



Computational and Applied Math and Statistics (CAMS) is an interdisciplinary program drawing on Applied Science, Biology, Computer Science, Math, and Economics.



CAMS has two tracks: Applied Statistics (major) and Mathematical Biology (major and minor).

<https://www.wm.edu/as/cams/index.php>

ALUMNI PROFILES

Lucie Jacobson (Applied Statistics '19)

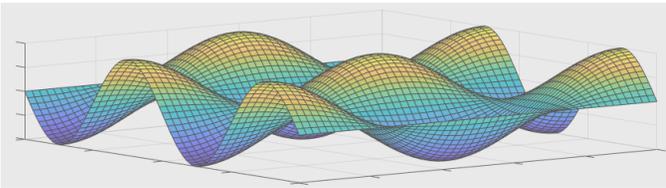
I am an M.S. candidate in Statistical Science at Duke University. My CAMS Applied Statistics major provided a fantastic framework of mathematics while allowing me to explore econometrics and urban economics. The College is a wonderful place to learn! After my studies, I hope to pursue a career in translational informatics in the medical industry. This involves streamlining healthcare data collection and analysis while maintaining patient privacy, which is critical in this age of data availability.



Soren Struckman (Math Bio minor '19)

I am a Technical Analyst with the Western Forest Initiative at Utah State University, where I investigate woody biomass accumulation in forests to inform policies of forest carbon sequestration and fire management. In the fall and winter this entails a lot of statistical analysis and code-writing, but during the growing season I get to cruise around western North America with a team of scientists that visits and collects data on over 100,000 trees. As a student, I worked on ecological modelling research. CAMS helped me develop the skills to complete this research and fostered an attitude of problem-solving that has helped me in numerous other ways.





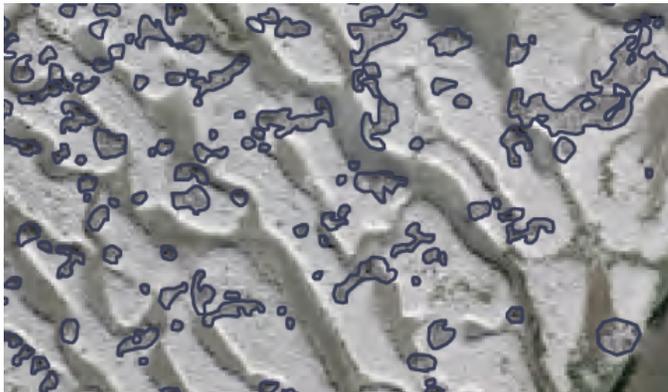
MEET THE STUDENT LIAISONS

Three current CAMS majors have volunteered to answer questions from prospective William & Mary students. E-mail any of our student liaisons to find out what it's like to be a CAMS student at W&M! You can also contact the CAMS faculty directors with questions.

Harrison Tuckman (Mathematical Biology '20)
hgtuckman@email.wm.edu



The CAMS major has been perfect for me, combining my interests in mathematics, computation, and biology. Through coursework and attending biomathematics seminars, I gained breadth and depth in all three disciplines, and most importantly, about where these disciplines overlap. I developed my own research project in computational neuroscience, which is the focus of my Honors thesis. Outside of biomathematics, I enjoy performing with the William & Mary Choir, of which I have been a member for the past 4 years.



TRACKS

Applied Statistics:
Statistics relates to the collection, analysis, interpretation, and presentation of data. With development of new technologies, data availability is rapidly increasing, and so is the need for statistical skills.

Mathematical Biology:
Mathematical biology aims to model biological processes using mathematical tools. Applications range from interpreting genomic data from cells to ecosystem-scale modeling.

Faculty directors:

- **Program director: Sarah Day** sldayx@wm.edu
- **Applied Statistics: Ross Iaci** riaci@wm.edu
- **Mathematical Biology:**
Drew LaMar mdlama@wm.edu and
Leah Shaw lbshaw@wm.edu

Caleb Baker (Applied Statistics '21)

cbbaker@email.wm.edu

I love the Applied Statistics track because it has equipped me to tackle problems from different angles and assess data. This comprehensive education has given me success in technical interviews for professional positions and gives me the option to pursue graduate study across different fields. Outside of academics, I work as a Wellness Ambassador at the McLeod Tyler Wellness Center and am active in student organizations such as Intervarsity, Phi Mu Alpha, and the Sinfonicon Light Opera Company.



Julia Urban (Mathematical Biology '21)

jaurban@email.wm.edu

CAMS allows me to study all of my interests. I knew I loved biology, but my freshman year at the College piqued my interest in other STEM fields. My experience competing in the iGEM competition, an international synthetic biology competition for student researchers, showed me the role of mathematical modeling and computer science in biology research. This competition season, W&M iGEM hopes to address aspects of the SARS-CoV-2 pandemic, including diagnostics, antiviral therapies, and outbreak prediction. Outside of the lab, you can find me in class or at Wawa with my friends!

