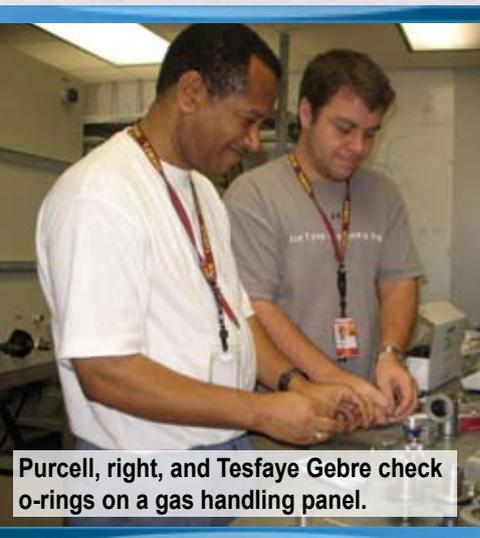


Science starts here

Ken Purcell turns a summer into a degree

By Amy Mast



Ken Purcell always knew he liked science. He'd been playing "school" with his sister since he was too young to go himself, and after a high-school experience with an inspired teacher, he decided that he wanted to inspire others as well.

During his sophomore year at Western Kentucky University, two of his professors encouraged

him to enroll in the Magnet Lab's Research Experiences for Undergraduates (REU) program at the place they called "the greatest school in the world"—Florida State University. Though it wasn't lost on Purcell that both of these suggestions came from FSU alumni, he applied and was accepted.

Purcell expected to learn a bit more about physics, meet some established scientists, and narrow the focus of his work. Having been assigned to work with a team under then Magnet Lab Director Jack Crow, he got a little more than he bargained for.

"I really learned a lot that summer about condensed matter physics," said Purcell, now 28.

Purcell came back again the following year and with the second experience under his belt, he added FSU to his list of prospective graduate schools.

"I was on the fence about that I wanted to do," he said. "I started undergrad with the intention of becoming a high school physics teacher. But once I came down here, it was like, no, I've got to do research, and I'll be able to teach, too."

With a 2004 master's degree under his belt and his Ph.D. to be completed this year, he's convinced he made the right choice.

"I truly can't think of a better place to be a graduate student," said Purcell. "Out of all my friends I've talked to at other schools, all the visiting scientists I've met – there is no other place I would have rather done it.

"You can walk a matter of minutes in this place and talk to some of the world's greatest theorists in several topics," he continued. "You can talk to people who do the thing you're trying to learn on an everyday basis.

An important goal of Purcell's mentor Crow was combining great research with community and educational outreach.

"Outreach is an integral part of the mission of the lab. As an undergrad, it was amazing to be that age and have access to these kinds of people willing to help you – it's neat to be

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this age even and have it," said Purcell. "There's not any other lab of this caliber where you can bring a grade-school class and walk them around during the

middle of the day. That's who we are."

Purcell said the most important lessons he'll take from his time here are the importance of being able to discuss his work in layman's terms; and the necessity of working across cultures and research interests to find the most exciting work possible with your research team. Wherever his career takes him next, he thinks he chose a great time to study at the Magnet Lab.

"We had a new REU recently whose adviser had told him: 'Florida State. You need to go to Florida State. They're the diamond in the rough right now, and you can still get into school there. You can get in, and then do better work than at Berkeley.' It's difficult to get into a lot of the traditionally difficult high-end research schools. We've already got the muscle and the brand is still building. It's a great time to be here."