## Summer job that makes you think

## W&M teaches the joy of academic research

By Sharon Schiff

WILLIAMSBURG — As if she's going to the beach, Lindsay Schwarting throws on a T-shirt and casual shorts and slips into a pair of flip flops.

It's part of her routine to get ready for work. Instead of driving, she rides her bike and spends much of her time in a canoe.

She has an ideal summer job for a college student. It offers great pay, plenty of time outdoors and the unique opportunity to explore a topic she's deeply interested in.

Schwarting is one of thousands of college students across the nation doing undergraduate research through

grants provided by the National Science Foundation. Students come from places like Harvard and Berkeley to take the summer programs at the College of William & Marv.

Schwarting, a rising senior at Clarkson University in New York, is spending 10 weeks this summer studying the levels of algae concentration in Lake Matoaka.

It's Week 6, and so far her data findings have been extensive. She tests for salinity and oxygen by using a device to take water samples from various depths. She sports a Global Positing System to find her way as she rows around Lake Matoaka.

Back at Clarkson, where there's a heavier emphasis on engineering and technology, she doesn't have the resources available to her at W&M's Keck Lab, which is tucked away from campus life and sits on the water's edge.

"My interests were really aligned with the interests of the school," she said referring to W&M. "I feel so fortunate I got this opportunity."

Randy Chambers, associate professor of biology, oversees the research of a half dozen students this summer at the Keck Lab.

"We have made it our

charge to focus on local environmental issues of urbanization, sprawl and development," he said. "There are a number of features associated with housing that we are very concerned about."

His students form a veritable cohort as they are all devoting their studies to watershed projects.

Schwarting's project will reveal more information about the dead zone, in which there is no oxygen present in some depths of the water. A lack of oxygen can kill off certain species of life and disrupt the ecosystem. The "red tide" in the York River is a vivid example.

W&M rising juniors Margaret Schrack and Jana Hartman are researching the terrapin population. Each week they travel to the mouth of the York and another location at Yorktown Naval Weapons Station.

"There are a lot of things that we see that worry me," Schrack said. "I sometimes feel like the whole population is in trouble."

The pair will spend hours canoeing up and down the river to get an accurate sampling of the turtle pop-

ulation.

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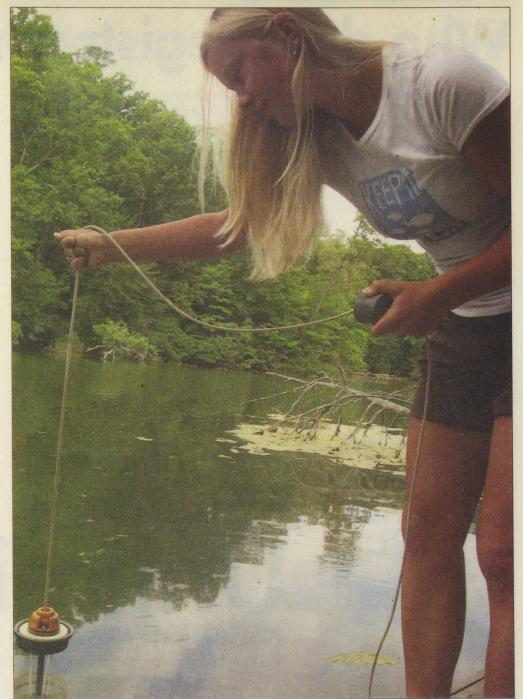
Kimball Theatre

Other research projects that Chambers is supervising have to do with the function of stormwater ponds here locally, the effect of golf courses on bird populations, and crayfish.

Most students devote about 40 hours a week to their research jobs. The undergraduates receive \$4,000 for their summer's work, but the experience is invaluable.

"It's the ultimate on-the-job-training," Chambers

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Lindsay Schwarting, a rising senior at Clarkson University in New York, tests the water a Lake Matoaka. She is spending her summer studying algae concentration in the lake as part of a summer program at The College of William & Mary.