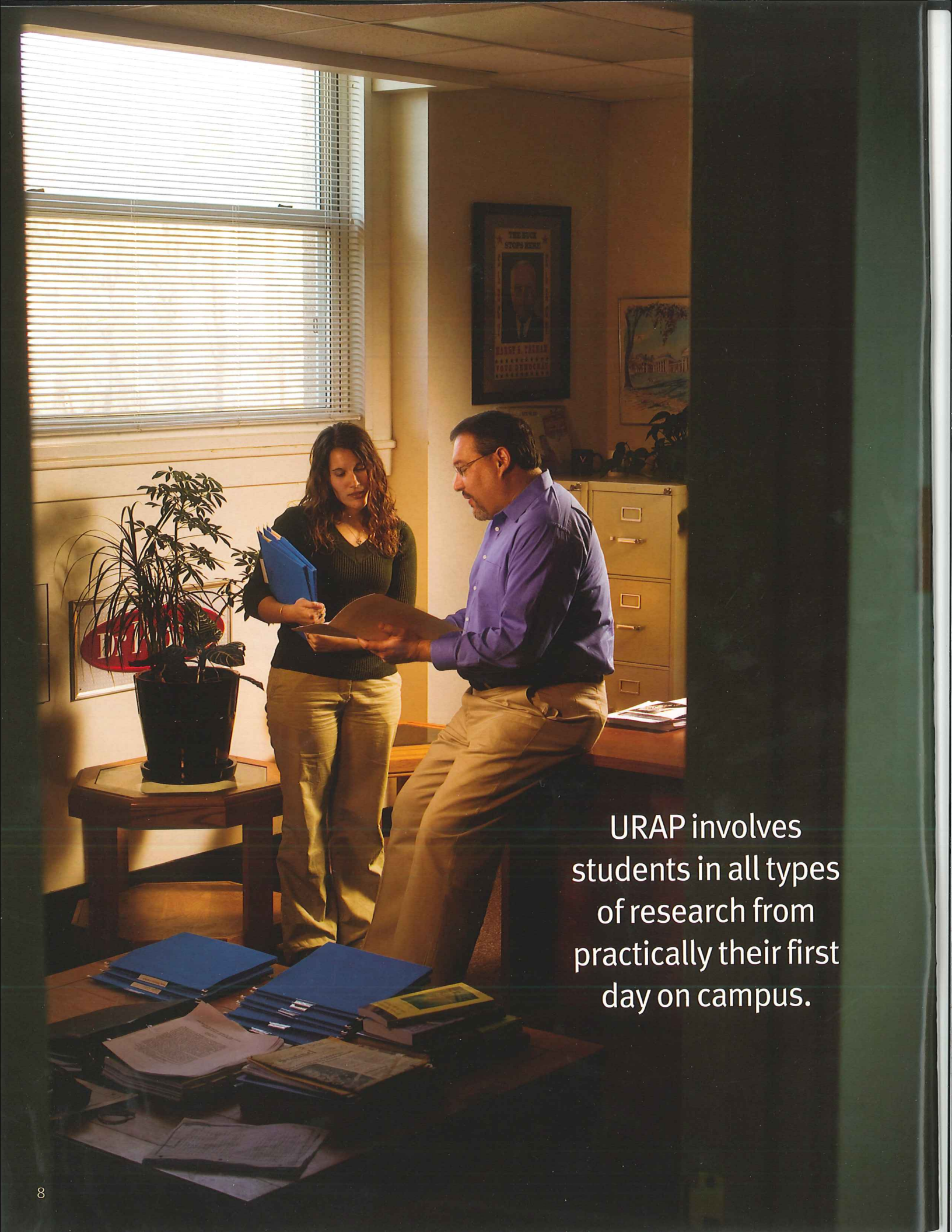


Teacher~Scholar 2008

ROANOKE

**PARTNERING
WITH STUDENTS IN
RESEARCH**





URAP involves students in all types of research from practically their first day on campus.

Unprecedented access to professors and research

BY SARAH COX

At Roanoke College, a third-year environmental policy major and a sociology professor are researching the attitudes of college students on end-of-life decisions. In a different department, a public affairs professor is working with another junior writing a book about the second-to-last juvenile executed in the Commonwealth of Virginia. And across campus, a junior majoring in economics is helping a math professor review the current textbook he's writing as well as creating a math model to deduce the future of AIDS.

These students are among eight who were selected their freshman year to participate in the College's Undergraduate Research Assistants Program or URAP, now in its third year. Distinguishing both the students and the College, this unique program involves students from practically their first days on campus in research methods usually not introduced to students until they're in graduate or post-graduate educational arenas. URAP gives students unprecedented access to a professor and the professor's personal research project. It supports the student's work with a \$2,000 per year stipend, offers academic credit and normally has students working closely with the professor all four years of their undergraduate career.

And beyond that, the program is truly life changing. Dr. Todd Peppers, assistant professor of public affairs, is working with **Beth See '09** reconstructing the facts of ju-

venile murderer Douglas Christopher Thomas' life, his trial and execution. "We are not trying to argue that he was factually innocent, because he wasn't, but we're examining how we try and punish juvenile offenders in this country," explains Peppers. Having a dedicated undergraduate at his side offers what Peppers terms "tremendous benefits. It's hard to find the dollar value of that," he says. "The URAP program is designed to produce multiple benefits but also to educate a future scholar and introduce someone to the life of the mind."

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— Dr. Roland Minton, Math Professor

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It has been difficult and time-consuming research alleviated by a student assistant who, says Peppers, has brought "energy and enthusiasm and an entirely different perspective to the project." See and Peppers have traveled to Middlesex County, Va., where the case took place; they have visited the graveyards of the victims and the perpetrator; they have combed courthouse files, retraced the steps of one fateful night and visited various family members and witnesses. They have immersed themselves in a case and, in so doing, have breathed life back into it to try and understand whether justice was served.

And that, explains Peppers, is necessary in social research. See has learned how social scientists study important issues of policy, and she also has been able to translate those skills into her classes. The junior from Broadway, Va., says the experience is unlike any normally available before graduate studies. But her opportunity to work one-on-one with Peppers has disabused the notion that students get lost in an undergraduate crowd, she says.

Although only a junior, Beth See '09 is in her third year of working with Dr. Todd Peppers in researching and writing a book about a Virginia juvenile who was executed for murder.

Unprecedented access to professors and research

“This program allows students to have interaction with professors while learning materials you do not get in the classroom,” she says. “Peppers is always willing to take a break from research to answer my questions and make sure I understand what we are doing.”

This is a trend found throughout URAP’s student-professor relationships. Dr. Roland Minton, a professor in the Math/Computer Science/Physics department, says there is an initial investment of time, but it’s the same investment that professors at Roanoke College make all the time as full-time teachers. “For me, one of the great rewards is interacting with students and watching them grow and develop,” he says. His URAP student, **Danielle Shiley ’10**, certainly needed his help, as she was taking calculus at the same time she was introduced to the project; thus, she was able to take advantage of her URAP professor to gain a better understanding of her course while bringing the perspective of a non-math major to Minton. “One of the things I’ve asked her to do in her classes is to be on the lookout for places where calculus is being used because it’s not an option I have to attend classes all over campus,” says Minton. Because she is an economics major, she is able to bring math-based lessons back to her research while getting introduced to calculus.

URAP, says Minton, “promotes what we ought to be promoting, which is a wonderful opportunity for our top students. When we get top students, we can start in their freshman year following through on promises that Roanoke College will be better than studying at a larger school.”

Shiley, who’s from New Cumberland, Pa., says her investment has been three to five hours per week and sometimes more. For the professors, it’s an upfront investment while they tailor the work to the level of their URAP student. “It’s important to structure it properly,” says Minton.

Dr. Greg Weiss found this to be the case with his research project, which is studying the attitudes of college students as they pertain to end-of-life decisions such as passive euthanasia, physician-assisted death and active euthanasia. His URAP student, **Lea Lupkin ’09** from Coral Springs, Fla., has helped him collect information

starting with a group of freshmen and periodically interviewing these same students as they progress through their years of college. Weiss says he had to provide an “expedited course of research methods for Lea, and then she jumped in with both feet.” Together, they formulated the questionnaire, spending hours developing the questions. “With issues like these, where many students and others would have strong emotional reasons for their feelings, it is absolutely necessary to find terminology that is value-free. That requires a lot of work.”

But it’s work that Lupkin has found rewarding. She says being offered the URAP opportunity was the “clincher” in her decision to attend Roanoke College. Since she began this project three years ago, she says it has been one of the most gratifying but also most challenging experiences of her Roanoke College education.

“I was able to probe [Weiss] mind, talk about methodological and theoretical issues,” she says. “And, it has given me a different dimension of accountability. I never want to let him down, so it motivates me further. I feel like I have to live up to certain standards he has. It’s been greatly motivating – and terrifying,” she adds with a grin.

Coordinator of URAP Dr. Benjamin Huddle says Roanoke College professors find it rewarding to work with students in this venue. “It is not an answer to professional development prayers,” he says of the professors’ investment, but the visible results of seeing student progress is so great that he looks forward to getting a student of his own. “I’d like to have several students, one for each of four years, and to see how the second-year student helps the first-year student, and the third year helps the second.”

Dr. Curt Camac, professor of psychology, has worked with **Megan Poore ’08** from Pulaski, Va., for three years, focusing in an area of social psychology known as social dilemmas. That’s where an individual’s self-interest conflicts with group interest. He gives as an example the case of a drought, where an individual has access to water but is torn between conserving or taking too much. Camac says both he and his student assistant have gained from

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– Lea Lupkin ’09, a URAP student from Coral Springs, Fla.



Dr. Stephen B. Hughes works alongside URAP student Timmy Balint '11 on the development of a personal large-screen immersive interactive display.

the experience. The professor's research has gone more quickly with Poore's help. Because the URAP students are top-flight, they tend to need less supervision once they begin understanding research methods. And the students benefit because they're learning outside of the classroom, working more independently, developing personally and oftentimes changing their goals. Plus, says Camac, this experience is one of the most important factors that graduate schools look at in addition to graduate exams, GPAs and letters of recommendation. The latter, he says, he was able to write with "real legitimacy" because Poore was also his advisee. He feels that URAP "is one of the best things we've done here. It's fairly unique, and I've loved the opportunity to work with Megan."

Next year, Roanoke College will select another eight

incoming freshmen to dive into professors' research projects. Subjects range from "Astronomical Parenting: Monitoring Teenage Stars" and "What do Music, Love and Humor have in Common?" to "A Marketing Perspective on Workforce Diversity using Targeted Recruitment Techniques," "Synthesis and Characterization of Nanophase Iron Oxides Using Spectroscopic Techniques" and "Developing the New Calculus."

Those incoming freshmen will just be getting started as the College's first set of URAP students are finishing their unique four years of research. But for them, it's hardly an end. The majority are going on to graduate school to continue what whetted their intellects at Roanoke College – and there's no telling where that experience will ultimately lead. •