



Office of Faculty Development

Pathology & Immunology

Dr. Yang Cao was born and raised in China. When she was a little girl, Yang always had a lot of questions in her mind about life: *How a human baby is formed? Why do twins look alike? Why do people need sleep?* Those childhood curiosities eventually developed into her intense interest in life science, which became her major in college. With her interest growing in the field of human genetics, she joined a laboratory focusing on neurological diseases in the Institute of Genetics and Developmental Biology in China Academy of Sciences as an undergraduate research assistant, working on a project to investigate the genetic mechanism of Fragile X syndrome. This research experience further confirmed her passion and fascination with human genetics. Besides academic study, Yang enjoyed her college life in many ways. She gained her life-long memorable experience as a volunteer for the 2008 Summer Olympics and was awarded as an outstanding volunteer. She was also selected as one of the University Ambassadors after extensive training.



After college, Yang pursued PhD study at the University of Wisconsin-Madison. With her interest in neurogenetics, she joined the laboratory of Dr. Barry Ganetzky, a distinguished geneticist and member of the National Academy of Sciences, aiming at investigating genetic and molecular mechanisms of neurodegenerative disorders. She especially enjoyed the challenge of trying to decipher the complex pathways by forward genetics strategy, which closely parallels genetic diagnosis. Therefore, Yang looked forward to the challenges and gratification of a career devoted to genetic diagnostics and contributing to improving healthcare practice.

With such a career goal, Yang went on to complete dual fellowship training in Clinical Cytogenetics and Clinical Molecular Genetics at Mayo Clinic. During her training, she dove into every opportunity to learn knowledge and skills, including clinical testing strategies, assay development, laboratory operation and management, result interpretation and professional communication. She truly appreciated such comprehensive training, which made her thoroughly prepared for her future career in clinical genomics.

In July 2017, Dr. Cao joined the division of Laboratory and Genomic Medicine in the Department of Pathology and Immunology as Assistant Professor and Associate Medical Director of Clinical Cytogenomics and Molecular Pathology Laboratory. As a dual board-certified laboratory geneticist, she also actively participates in the clinical service and trainee education in the Clinical and Translational Genomics NGS service and BJC Molecular Diagnostic Laboratory. Meanwhile, she has been enjoying contributing her expertise in clinical genomics to facilitate precision medicine by actively involving in national professional communities. Dr. Cao would like to devote her efforts to improving clinical service and educational environment of clinical genomics, which she believes is truly an essential component of precision medicine.

After a long journey, Yang and her husband, Jiabin, settled down in St. Louis. **(Photo: The family at the Gateway Arch)** They have a lovely son, Mason, who is almost three years old and a huge fan of anything with wheels. The family really enjoy the Midwest lifestyle in St. Louis. During their spare time, they love exploring St. Louis together, such as jogging in the Forest Park, wandering in the botanical garden, seeing animals at the zoo and aquarium, enjoying performances at MUNY and SLSO, as well as many other activities, of course, including Mason's favorite – visiting the wheels at the National Museum of Transportation!

