



## Office of Faculty Development

### Pathology & Immunology

**Dr. Ina Amarillo** was born in the northern part of the Philippines, a small city known for its Arabica coffee. Her father was in the Air Force and mother was a high school Math teacher. She is the youngest of 7 siblings. After her mother died when she was 1 year old, the entire 7 sibling set moved to the south in a remote town known for rubber plantation, to be raised by their aunt (mother's sister) and uncle who themselves have 8 children. Being the youngest in the entire household, she had witnessed how people are so different despite being so related. They all grew up in a house full of fruit and flower bearing plants, as well as farm animals. It was there where she started appreciating the beauty and diversity of living things. Coming from a small dot in the world map, she dreamt of travelling the world.

Ina spent her grade and high school years in two different places and 7 different schools, a wanderlust at an early age. For college, she went to the University of the Philippines (UP) Los Banos, an institution renowned for agriculture, natural sciences, engineering, and academic research. She majored in Biology and Genetics, studied microbial, plant and animal genomics, and fell in love with chromosome biology. Those were the early days of PCR, the Human Genome (HUGO) Project, and telomeres. She promised herself to get involved in these exciting fields one day and dreamt of visiting WUSTL, one of the HUGO project institutions. Despite not having the advanced technology, she immersed herself in many genetics and genomics projects.

Ina wanted to pursue medical school at some point, but the wind routed her on a different direction. She dedicated her post-undergraduate years to teaching biology, zoology, cell biology, genetics, embryology, anatomy to pre-med students of the UP Manila (8 years), as well as advance her genomics knowledge by studying Chronic Myelogenous Leukemia in Filipino population through karyotype and PCR analyses (master's thesis). Her yearning to learn about FISH (fluorescence *in situ* hybridization) drove her to pursue transgenomic cytogenetic FISH mapping studies for her PhD dissertation in Florida State University. She constructed a FISH map of chromosome 9 of corn using sorghum and oat genomes. This effort gave her a deep understanding of plant genome plasticity, PCR, BAC library, fingerprint contig mapping, Southern hybridization, FISH probe design, FISH mapping, and deconvolution microscopy. She was mentored by one of the world experts in plant genomics, Dr. Hank Bass who also studies corn telomere and behavior during mitosis and meiosis.

For postdoctoral studies, her desire to learn more about telomere biology in cancer cells brought her to NYU School of Medicine to work on tankyrase, a telomere-associated protein. After 18 months, she decided to changed paths and pursued clinical genomics research at the Cytogenetics Lab of Columbia University. She was involved in term placenta mosaicism studies and in a national validation project for prenatal Chromosome Microarray Analysis. After a year, she moved to UCLA and trained as a Clinical Cytogenetics Fellow. In 2013, one of her childhood dreams come true, not only stepping into WUSTL soil but became an Assistant Director of the Cytogenetics Lab and an Assistant Professor of the Department of Pathology and Immunology.

Ina continues to enjoy clinical genomic diagnostics, education, and research. She wants to spend more time to advocate for health equity for gender-expansive, transgender, and intersex/DSD individuals. She also would like to advocate for the creation of inclusive and affirmative clinical, diagnostic, research, and learning spaces for these sexual and gender minority populations.

Ina is a big foodie. She appreciates that St Louis is a foodie city. She loves to dine out solo or with friends, and she eats anything from street food to dishes of Michelin star level tasting menu. Her favorite local restaurants are Asador del Sur, Vicia, Gerard Craft's, Ben Poremba's, and authentic Filipino food in Kain Tayo ("let's eat" in Filipino) restaurant in Trenton, Illinois. During the pandemic, she started learning about different kinds of wine. She loves flower gardening and growing vegetables for cooking Filipino dishes. She enjoys hosting get together for friends.

She considers herself a wanderlust and global citizen. She's been to 19 countries, but Spain, Italy, Greece and France stole her heart. On her travels, she loves local cuisine, wine or spirits, tea, and coffee. She is also a beach bum and considers the beach as the greatest stress reliever.

Ina also loves that St Louis is a very athletic city. She plays tennis 2-3x a week with friends and really enjoys watching live tennis. She also loves playing indoor and beach volleyball.



Photos:

For her college thesis, she investigated the mitotic and meiotic systems of periwinkle, a flowering plant known for its alkaloid (anti-cancer) content. It is one of the main characters in her outdoor mini-garden.



Ina has been to 56 Michelin restaurants (101 stars total) from 8 different countries. She's been to Mirazur in Menton, France (left), a Michelin 3 stars and the #1 of World's 50 Best Restaurants. A selfie with chef Thomas Keller of The French Laundry, one USA's best and Michelin 3 stars (right).



Ina is a tennis fanatic. She is a huge fan of tennis and has been to all four grand slams, Wimbledon (photo, Centre Court), US, Australian and French Open, and the Rio Olympics. Her favorites Roger Federer, Maria Sharapova, Rafael Nadal and other rising tennis greats.