Going from Mom's or Dad's savory home cooking to the campus cafeteria's "mystery meat" can be a big adjustment for any college freshman. But for Ryan Harrison, a sophomore biomedical engineering and economics major at Johns Hopkins University in Baltimore, Maryland, it wasn't a big deal.

While most of his high school friends took it easy their last year to fully enjoy "senioritis," Harrison spent his downtime at Hopkins, where he worked in the chemical and biomolecular engineering lab of professor Jeff Gray. Harrison got the chance through his high school, which offers a program that pairs students with researchers.

Harrison had been writing his own computer programs since the 4th grade. So when his high school biology teacher introduced him to Gray, everything fell into place. "He was into computational biology and we immediately hit it off!" says Harrison.

While in the Gray lab, Harrison improved the Rosetta computer program that predicts how proteins fold and attach to other biological molecules.

Before he had even graduated from high school, Harrison had presented his research to scientists older than his parents and received numerous awards, including a top prize in the 2005 Intel Science Talent Search—the nation's oldest and most prestigious high school science competition.

As a Hopkins student carrying a full load of courses, Harrison still finds time to work on the program. These days, he's mostly fixing its bugs.

Don't be fooled, though. Just because he was an award-winning researcher at age 17 doesn't mean he's a whiz at everything! When he started losing the battle in a high-level algebra course, he says he knew it was time to visit the math help room, where students could work with tutors. The effort paid off. Harrison finished the class with a B-, which, considering how tough the class was, he says felt more like an A+.

"I study a lot," admits Harrison. "But I still make time to do things that I enjoy."

Among his hobbies: directing a one-act play, experimenting with light and sound for student theater productions, and playing his favorite computer game, Civilization® III. And he teaches disadvantaged kids in Baltimore how to play chess, explaining, "It's also really good practice for me!"

With so many interests, one of Harrison's biggest challenges in college is finding time for all of his activities—and deciding what he ultimately wants to do professionally. As he wrote in his online diary (see excerpts below), "I have more questions now about my future than ever before. But, I guess that's...a
normal part of growing up."