



VITERBO UNIVERSITY

PRE-HEALTH NEWSLETTER

Updates from the Viterbo Pre-Health Program

WELCOME

BY MICHAEL ALFIERI, PHD
INTERIM ASSOCIATE DEAN

As part of Viterbo University's long history of offering a premier pre-health experience for students, we are proud to introduce you to our first-ever pre-health email newsletter! You are receiving this newsletter because you are a valued member of Viterbo's pre-health community. As a health advisory board member, alumni, STEM partner connected to our program, or someone working with high school students, we are excited to provide you with news, updates, and opportunities around our pre-health programs at Viterbo. Our newsletter will be emailed near the end of our academic semesters, and we welcome your feedback, questions, and comments at prehealth@viterbo.edu.

Thank you for your continued support, guidance, and interest in the Viterbo University pre-health program.

On behalf of the pre-health committee, wishing you a safe, healthy and happy 2022.

Michael

UPCOMING EVENTS

Tropical Ecology
-Galapagos
Jan. 7-17, 2022

Health Science
Scholarship
Competition
Feb. 11, 2022

Agnes W.H. Tan
Science
Symposium
March 25, 2022

Scholar's Day
April 22-23, 2022



VITERBO
UNIVERSITY

JANUARY 2022

EVENTS AND OPPORTUNITIES

STREAMING SURGERY

We took advantage of a new learning opportunity at Viterbo by live streaming surgeries. Our first surgery stream this fall was orthopedic in nature.

This was a collaboration and hosted by Gundersen Health System and the Integrated Center for Education (ICE House). We had the opportunity to view the procedure, live chat questions of the surgical team, and listen to commentary. Working with the ICE House, we plan on hosting at least one live surgery each semester at Viterbo.

“ IT WAS A GREAT EXPERIENCE TO WATCH SURGEONS PREPARE AND PERFORM SURGERY IN REAL TIME. ”

-Ben Lisak, first year science student

Ben plans on going to medical school and becoming a surgeon. He explained, "This was a great way to get a little insight on how things are operated in the surgery room before I make my final career decision."

HEALTH SCIENCE SCHOLARSHIPS

Feb. 11, 2022

We continue to offer scholarships to students intending to pursue careers in the health sciences. Through this competitive process, all students invited to the event will receive scholarships, and one student will be awarded a four-year, full-tuition scholarship to Viterbo. More details [here](#).



March 25, 2022

Focus on: Drinking Water

More information at viterbo.edu/agnes-wh-tan-science-symposium

SPOTLIGHT ON PRE-HEALTH STUDENTS

ANTHONY POPE

Class of 2025

Anthony was accepted to the Early Acceptance Program at Lake Erie College of Osteopathic Medicine.



ZACHARY SCHMIT

Class of 2022

Zach will be attending the Mayo Clinic School of Health Sciences Doctorate of Physical Therapy Program after graduation.



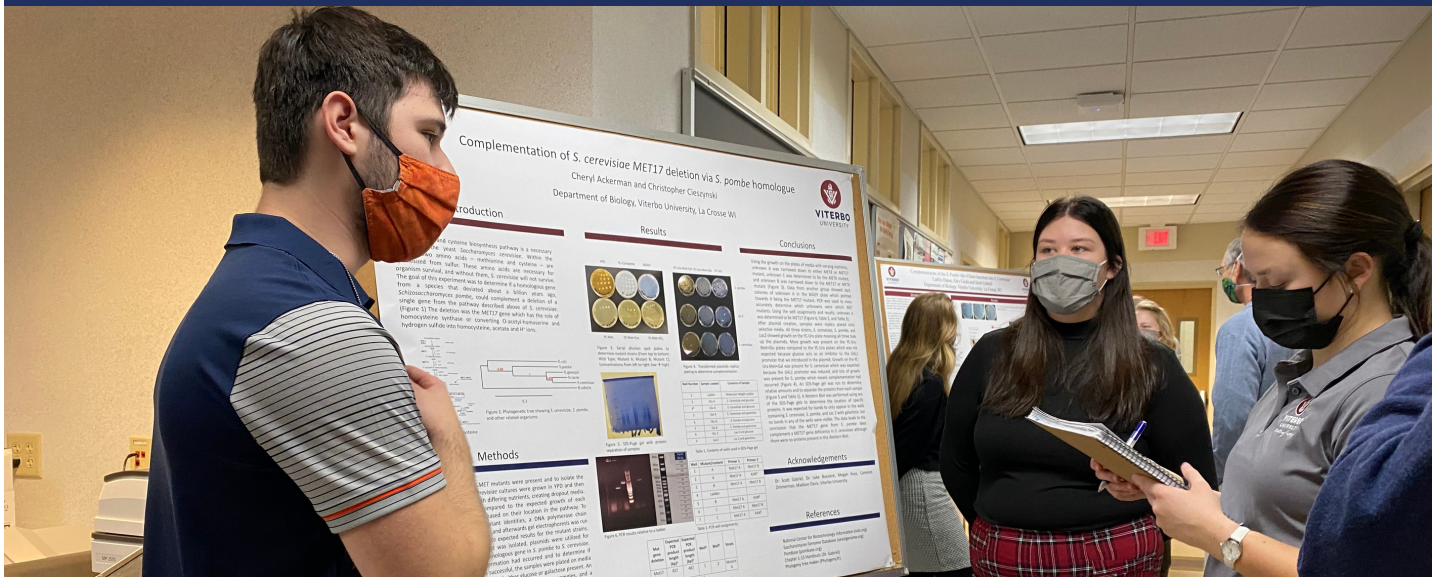
MELISSA EDGAR

Class of 2021

Melissa is attending the University of Minnesota Medical School. She was awarded a full ride Scholarship.



RESEARCH AND INTERNSHIPS



HIGHLIGHTS FROM VITERBO'S ANNUAL 7 RIVERS RESEARCH SYMPOSIUM

"The Comparison of Insect
Diversity Between Ecosystems
Using Blacklight"
Ryan Ellington

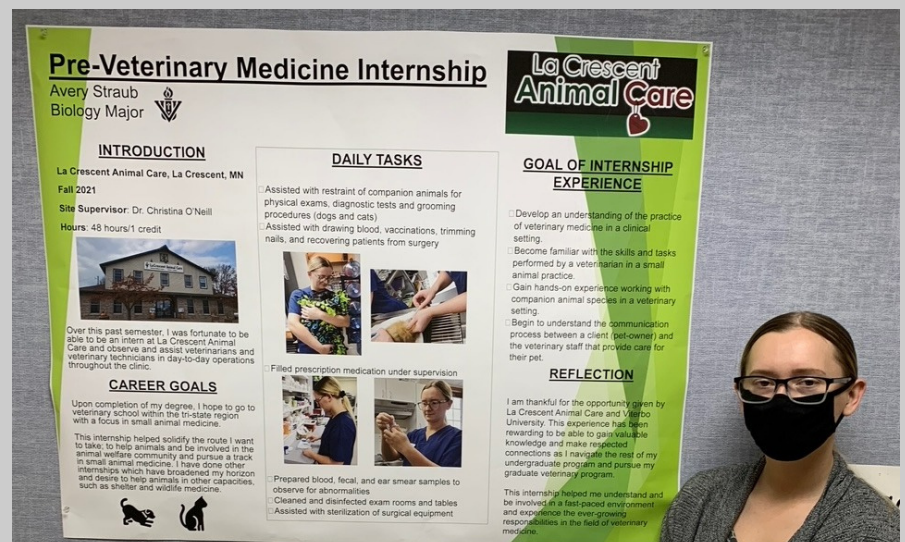
"Synthesizing and Characterizing
a Toxicant to Control Invasive
Asian Carp Species"
Morgan Mohler

"How will you decide? An analysis
between the relationship of
personality and moral judgment"
Bailey Benson

"Genetic Transformation of
Lactobacillus rhamnosus GG a
Mutualistic Member of the
Human Microbiota"
Mya Snyder

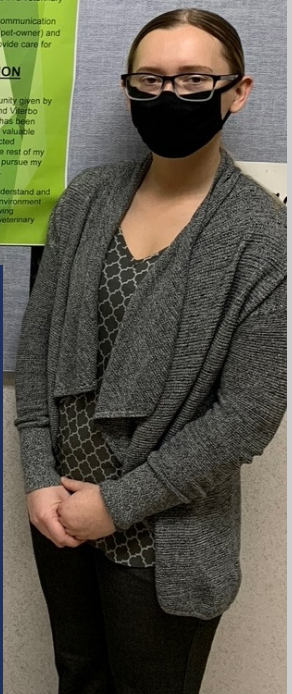
RECENT RESEARCH & PRESENTATIONS

Research continues to thrive in the natural sciences at Viterbo. This semester we had 24 science students enrolled in one or more phases of our multi-semester research series with 11 new research proposals presented by junior students.



AVERY STRAUB

Working hand-in-hand with La Crescent Animal Care, biology major Avery Straub was able to assist with drawing blood, vaccinations, diagnostic tests, and physical exams with animals. She plans to go to veterinary school.



NEW FACES & POSITIONS



MEET DR. BUSSIÈRE

Assistant Professor

Dr. Luke Bussiere joined our biology department this fall. Luke moved from Iowa to La Crosse with his wife, Emily, and a one-year-old puppy, Nala. Originally from the Upper Peninsula in Michigan, they are used to the cold winters and are ready for the snow and winter sports that they missed while in Iowa.

Luke pursued his BS degree in human biology at the University of Wisconsin-Green Bay and his PhD in microbiology at Iowa State University, where he studied mammalian orthoreovirus (reovirus). Reovirus is a recognized cancer killing virus that has undergone many clinical trials in various cancer patients, but it has yet to be FDA approved as a cancer therapeutic due to uneven effectiveness among patients. Luke's research at Viterbo University strives to determine which types of cancers or cancer environments are most amenable to reovirus therapy to help direct future clinical trials.

MEET JAMIE O'NEILL

STEM Event Planner and Outreach Coordinator

Viterbo University and the School of Natural Sciences, Mathematics, and Engineering is fortunate to receive an estate gift from Viterbo alumna Agnes W.H. Tan to put on annual symposiums with a focus on biochemistry. Our first symposium will focus on drinking water and be held on March 25, 2022 at Viterbo. The symposium aims to engage students and the community with experts and influencers on transformative science issues within our broader society.

With a background in math, public health, and event planning, Jamie is excited to put on this event while working with work study students and coordinating outreach projects. Strengthening connections with high schools and highlighting our STEM opportunities are two focuses of her outreach work.

Jamie can be reached at 608.796.3472 or jmoneill@viterbo.edu.



Our aim is for this symposium to be a place where questions of science and society can intersect.

-JAMIE O'NEILL

COMING SOON

CRISPR LAB

CRISPR is a powerful gene editing technology that transforms research. We are excited to add several aspects of this new technology to our teaching and research programs. Susanna Driscoll, adjunct faculty member in biology, has experience in gene editing and will guide students through classroom and independent research projects where they can explore genes.

Gene editing treats diseases at the genetic level by directly modifying DNA through various techniques. These techniques are gene inactivation and disruption and gene correction and insertion.



“

THIS TOOL ALLOWS STUDENTS TO BE COLLABORATING IN THIS GLOBALLY POPULAR RESEARCH FIELD.

-SUSANNA DRISCOLL

”

ANATOMAGE DISSECTION TABLE



The Anatomage Table is a technologically advanced, life-size virtual dissection table. It utilizes a 3D digital cadaver to help students visualize and interact with the content being studied in biology courses such as Anatomy and Physiology. Anatomage Table activities are integrated into the course where students can perform a virtual dissection, study internal structures, identify muscles of the body, or visualize physiologic processes, such as blood flowing through the body. By seeing these structures and processes in this life-size cadaver, students can see the system being studied and appreciate how all systems fit together.

“

THE ANATOMAGE TABLE IS A POWERFUL TOOL THAT COMBINES TECHNOLOGY WITH ANATOMY AND BRINGS TO LIFE THE STRUCTURES AND CONCEPTS BEING TAUGHT.

”

- Minda Lemke, A&P instructor

CONNECT WITH US

FB: [@ViterboSTEM](https://www.facebook.com/ViterboSTEM)

W: viterbo.edu/engineering-math-and-science

E: prehealth@viterbo.edu

