Channeling a passion for chemistry to help others

Ask Brandon Presley about any twist and turn in his chemistry journey, and he’ll tell you about people: The high school teacher who gave him the courage to sink his teeth into chemistry; the family and friends who encouraged him; and the mentors and colleagues who gave him focus when he’d spread himself too thin. For Presley, that deep connection between chemistry and people motivates him every day.

Now a chemist who helps analyze promising new cancer drugs, he channels his passion for understanding how the world works, using chemistry to improve people’s lives.

Presley’s path to becoming a chemist began early: He landed two research internships before graduating from high school. The internships came through Project SEED, an American Chemical Society program for students from economically disadvantaged backgrounds.

“That was really a big deal for me,” Presley says. “Once I started to see how science connects everything, I was motivated to learn more.”

In college, he leapt into more research, internships, and then landed a job as a forensic chemist. While working full-time analyzing samples from criminal cases and raising a family, he went back to school to get a Ph.D. He graduated in 2020, and has since been working with Janssen Pharmaceuticals—a job well suited to a chemist deeply concerned about matters larger than himself.

Today, Presley wears that love for chemistry with pride. Literally. In his wisps of free time, he makes and sells “Simple Science Tees” bearing quirky references to chemistry. One reads: “Ask me about complementary base pairs (it’s in my DNA).”

You may not buy (or even agree) with his “I’d rather be in the lab” shirt, but you’ll believe that he means it. —Max G. Levy

The following interview with Presley was edited for length and clarity.

What first sparked your love for chemistry?
My high school chemistry teacher, Mrs. Shirley Lassoff. She just had a very enthusiastic personality. She was chemistry, like the way she wrote her name on the board with subscripts. We actually reconnected a couple years back. It was pretty amazing to tell her that I was getting my Ph.D. in chemistry of all things.

Do any mishaps or failures stick out to you as formative experiences?
For a long time, I tried to do as much as I possibly could. That actually became a stumbling block for me because I was too busy.

And then, I had a mentor tell me, “You can have 10 things that are 90% complete. But that just means that you haven’t finished anything.” I use that to this day, and as a result, I’ve gotten such clarity and focus in my life.

That makes sense coming from someone who balanced graduate school with a full-time forensic science job. What did you like about that job?
I tested samples submitted by law enforcement for the presence or absence of controlled substances. Testifying in court was definitely the highlight for me, because it brings it full circle. You get this case that comes to the lab, and you’re responsible for the testing and for submitting a report. Then you get to testify about your findings.

What was your first time testifying in court like?
It was a high-profile case. I just remember the courtroom being packed. There were cameras and everything. So I was very nervous, but I think I did a good job.

What do you work on now at Janssen Pharmaceuticals?
I develop methods to test biotherapeutics and then transfer those methods to quality-control labs. Most of the medications that I’m working on are for cancer therapies. It’s very rewarding. The drugs that I get to test have the potential to literally change someone’s life for the better.