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EDUCATING MARINE LEADERS

Exceptionally bright. Impassioned. Our students are among the world's best and they leave here ready to solve global problems.



A Capital Experience

Selected for the prestigious
Knauss Fellowship, VIMS students
turn policymakers

In February, James DelBene M.S. '19 traded his lab bench for a desk on Capitol Hill — beginning a yearlong Knauss Marine Policy Fellowship working for Senator Lisa Murkowski of Alaska.

The Knauss Fellowship, established in 1979 and administered by NOAA's Sea Grant program, offers young marine scientists like DelBene an immersive policymaking experience, placing them in legislative and executive positions in Washington, D.C. Since the program's inception, VIMS has been a top institution nationally in placing students and recent graduates as Knauss Fellows.

"Science has a critical role in informing policy," says Troy Hartley, director of Virginia Sea Grant. "It's more than just doing amazing science — it's understanding what policymakers need and the nature of the problem they're trying to solve. You just can't get that unless you step into their shoes. That's the huge advantage of Knauss."

Linsley Kraatz Ph.D. '13, who worked as an advisor to Rep. Mike Thompson of California, vividly remembers the steep learning curve she encountered when she arrived in Congress as a Knauss Fellow.

"In my first week as a fellow, I was in a meeting with constituents, and the Congressman turned around and said to me, 'Linsley, write me a bill.'" She jotted down "Write

Students participating in the VIMS Research Opportunities for Undergraduates program explore the waters of the Eastern Shore.

Bill?” on her notepad, the first step in her eventual mastery of the lawmaking process.

“I got bit by the bug,” says Kraatz, now at NOAA, who initially planned on an academic career. “It opened my eyes to other possibilities I didn’t know existed.”

“The Congressman turned around and said, ‘Lindsey, write me a bill.’”

As an advisor to Massachusetts Senator Ed Markey, Knauss Fellow William Goldsmith Ph.D. '18 drew directly on his VIMS experience working with recreational tuna fishermen. He worked to ensure that the Modernizing Recreational Fisheries Act of 2018 did not undermine sustainable fisheries management practices, and also engaged stakeholders in crafting a bill to help endangered right whales.

“One of the major contributors to right whale mortality is entanglement in fishing gear,” says Goldsmith, now executive director of American Saltwater Guides Association. “So we were trying to find a way to address conservation while not putting undue pressure on our lobstermen, which is a tricky needle to thread,” he says, “It’s emblematic of what legislators do.”

Goldsmith and Kraatz, along with scores of other VIMS graduates, are now part of an exceptional network of Knauss alumni — with James DelBene soon joining them. “These are people who end up moving into powerful policy positions down the road,” Troy Hartley says. “They’re leaders in their field.”



During his Knauss Fellowship year, William Goldsmith Ph.D. '18 worked in the office of Senator Ed Markey.



Matthew J. Strickler M.S., M.P.P. '07

VIRGINIA SECRETARY OF NATURAL RESOURCES

After graduating from college, Matthew J. Strickler set out on a career as an environmental policymaker. “But I knew I needed to have a first-hand understanding of the scientific process and how to think like a scientist,” he says. Strickler enrolled in the joint marine science/public policy program offered through VIMS and William & Mary’s Thomas Jefferson Program in Public Policy. His research focused on using geographic information system (GIS) modeling to study the impact of Eastern Shore land use changes on water quality.

Strickler also served as a Knauss Fellow on Capitol Hill, which eventually led to his position as senior policy advisor to the House Committee on Natural Resources. In January 2018, Governor Ralph Northam appointed him to his current position as Virginia Secretary of Natural Resources.

While at VIMS, Strickler built connections with scientists, regulators, and the aquaculture industry that he still relies on today. “The Governor’s Executive Order 24 on coastal adaptation and resilience — a lot of that was born out of conversations that my advisor Carl Hershner and I had. VIMS’ science is seen as the gold standard by the public, and by members of the General Assembly on both sides of the aisle.”



NEW M.A. IN MARINE SCIENCE

VIMS has introduced a new degree program, the M.A. in Marine Science, designed for students pursuing careers that bridge marine science and other professional areas.

“There’s a pool of students who want to pull from the science side as well as the policy or law or education side to address problems that require the integration of information from diverse fields — what sociologists call ‘wicked’ problems,” says Associate Dean of Academic Studies Linda Schaffner Ph.D. '87, who led the program’s development.

The curriculum is deliberately designed to be flexible. “Students will get the same world-class marine science education as M.S. students do. The change comes when they transition to elective courses, culminating in an internship and capstone project,” says John Griffin, M.Ed. '19, assistant director for admissions and student affairs. Schaffner adds: “Our ability to partner with the other strong programs at William & Mary will give our graduates an extra boost when it comes to employment opportunities.”

For more information, please contact John Griffin at jmgriffin@vims.edu.

“Our goal at VIMS is to shape our students to provide leadership at the interface between what scientists can do and what society and policymakers need.”

Associate Dean Linda Schaffner Ph.D. '87 has spearheaded VIMS’ innovative education programs, winning state and national accolades as an educator. VIMS has one of the largest marine science graduate programs in the U.S., with more than 1,000 alumni.



STEMMING THE TIDE OF PLASTICS POLLUTION

Meredith Seeley first became interested in plastics as a master's degree student at the University of Texas. "I used a technique to study oil spills that is also used in plastics research, and so I dove into the literature on microplastics." She learned of Professor Rob Hale's work at VIMS, applied and was accepted to the doctoral program.

More exciting still, Seeley was awarded the Freeman Family Fellowship in Marine Plastic Pollution, funded by the Freeman Family Foundation — the first-ever fully privately funded graduate student fellowship at VIMS. In her research, Seeley has followed the impact of plastics on marine life ranging from microbes to larger species like rainbow trout in the Pacific Northwest. Just this year, she was first author on an article for *Nature Communications* on how microplastics affect sedimental microbial communities and the nitrogen cycle.

And along the way, she's become close with Peg Freeman and her children, who were instrumental in the fellowship's creation. "Peg Freeman is the pioneer in this, and someone really wonderful to look toward for inspiration. It's a unique situation, and I'm so fortunate."

Meredith Seeley spoke at VIMS' popular After Hours lecture series on her research in Alaska, collecting water and sediment samples to study chemicals leaching from marine plastics.

"Peg Freeman is the pioneer in this, and someone really wonderful to look toward for inspiration."

ATTRACTING EXCEPTIONAL TALENT

Private support enables VIMS to recruit the highest caliber students and enhance our global prominence. During the *For the Bold* campaign, generous supporters committed to endow 22 new graduate fellowships.

- ▶ R. Gordon and Catherine B. Smith Fellowship Endowment
- ▶ Tidewater Oyster Gardeners Association (TOGA) Fellowship
- ▶ Norfolk Southern Foundation Fellowship Endowment
- ▶ James E. & Anne McCracken Rogers Graduate Student Fellowship Endowment
- ▶ Olsson Family Graduate Student Fellowship Endowment
- ▶ Rebecca M. Dickhut Endowment for Support of Students and Early Career Young Scientists
- ▶ Mary Hedrick Causey Memorial Fellowship Endowment, established by J.P. Causey, Jr.
- ▶ Nancy S. and Henry H. George Fellowship Endowment
- ▶ Strickland Family Fellowship Endowment
- ▶ Bruce K. Goodwin Fellowship Endowment, established by William Jerrold Samford and Ann Markel Samford
- ▶ Dr. Maynard Nichols and E. Jane Nichols Student Travel Fellowship Endowment
- ▶ Philip A. and Barbara C. Wenger Graduate Fellowship Endowment
- ▶ MacWhorter Family Fellowship Endowment
- ▶ Brenton S. Halsey Fellowship Endowment
- ▶ Waleski-Smith Fellowship Endowment
- ▶ George Edwin and Amelia Ann Dick Fellowship Endowment
- ▶ Phyllis L. Cothran & Arnold L. Stolberg Fellowship Endowment
- ▶ Robert and Jennifer Latour Fellowship Endowment
- ▶ John and Patsy Wells Fellowship Endowment
- ▶ Ronald West Family Foundation Military & Veterans Fellowship Endowment
- ▶ Cake Family Fellowship Endowment
- ▶ The Sara E. and Bruce B. Collette Fellowship Endowment



At top, Professor Chris Hein and his students work on the Eastern Shore aboard the *Peregrination*, a vessel purchase supported through giving from VIMS Foundation president emeritus Stephen Johnsen HON '18 and Barbara Johnsen Ed.S. '90, Ed.D. '95.