



VITERBO UNIVERSITY

PRE-HEALTH NEWSLETTER

Updates from the Viterbo Pre-Health Program

WELCOME

BY SCOTT GABRIEL, PHD
INTERIM ASSISTANT DEAN

To each of you whether alumni, advisory board members, community STEM partners, or prospective students, happy holidays from La Crosse! Our students and faculty are busy finishing the last weeks of the semester. Projects, presentations, and exams are found aplenty while sleep, time, and serenity are in rare supply. The stories found within this newsletter will hopefully give you a fuller sense of the great work students have accomplished over the last year. Our departments continue to support students and dream about how we can do that even better in the years to come.

On behalf of the pre-health committee, thank you for your continued support, guidance, and interest in the Viterbo University pre-health program.

If you have any questions, or would like to talk about how to support our efforts in working with students please reach out to me, I would enjoy the opportunity to connect.

Scott

UPCOMING EVENTS

Health Science
Scholarship
Competition

Feb. 10, 2023

Scholar's Day
(Student Research
Presentations)

April 27-28, 2023

Agnes W.H. Tan
Science
Symposium

Sept. 2023



VITERBO
UNIVERSITY

DECEMBER 2022

ALUMNI AWARD RECIPIENTS

2022 Distinguished Alumni Award Pre-health Recipients



Elizabeth Maher with Viterbo
President Rick Trietley

In early October, Viterbo awarded Distinguished Alumni Awards and invited winners to campus. Three of the award winners this year were previous students who had pre-health related majors. Jed Barton ('17) biopsychology and ('20) MS in Servant Leadership received the Spirit of Francis award. Rebecca (Arndt) Crecente ('04) biology received the Professional Achievement award from the College of Engineering, Letters, and Sciences Professional Achievement. **Elizabeth (Eckert) Maher ('14)** was awarded the College of Engineering, Letters, and Sciences Rising Professional.

While Maher was on campus to receive her award, she guest lectured in Gabriel's class, one of her past professors. Students learned about how her Viterbo experiences led her to where she is now. Additionally, they got some advice from someone who used to be an undergraduate at Viterbo.

Maier says that some of her most memorable times were presenting research she performed with professors Gabriel and Lee at a conference and traveling to Costa Rica with professors Wright and Alfieri. Additionally, "Viterbo's strong science and math curriculum, faculty-student mentorship, and research opportunities were stellar," she said. "Equally important were the values, friendships, as well as wisdom of the Franciscan Sisters of Perpetual Adoration, all of which helped form me as a person. Cumulatively, these set me up for success professionally and personally."



Nearing the end of her time at Viterbo, Maher was interested in using her scientific knowledge to improve patient lives, at that point focusing on epidemiology and mathematical modeling. Maher went on to graduate school at the Mayo Clinic Graduate School of Biomedical Sciences. In her early days there, her concentration shifted slightly to basic science and the translational space—the space between the lab bench and the bedside of the patient.



Jed Barton



Rebecca Crecente

SPOTLIGHT ON ALUMNI CONTINUED

Updates from recent grads



KAYLA KACZOROWSKI

Class of 2022

While here as an undergraduate, Kayla explored the relationship between substance use disorders in parents and children through her research. Now, Kayla is gaining her master's at Viterbo and plans to become a clinical mental health counselor and substance abuse counselor.



ZACH EARLL

Class of 2021

For a year after graduation, Zach worked at the Community-University Health Care Center in Minneapolis with a diverse array of dental patients, included those who were uninsured. He is now a first-year student at his top choice school, University of Minnesota-Twin Cities, in their dental program.

These days, Maher is an ophthalmology medical science liaison (MSL) at Genentech (a member of the Roche group) in Rochester. She provides medical education, clinical trial support, pipeline presentations, and conference updates to retina specialists in her six-state territory. This includes working with physicians in rural South Dakota as well as urban physicians named to the list of "Top 100 Ophthalmologists" in the world.

Advice she would like every student to know :

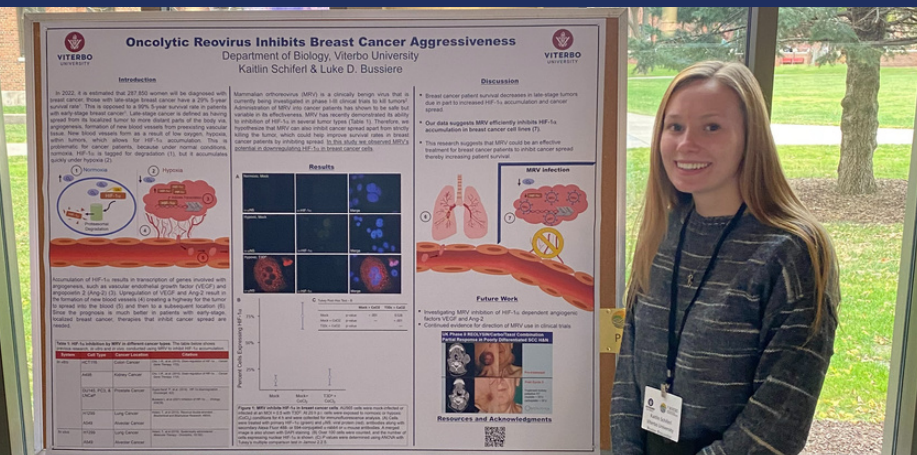
"You don't have to have it all figured out. Know what you enjoy and apply your skills to fill that need. Four-year plans are helpful, but it's also important to be open. If an opportunity comes up that wasn't in your four-year plan, but it aligns with where you're at, you should do it."

-Elizabeth Maher

In addition to her work for Genentech, Maher has been involved in Brainwaves, a neuroscience education program for kids, and has been a presenter and attendee at a multiple myeloma support group. With Maher's commitment to service and excellence, she is no stranger to being recognized. Genentech has honored Maher for her work with an Innovator Award and an External Impact Award. She also earned a Best Poster Award at an international oncolytic virotherapy conference.



CURRENT STUDENT RESEARCH



SURF PROJECTS

Students in our programs are trained to think scientifically through a three-course sequence that asks them to design, conduct, and present a research project of their own design. One way for students to complete these projects is to participate in the Summer Undergraduate Research Program (SURF).

Biology major Kaitlin Schiferl is one of sixteen Viterbo students who were selected last year for the university's SURF program. Faculty member Charlie Lawrence leads SURF and Professor Luke Bussiere served as her mentor.

She designed her project to investigate the use of viruses to treat cancer. This research involves cultivating breast cancer cells, infecting them with reovirus, and testing them for evidence of downregulation of two specialized proteins that cancer cells produce to help them metastasize.

Kaitlin's summer research was featured this summer in the La Crosse Tribune.

Other students who participated in SURF and are not listed in the right column are Amanda Tranberg, Alexis Oestreich, and Mira Kendall.

"The hypothesis is if we detect a decrease in the RNA encoding both of those proteins, it could inhibit the spread of cancer," Schiferl said.

PRESENTATIONS

Many of the SURF students presented at the 7 Rivers Symposium. They researched and presented on the following:

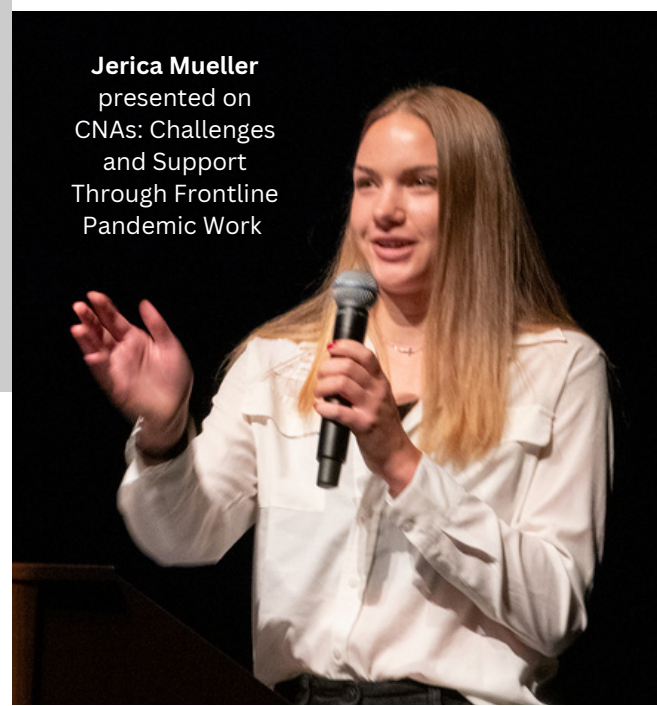
"CNAs: Challenges and Support Through Frontline Pandemic Work at the 7 Rivers Research Symposium"
Jerica Mueller

"Effect of the Environment on BDNF Induced Plasticity of Chronically Stressed Rats"
Alexander Boardman

"Oncolytic Reovirus Inhibits Breast Cancer Aggressiveness"
Kaitlin Schiferl

"Olmesartan and Captopril's Promising Potential in Diminishing Fibrotic Activity of Radiation Induced Pulmonary Myofibroblasts"
Easton Halverson

"Assessing a Bone Marrow Derived Dendritic Cell Line's Ability to Process and Present an Antigen"
Tristan Meighan



CURRENT STUDENT UPDATES

AUBREY STREIF

Class of 2023

Dual Degree Program: Doctor of Chiropractic

Aubrey is our first student to enroll in our dual partnership program with Palmer College of Chiropractic. The 3+ program allows students to obtain a Bachelor of Science in Biology degree from Viterbo and a Doctor of Chiropractic (DC) from Palmer College of Chiropractic in less time than would be required if students separately applied to both programs.

Aubrey explained, "I heard about the 3 +3 program with Palmer through the professors at Viterbo. I entered my freshman year with the goal of becoming a chiropractor but didn't know if I could make it happen. My professor at the time, Dr. Alfieri, informed me about the program and I immediately was ready to sign."

“ I hope to start out working with another chiropractor to establish myself. Then I plan to eventually open a business of my own. I am very excited to add DC to my name in 3.5 years. **”**



BELLA BRUNTON

Class of 2026

Health Science Scholarship Winner

Bella visited Viterbo University last year as a high school senior. While on campus, she participated in the Health Science Scholarship day and won a scholarship. Now as a first-year student at Viterbo, she is pursuing her interest in biology. Bella has played a key role in the department by setting up science labs and monitoring open labs in the evening. Bella recently led experiments at a middle school outreach night. With other STEM students, students did hands-on outreach activities like slime, elephant toothpaste, and mini-volcanos.

A few other fun facts about Bella is that she is an identical triplet and is from Monroe, Wisconsin. We are glad she picked Viterbo with her uplifting attitude and well-aligned interests.

"Discovering there are so many different opportunities for me to be successful as a biology student has made me even more excited about my education at Viterbo" says Bella.



SYMPOSIUM RECAPS

In the past year, we held the first two Agnes W.H. Tan Science symposiums. These symposiums are made possible through a gift from Agnes W.H. Tan, a chemistry alumna. This gift is making it possible to hold a biochemistry related symposium each academic year.

The inaugural symposium held in March 2022 gained much attention with the help of the D.B. Reinhart Institute for Ethics in Leadership. They brought in Erin Brockovich as part of their lecture series the night before the symposium to discuss what's in our drinking water. Erin has been working with communities since her first lawsuit to make changes in water and water policy. The Friday keynote Jeannie Purchase shared her stories as an engineering PhD candidate who is helping remove lead from pipes in Washington D.C. Additional experts joined by being part of a panel, breakout sessions, and booths.

In September 2022, the symposium focused on who is being left behind in health care. Despite increased longevity over the past 100 years, speakers explained where gaps still exist and what participants can do to help shrink these health disparities.

Registration for both events was over 500 people and included Viterbo students, faculty, community members and local schools. Sessions were held in person and online.



Speakers from the "Who is being left behind in health care" themed symposium stop at the photo booth.



Jeannie Purchase gives a keynote address to open the inaugural symposium on water.

UP NEXT

We are currently planning our next symposium for September 2023. We are exploring the brain as a topic and we are leaning towards focusing on **traumatic brain injuries (TBI)**.

PRE-HEALTH ADVISORY BOARD

A continued thank you to Viterbo's Pre-Health advisory board for their support:

Paul Molling, DO
Mayo Clinic Health System

Jacob Erickson, DO - Sports Medicine
Mayo Clinic Health System

Adam Zart, PharmD
Pharmacy Manager, Walgreens Co.

Christina O'Neill, DVM
Companion Animal Care Center in Winona

Melissa Naylor, PA-C
Mayo Clinic Health System

Averi Kotnour, PA-C
Gundersen Health System

Chris Suilmann, PT
Twin Cities Orthopedics in Burnsville, Minn.

Randall Nall, MD
Gundersen Health System Residency

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