VIMS alumna joins U.S. Department of Energy

By Erin Kelly

(February 17, 2014) The Virginia Institute of Marine Science has a long history of its students and recent graduates being selected for the prestigious John A. Knauss Marine Policy Fellowship, and this year is no exception. VIMS alumna Samantha Bickel will carry on the tradition as she works as an Environmental Science and Policy Specialist in the Offshore Wind and Ocean Renewable Energy office at the U.S. Department of Energy (US DOE).

Bickel—who completed her Ph.D. in 2013—was selected for the one-year fellowship through the National Sea Grant Federal Fellows Program. Since its inception in 1979, the program has brought 37 VIMS students and recent alumni to our nation’s capitol to join other highly qualified graduate students from across the nation with hosts in legislative or executive offices on Capitol Hill.

The Fellowship—named for former NOAA administrator and Sea Grant founder John A. Knauss—was created for students with an interest in ocean, coastal, and Great Lakes resources, and the national policy decisions affecting those resources. Bickel—who had her first day at the US DOE last week—will remain in the program until January 2015.

Over the course of the next year, Bickel will be working on the environmental portfolio for offshore wind and marine hydrokinetic technologies. Bickel says she’ll be assigned to tasks such as determining the program’s research priorities, participating in conferences and other outreach venues, and creating and distributing materials that communicate the program’s mission and activities to internal and external stakeholders and partners.

“The DOE is trying to find alternative energy sources—such as offshore wind farms—as well as wave-energy converters and other types of nonconventional hydropower,” says Bickel. “There isn’t a lot known about the environmental impacts for deploying these devices, so I’m looking forward to exploring those effects.”

Bickel says she is excited to have an opportunity to gain some experience outside of an academic environment. “I’m looking forward to acquiring some insight into how governmental processes work,” she says. “I’m also excited to be gaining a lot of contacts in different agencies, and having the opportunity to interact with researchers at other universities, as well as industry partners.”

Bickel says she heard about the fellowship through an announcement at VIMS, and thought it sounded like the perfect opportunity to gain experience in the policy realm. “It’s important for me to get acquainted with the policy side of things because it has such huge ties to the future of marine science and research,” she says.
During her time at VIMS, Bickel’s research focused on the interactions between bacteria and zooplankton. In particular, she was interested in exploring how changes in environmental conditions in Chesapeake Bay and other coastal ecosystems can impact the number and community composition of the bacteria that live both on and within zooplankton. Bacteria play an important role in the cycling of pollutants such as excess nitrogen.

After completing her Ph.D. in August, Bickel decided it was time to shift gears and gain some new experiences outside of academia. “I’m not completely sure if I want to remain in academia or go the governmental route, so I think this opportunity will serve as a testing board and help me in making my next big career decision,” she says.

After being notified that she was selected as a fellowship finalist, Bickel had to complete “placement week,” during which the finalists attend briefings with Congressional staffers, current fellows, and members of host offices. In addition, there’s a demanding round of roughly 15 interviews over the course of 2 days.

“Placement week was very intense, but it challenged me and taught me to be on top of my game at all times,” says Bickel. “You have to be able to network and put your best foot forward because there are interviews and other events where you’re interacting with the interviewers, so you have to be ‘on’ all of the time. Even though it was stressful, it was definitely a good experience.”

Prior to her arrival in Washington, Bickel says she spoke with former fellows from VIMS who had nothing but positive things to say about the program. “There has been a long tradition of VIMS grads having great experiences on the Hill, and they have always represented VIMS very well, so I’m honored to be able to continue that legacy,” she says.

Bickel says the broad background in marine science she obtained from her education at VIMS helped prepare her for this new position. “The broad training that VIMS gave me—from classes in physical and chemical oceanography to benthic ecology—gave me the basic understanding of all of the different systems I’m working on right now, so that has proved to be very beneficial,” she says.

The Knauss program is administered through Sea Grant, a nationwide network of 32 university-based programs, administered through NOAA, that work with coastal communities to foster science-based decisions about the use and conservation of aquatic resources. The Virginia Sea Grant program is housed on the VIMS campus in Gloucester Point and administered through VIMS and the College of William and Mary.