-marathons, and exploring the beautiful parks and museums in the area. Once the pandemic subsides, Jackie very much looks forward to traveling again.

