

DNA News
January 27, 2017

From Candy to Chemistry: Ivy's Journey



Ivy Kekessie, senior scientific researcher, Early Discovery Biochemistry, was the kind of child who would dive into her grandfather's stash of math books, or organize after-school study sessions with children in her small village in Ghana.

But like most kids growing up in Africa, Ivy didn't have it easy. With limited opportunities, she sold homemade candies at school and kerosene at night to pay school fees. The only girl in her neighborhood to graduate from high school, Ivy's drive to learn has paid off in a career in science she could only imagine when she was younger.

"Ivy's determination against all odds is truly inspiring," said [Wendy Young](#), vice president, Discovery Chemistry. "She's a perfect example of the Genentech spirit of working hard and pursuing science to transform patients' lives."

Earning Her Keep

Growing up in Ghana, Ivy understood the need to earn her keep. After her mother died when she was just six years old, Ivy's aunts and grandparents raised her. But with that came extra responsibilities and, in some ways, servitude.

She gathered water for the household and woke up at 4 a.m. to help sell commuters items from her grandmother's roadside kiosk.

But she was also responsible for school-related costs. Ivy remembers being sent home from school when she wasn't able to cover the payments, which she hated. She loved school and learning. It was her way out, she said.

"All my work was aimed at, 'How do I get my next book?'" said Ivy, "or 'How do I buy my next pencil? How do I buy a uniform?'"

Luckily, her family valued education. But between earning for her family and school, there wasn't much time to study. So she listened intently in class and learned to grasp concepts quickly.

It paid off. Ivy managed not only to graduate at the top of her secondary school class, but also to make it to Kwame Nkrumah University of Science and Technology, where she majored in chemistry and minored in survival. Technically homeless, she spent college sleeping at friends' houses and working at blood banks and hospitals during breaks to supplement the scholarship that covered tuition.

Making it to Genentech

While working those hospital lab jobs, Ivy came in contact with many sick people. She was moved, and wanted to help. Ivy considered becoming a doctor, but eventually decided to pursue her favorite subject: chemistry.

"I love the analytical aspect of chemistry," she said. "It's not just memorizing facts. It's taking those facts and using them to solve problems."

So she applied for and got in to [University of California Davis](#) (UCD) for her Ph.D. in organic chemistry. There, she found her scientific passion and a mentor who would eventually lead her to Genentech.

Finding Her Team and Her Purpose

Her mentor, it turned out, used to work at Roche, and often wore Roche-emblazoned lab coats.

Ivy's interest was piqued. Genentech and Roche, she said, could be the way to marry her love of science to her desire to help patients.

"I felt like Roche and Genentech were companies that were doing something really big," she said. "I really just wanted in. I worked hard to get a job here."

She worked so hard, in fact, that she applied for every job for which she was qualified at both Roche and Genentech.

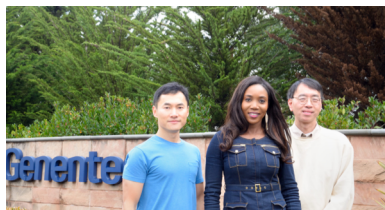
That drive brought her in contact with Aimin Song, scientific manager, Peptide Synthesis Lab, Early Discovery Biochemistry. Aimin and Ivy had worked in the same lab during their post-doctoral fellowships at UCD Medical Center, though their time at UCD didn't overlap. When Aimin was looking for a new scientific



Today, Ivy is a single mother and valued member of her team in Peptide Synthesis.

researcher for his team in 2015, he reached out to that lab, including Ivy's mentor, for recommendations. Ivy's name was at the top of the list.

"I was told she was a very good researcher, a great chemist and a great team player," said Aimin, who himself had immigrated from China. "They were right. Ivy's special not just because she's an excellent chemist and willing to work hard, as many of our scientists are. She's also always optimistic and does what's necessary to accomplish her goals."



In her team at Genentech, Ivy (pictured here with manager Aimin Song and coworker Jeffrey Tom, principal scientific researcher, Early Discovery Biochemistry) is known for her exacting science and friendly demeanor.

A Bigger Story

In January, Ivy celebrated her first year as a regular employee. In her work, she uses her expertise in chemistry to assemble new peptides that become the building blocks for new medicines. She's one of the first people who touch our emerging medicines.

Today, Ivy said that the company and the job are everything she'd hoped they would be. "What I contribute is a small piece of our medicines," she said, "but it's also fundamental to finding a cure for many diseases. My team is impacting early research in a really important way."