

# Research, Service, & Education: The VIMS Coastal Geology Lab

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## THE VIMS MISSION: RESEARCH

- Commonwealth & federally (grant) supported research in Chesapeake Bay, the Virginia Eastern Shore, & across the country and the world
- Funded by 300-350 *active* grants
- Last 10 yrs: >\$200M in grants





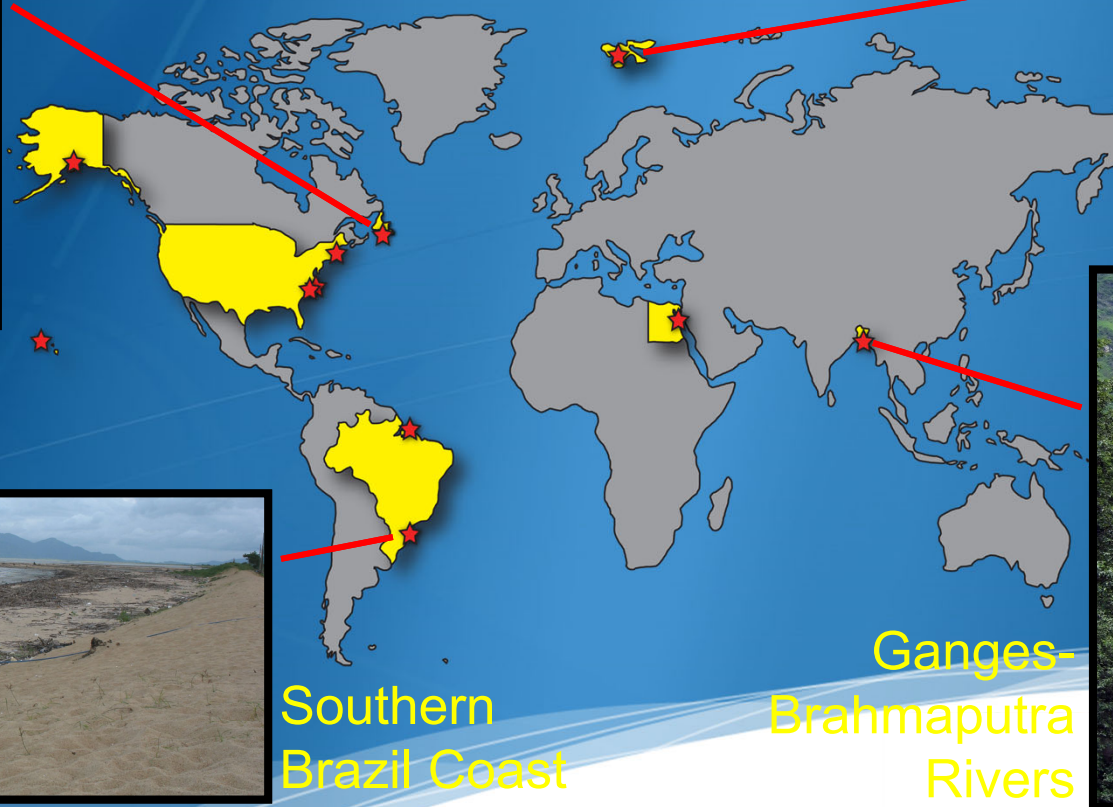
# THE VIMS COASTAL GEOLOGY LAB: GLOBAL-SCALE COASTAL & CARBON-CYCLE RESEARCH



St. Pierre &  
Miquelon



Southern  
Brazil Coast



Svalbard



Ganges-  
Brahmaputra  
Rivers



# COASTAL GEOLOGY RESEARCH IN THE MID-ATLANTIC



*Outer Banks, NC:  
Dune Management  
(NOAA)*



*Virginia Eastern  
Shore barrier islands  
(Sea Grant, NSF)*

# COASTAL GEOLOGY RESEARCH IN THE MID-ATLANTIC



*Chincoteague Inlet*  
(VA Commonwealth)

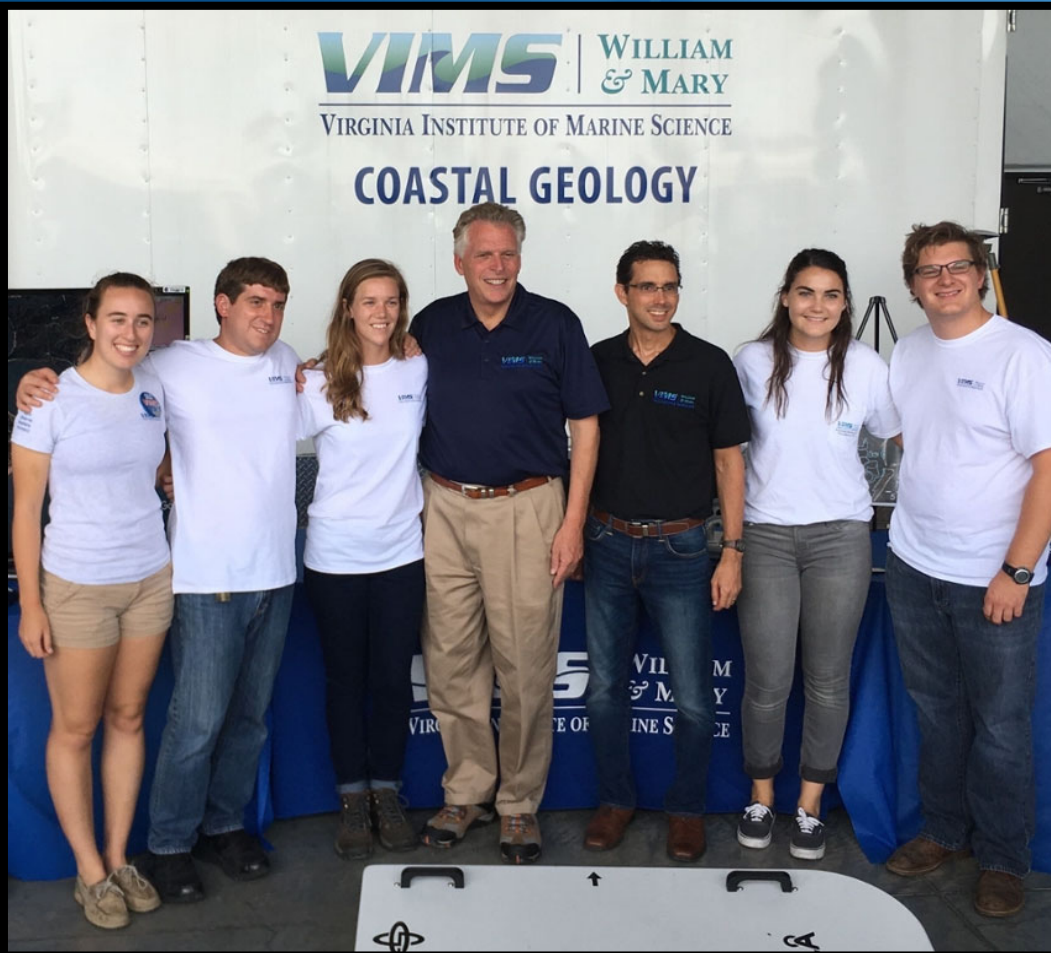


## THE VIMS MISSION: ADVISORY SERVICE

- Commonwealth's scientific advisor on coastal natural resources
- 37 sections of VA Code require VIMS advisory service for natural resource management
- Advisor to General Assembly, state agencies, local governments, maritime industries, & the Public
- Long-running fish, invertebrate, harmful algal bloom, seagrass, & sea-level surveys & mapping



# THE VIMS COASTAL GEOLOGY LAB: ADVISORY SERVICE



- Shoreline change studies
- Norfolk Sand Mgmt. Board
- Advising local coastal managers
- Public outreach





# THE VIMS MISSION: EDUCATION

## Teaching

- Graduate program in *interdisciplinary* marine sci
- *NEW* Marine Science professional masters
- *Marine Science Minor*: faculty & grad student instructors



## Graduate Student Mentoring



- 90 MSc/PhD students
- Field-based research from Arctic to Antarctic
- Lab-based & computational science

## Undergraduate Research

>50% of VIMS faculty engaged in undergrad teaching / research





# THE VIMS COASTAL GEOLOGY LAB: EDUCATION

## Field-Based Teaching

Undergraduate: Wales & the VA  
Eastern Shore: Summer 2020

Graduate: California Rivers:  
Spring 2020





# THE VIMS COASTAL GEOLOGY LAB: EDUCATION

## Field-Based Student Research: Senior/Honors and MSc/PhD Students





# THE VIMS COASTAL GEOLOGY LAB: EDUCATION

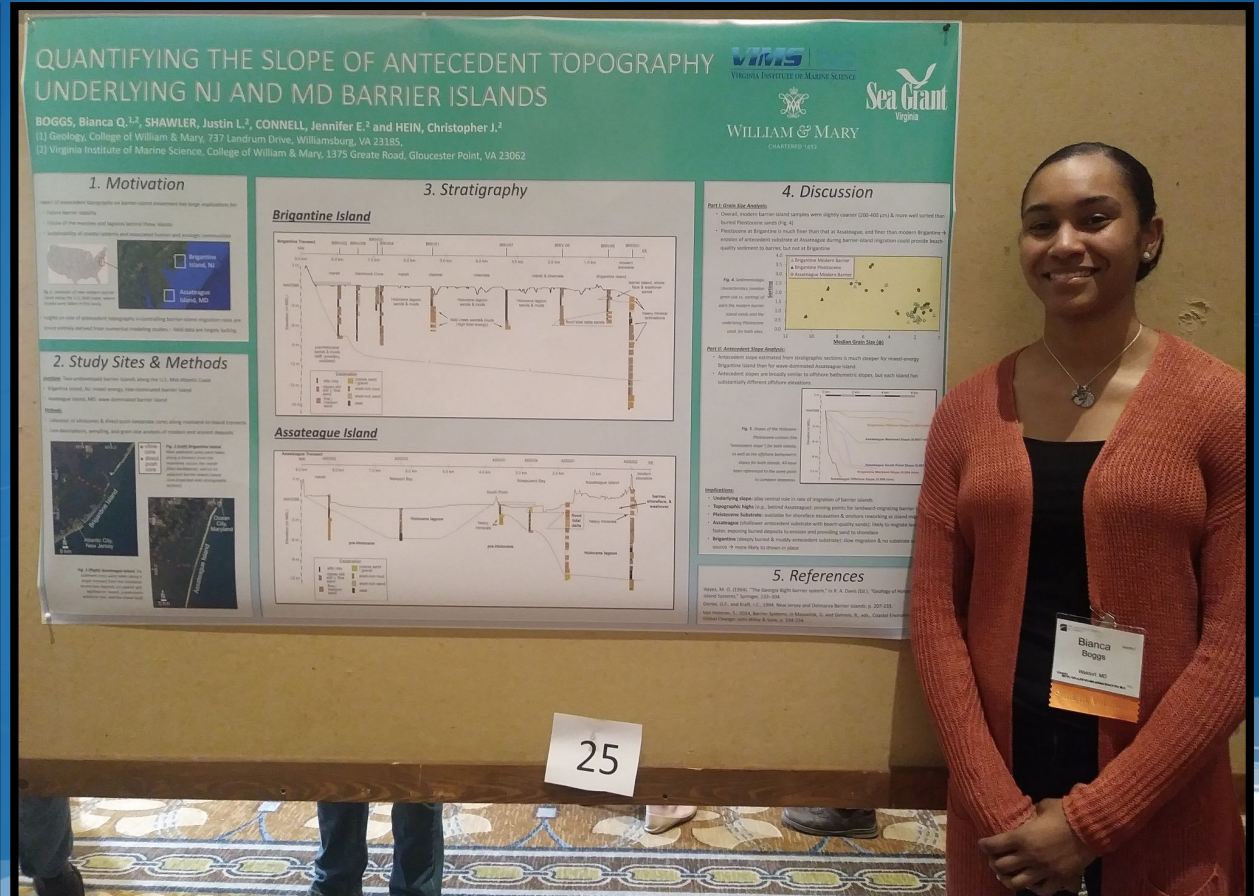
*Field-Based Student Research: In Virginia . . .*





# THE VIMS COASTAL GEOLOGY LAB: EDUCATION

## Field-Based Student Research: In Virginia . . .





# THE VIMS COASTAL GEOLOGY LAB: EDUCATION

## Field-Based Student Research: In Virginia . . . And Beyond



# THE COASTAL GEOLOGY LAB: FULFILLING THE VIMS MISSION

- World-class & world-wide research, with a focus along the Virginia coast
- Studying the past to improve predictions for the future
- Advising Virginia on coastal change & sediment resources
- Educating the next generation of scientists & policymakers

