

BIOMEDICAL SCIENCES

**AWARDS CELEBRATION
2025**



Welcome

Debra Burg, Interim Chair,
Biomedical Sciences Department

Awards

**Excellence in a Discipline: Undergraduate -
Biomedical Sciences**

Emma Long

**Excellence in a Discipline: Undergraduate -
Microbiology**

Koby Fraaza

**Excellence in a Discipline: Graduate -
Master of Health Science in Biomedical Sciences**

Janina Mayers

Steve Hecht Memorial Scholarship

Joseph Zylla

Duke Tanaka Jr. Anatomy Scholarship

Gabriele Peters

Ilene I. Schooley Biomedical Sciences Scholarship

Takwa Ghennewa, Abdikeni Sharif, Jamie Valkenburg

Biomedical Sciences Graduates of Distinction

Chelsea Aiken	Alyson Furstenau
Carter Bechtel	Nadia Gniatczyk
Jacqueline Belkin	Haarika Hebbur
Macy Bisballe	McKenna King
Jarrett Budde	Emma Long
Olivia Camara	Daan Louwerse
Daniela De Andrade	Annabel Maag
Nicole Denz	Erin McLean
Jaclyn Driesenga	Daniel Nichols
Colton Dysart	Connor Veen
Koby Fraaza	Elise Voglewede

Closing Remarks

Cynthia Thompson,
Chair BMS Awards and Scholarships Committee

Acknowledgements

Debra Burg, Donovan Anderson, Sheri Greene and Katie Haynes
Faculty for their nominations, support of students, and participation

BMS Awards and Scholarships Committee:

Brian Kipp, Cris Reed
and Cynthia Thompson

Excellence in a Discipline

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Excellence in a Discipline - Undergraduate Biomedical Sciences 2025 Awardee:

Emma Long



Major: Biomedical Sciences

Awards/Scholarships: BMS Excellence in a Discipline Award, BMS Graduate of Distinction, Dean's List, P. Douglas Kindschi Undergraduate Research Fellowship, Academic Conference Fund, Frederik Meijer Honors College

Research: Under faculty mentor, Dr. Laudicina, I have investigated how different stressors may impact the human pelvis, such as pregnancy and gut volume. I have presented this ongoing research for 2 years at Student Scholars Day. We are currently working on a publication to the Humans journal. We also conducted research on precocial and altricial pelvis comparisons and traveled to Baltimore, MD to present at the American Association of Biological Anthropology Symposium.

Clinical Experience: I have worked as a phlebotomist and lab technician at Biolife, a plasma donation center for nearly 2.5 years. I have also shadowed family physicians and emergency medicine physicians in rural Michigan towns.

Service: I have been a volunteer at Kids Food Basket in Kent County since 2021, helping prepare meals for underprivileged children in schools. I have also been a volunteer at MomsBloom in Grand Rapids since 2023, helping aid mothers in their postpartum journey.

Future Plans: In fall of 2025, I will be attending medical school to pursue my dream of becoming an obstetrician.

Excellence in a Discipline

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Excellence in a Discipline - Undergraduate Microbiology 2025 Awardee:

Koby Fraaza



Majors: Biomedical Sciences & Microbiology

Minor: Biology

Awards/Scholarships: 2x GLIAC Commissioner's Award, Cross Country and Track All-Academic, Cross Country All-American, Cross Country All-Region, BMS Graduate of Distinction

Research: I evaluated the impact of glucose concentration on endothelial cell progression through the cell cycle with Professor Kurjiaka. I conducted independent research overseen by Prof. Thomas studying the ferritin gene (ftn) in E.coli, and how up-regulation or deletion of the gene influences the metabolic activity of the cells in iron deficient media after having been grown in iron rich media.

Clinical Experience: I worked at Armor Physical Therapy as a physical therapy technician where I assisted patients with exercises and treatment. I am currently at Olivia's Gift where I work alongside individuals with different -abilities, helping them achieve their goals while promoting dignity, independence, and a safe, healthy environment. I oversee medication administration, personal care, and all aspects of daily living.

Service: I lead a Bible Study for the cross country team where we gather weekly. As a group, we have worked with Family Life Centers in Hudsonville to help with the facilities and organization of donations.

Future Plans: I plan to apply to medical school in the upcoming application cycle.

Excellence in a Discipline

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Excellence in a Discipline - Graduate

Master of Health Science in Biomedical Sciences

2025 Awardee:

Janina Mayers



Major: Master of Health Science in Biomedical Science (M.H.S)

Awards/Scholarships: GVSU Graduate School Outstanding Publication Award, Graduate Assistant - Movement Science Department, Research Assistant - Biomedical Science Department, HBCU/HSI Consortium Scholarship

Research: My research in Dr. Maria Kwesiga's lab focuses on a unique model system to study the biocompatibility of metals for potential cardiovascular disease treatments. My thesis looks at the effect of a potential biodegradable stent material, Molybdenum, on the cell viability and metabolic activity of macrophages in both physiological and inflammatory conditions.

Future Plans: I plan to pursue my Ph.D. in Biomedical Science at Maine Health Institute for Research through the University of Maine.

Scholarships

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Steve Hecht Memorial Scholarship 2025 Awardee:

Joseph Zylla

Joseph Zylla was unable to attend the awards ceremony. However, the Biomedical Sciences Department wishes to acknowledge Joseph as the awardee of the 2025 Steve Hecht Memorial Scholarship.

Scholarships

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Duke Tanaka Jr. Anatomy Scholarship 2025 Awardee:

Gabriele Peters

Majors: Diagnostic Medical Sonography
& Clinical Exercise Science

Awards/Scholarships: Duke Tanaka
Anatomy Scholarship, Frederik Meijer Op-
portunity Scholarship, GVSU Award for Excellence Scholar-
ship, and the Dean's List



Research: I assisted in researching the effects of seden-
tary behavior on blood flow in the lower extremity in the Sit
Less and Move More (SLAMM) lab led by Dr. Nicholas Ler-
ma. Ultrasound was used to analyze the effect of sedentary
behavior on endothelial response of the popliteal artery
through the use of flow mediated dilation (FMD).

Clinical Experience: I have had the opportunity to be a
student sonographer at Beacon Health in South Bend, IN,
as well as Corewell Health and Trinity Health in Grand Rap-
ids, MI. I have gained valuable experience in abdominal,
vascular, breast, gynecological, and obstetrics sonography
in both inpatient and outpatient settings.

Service: I volunteered with the Mary Free Bed Rehabili-
tation college volunteer program, assisting physical and oc-
cupational therapists. I have also served on the executive
board for GVSU clubs including the Diagnostic Medical So-
nography Student Organization (DMSSO), Pre-Radiologic
and Imaging Sciences Student Organization, and the Cross
Country and Track Club. Through those student organiza-
tions, I have participated in various volunteer opportunities
around campus and the Grand Rapids area.

Future Plans: I plan to begin my career as a Registered
Diagnostic Medical Sonographer at a West Michigan hospi-
tal. Eventually, I would like to specialize in obstetrics or
musculoskeletal ultrasound.

Scholarships

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Ilene I. Schooley Biomedical Sciences Scholarship 2025 Awardee:

Takwa Ghennewa

Majors: Biomedical Sciences & Pre-Grad Health Profes-
sions

Awards/Scholarships: GV Laker Scholarship, Thomp-
son Working Family Scholarship, and Scholarship America

Research: I engaged in research to investigate the effects
of CDC20/CDH1 knockdown on regeneration in planaria un-
der the mentorship of Dr. Christians. Using RNA interfer-
ence, we suppressed CDC20 expression and analyzed re-
generation following decapitation. Our findings suggested
that CDC20 knockdown did not impair APC function, indicat-
ing the involvement of alternative regulatory mechanisms.
Additionally, I worked with Zach DeBruine on training neural
networks to predict cell types from gene expression data.
Although technical issues arose, I adapted by writing an es-
say on the applications and future of long-read sequencing
technology. These experiences deepened my understanding
of molecular and computational biology and reinforced my
interest in interdisciplinary biomedical research.

Service: MLK Day of Service and Solidarity, volunteered
at Crash Landing Cat Shelter

***Ilene I. Schooley Biomedical Sciences
Scholarship 2025 Awardee:***

Abdiken Sharif

Major: Biomedical Sciences

Awards/Scholarships: Ilene I. Schooley Biomedical Sciences Scholarship, The Robert and Ellen Thompson Scholarships, Dean's List, GV Working Families Grant.



Research: I have conducted research in two areas: PFAS toxicity and gene annotation. As part of the MSU BRUSH Summer Research Program, I studied the effects of PFAS and PAHs on Gap Junction Intercellular Communication using YFP cells, focusing on the cytotoxicity of GenX through Neutral Red assays. This research highlighted GenX's toxicity at high concentrations and reinforced the real-world impact of PFAS contamination in drinking water. Additionally, in the Pathways Project, I worked on gene annotation of insulin signaling in *Drosophila*, identifying and analyzing genes involved in insulin regulation under the guidance of Dr. M. Burg. By comparing sequences across species and utilizing bioinformatics tools, I contributed to understanding metabolic regulation and evolutionary conservation of insulin-related genes.

Clinical Experience: I am medical assistant at an urgent care facility, performing a variety of clinical and administrative tasks to support patient care.

Service: I am a passionate advocate for cultural diversity and community engagement, which is why my involvement with A Glimpse of Africa has been such a rewarding experience. I have had the honor of volunteering for this impactful organization, which seeks to educate, celebrate, and share diverse African cultures. Through my work, I contributed to programs that supported African immigrants and refugees in West Michigan, promoting cultural understanding and addressing systemic barriers. One of my proudest moments was being recognized as Volunteer of the Year.

Future Plans: I would like to attend medical school and, after medical school, become a doctor without borders.

***Ilene I. Schooley Biomedical Sciences
Scholarship 2025 Awardee:***

Jamie Valkenburg

Jamie Valkenburg was unable to attend the awards ceremony. However, the Biomedical Sciences Department wishes to acknowledge Jamie as the awardee of a 2025 Ilene I Schooley Biomedical Sciences Scholarship.

Chelsea Aiken



Majors: Biochemistry & Microbiology

Minor: Biology

Awards/Scholarships: Badge in Homebrewing, GVSU Award for Excellence, Dean's List, Biomedical Sciences Graduate of Distinction

Research: I have done two years of microbiology research under Dr. Aaron Baxter. The goal of this project was to identify the effect of polar mutations in *Salmonella* specific regions of the genome.

Service: I have one academic year of service and volunteering experience under the Mu Epsilon Delta business fraternity. I also volunteered in the microbiology sections of the Science Olympiad Regional Conference.

Future Plans: After a brief gap year, I want to attend the Biomolecular Science Gateway doctoral program offered at Michigan State University. I hope to obtain my Ph.D. in molecular biology.

Carter Bechtel



Major: Biomedical Sciences

Awards/Scholarships: Biomedical Sciences Graduate of Distinction, Dean's List (all semesters), Mu Epsilon Delta Distinguished Individual, GV Award for Excellence Scholarship.

Clinical Experience: Since January 2023, I have worked with Dr. Sylvester and several students to study the effects of commercial red beetroot supplements on coronary and pulmonary porcine arteries. While beetroot is marketed to improve circulation and lower blood pressure, further research is needed. As first author, I presented our research at GVSU Student Scholars Day and the 2024 Van Andel WMRUGS.

Research: I have worked as a nurse technician at Mary Free Bed Rehabilitation Hospital for the past two years, assisting nurses with patient care, including monitoring vital signs and helping with daily activities. Additionally, I worked as an optometry technician for one year, performing eye tests and managing patient records.

Service: I founded the Alzheimer's Awareness Club during my sophomore year at GVSU, leading fundraising efforts that raised thousands for the Alzheimer's Association and organizing volunteer events at local nursing homes. As volunteer chair for Mu Epsilon Delta and Pre-Med Club, I organized many volunteer events such as volunteering at Exodus Place, Mary Free Bed, and Versiti blood drives.

Future Plans: I plan to attend medical school and become either a Physical Medicine and Rehabilitation Doctor or an Ophthalmology Physician.

Jacqueline Belkin



Major: Biomedical Sciences

Awards/Scholarships: Biomedical Sciences Graduate of Distinction; Cook Leadership Academy; Structured Learning Assistant Facilitator of the Month; Deans List - all semesters

Research: I worked with Professor Babasola Fateye to design the project "Using Photoelicitation to Understand the Relationship Between Coping Mechanisms and Gender in College Students." We utilized surveys to examine how photoelicitation can explore coping mechanisms among college students of different genders. I presented this research at the 2024 GVSU Student Scholars' Day.

Clinical Experience: I have worked or volunteered in several medical offices, including those of an ophthalmologist, otolaryngologist, and hematologist-oncologist.

Service: I have volunteered with a physician at a community health clinic that provides free care to underserved populations. Additionally, I have volunteered at William Beaumont Hospital's Geriatric Day Room, assisting elderly patients, and at Kid's Food Basket in Grand Rapids. I have also served as a volunteer academic tutor.

Future Plans: My goal is to become a physician, continue on with medical research, and practice clinical medicine.

Macy Bisballe



Major: Biomedical Sciences

Awards/Scholarships: Dean's List, GVSU Award for Excellence

Research: In Heidi Lempradl's lab at Van Andel Institute, I had the opportunity to study the effects of maternal nutrition on offspring phenotypes.

Clinical Experience: I've job shadowed naturopathic doctors at both Freshwater Wellness and Black River Acupuncture and Integrative Wellness.

Service: I have volunteered at Community Food Club, Meals on Wheels, Kids Food Basket, a variety of 5k run/walks, Operation Christmas Child, GVSU MI Gear Up, women's basketball camps, and Mayers' Grand River Clean Up. Additionally, I tutored in the Chemistry Success Center for a year, served on the Leadership Committee for Grand Valley women's basketball team, and have served the Lord's people on mission trips to Honduras and Jamaica.

Future Plans: I plan to obtain my Masters in Clinical Dietetics from Grand Valley and become a registered dietitian where I can apply a holistic approach to nutrition for the community!

Graduate of Distinction

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Jarrett Budde

Major: Biomedical Sciences

Awards/Scholarships: GVSU: Biomedical Sciences Graduate of Distinction Award, Organic Chemistry Award, Dean's List (x3) MCC: Award for Excellence in Chemistry, President's List (x5)

Research: At Grand Valley I have spent substantial time working in Dr. Sylvester's lab. Our focus is on the vasoactivity of red beetroot in porcine coronary arteries. Our most recent project involves the extraction of vasoactive substances from our source samples. Additionally, I spent some time at Muskegon Community College conducting research involving the changes in brain activity associated with transcendental meditation.

Clinical Experience: For the past year and a half, I have worked as an ER technician at Trinity Health, Grand Haven. Prior to beginning my current position, I was employed for two years as a CNA at a long-term care facility. I have also spent time shadowing physicians in a number of specialties, from emergency medicine to orthopedic surgery.

Service: I have completed two volunteer trips through a club called Alternative Breaks. Additionally, for the past year, I served as the Director of Member Engagement for the same club, organizing and participating in 14 different local volunteer events.

Future Plans: After graduation, I plan to study for and take the MCAT. I hope to begin medical school in 2026 after a gap year.



Graduate of Distinction

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Olivia Camara

Major: Biomedical Sciences

Certificates: Certificate in Medical and Health Humanities

Awards/Scholarships: GVSU Award for Excellence, GVSU Faculty Scholarship, Dean's List every semester at GVSU

Research: I conducted research with Dr. Aaron Baxter exploring the unknown functions of genes in the Salmonella Typhimurium genome.

Clinical Experience: I have worked as a medical assistant for Ascension and have worked and as a phlebotomist for Corewell Health.

Service: I have volunteered at Kids Food Basket and at Trinity United Methodist Church Community Ministries Program.

Future Plans: I plan to start medical school in July at Michigan State University's College of Osteopathic Medicine in East Lansing



Daniela De Andrade



Major: Biomedical Sciences

Minor: Biology

Awards/Scholarships: Biomedical Sciences Graduate of Distinction, Kaplan MCAT Scholarship, and Dean's List.

Research: I have participated in Dr. Tim Evans' lab, where we focused on collecting molecular and morphological data to determine the phylogenetic relationships among Bromeliaceae. I also conducted research with Dr. Cynthia Thompson, which focused on analyzing satellite data to measure the deforestation at Brownsberg Nature Park in Suriname over two decades. Lastly, I have been in Dr. Amy Russell's lab, analyzing mitochondrial DNA from bats' fecal samples to identify species.

Clinical Experience: I have been working as a Behavioral Health Technician at the University of Michigan-Health West since July of 2024. Additionally, I have shadowed physicians in the areas of pediatric neurosurgery, emergency medicine, and neonatology.

Service: I have been a tutor for General Chemistry, Organic Chemistry, and Psychology at the GVSU Tutoring and Reading Center. I have volunteered at Butterworth Hospital, Helen Devos Children's Hospital, and at Fountain View Assisted Living. I have also worked as a Rep4 Midwest Summit Mentor and am currently a teaching assistant for the BMS 309 Cadaver Lab. Additionally, I founded and am the current president of Multicultural Health Advocates, a club dedicated to minorities and international students interested in pursuing a healthcare career.

Future Plans: This fall I will be attending the Anatomy and Cell Biology Master's Program at Wayne State University. After graduating, my goal is to attend medical school and help serve underserved communities to address healthcare disparities.

Nicole Denz



Major: Biomedical Sciences

Minor: Chemistry

Awards/Scholarships: Biomedical Sciences Graduate of Distinction, Dean's List for all semesters, Director's Award Laker Marching Band, GV Award for Excellence, Frederik Meijer Honors College

Research: I have conducted research in Dr. Matthew Hart's lab at GVSU where we have worked to synthesize diphenyl ureas to act as possible antibiotics against tuberculosis. This project is aimed to combat antibiotic resistant strains of TB. I have also been involved in biologically testing these molecules. Additionally, I have worked in Dr. Kevin Theis's lab at Wayne State's School of Medicine helping to characterize anaerobic bacteria within the vaginal microbiome. Characterizing these organisms could allow for better solutions to treating infections and pregnancy complications.

Clinical Experience: I shadowed doctors in the emergency department at DMC Detroit Receiving and in the operating room at St. Mary Mercy, Livonia.

Service: I have served the Laker Marching Band as a Drum Major, Section Leader, and Council President. I have spent time with the band at service events such as Relay for Life and Rally with the Rapids. I have also volunteered with Corewell Health as a compassion in action volunteer on the med-surg unit.

Future Plans: I will be attending medical school this fall and plan to specialize in surgery.

Jaclyn Driesenga



Major: Biomedical Sciences

Minor: Spanish

Awards/Scholarships: Biomedical Sciences Graduate of Distinction, Cook Leadership Academy Independent Initiative Fund, GVSU Dean's List (every semester), GV Award for Excellence Scholarship, Julie Genzink Memorial Scholarship, Hamilton Community Schools Faculty Scholarship, Frederik Meijer Honors College

Research: I worked with Dr. Laura Stroik to investigate microfossils from Uinta Basin, Utah to learn how the Middle Eocene Climatic Optimum, a hyperthermal event, has impacted vertebrate faunal communities. I presented this information with my lab members at WMRUGS at Van Andel Institute and Student Scholar's Day. Additionally, I worked with Dr. Lourdes Yen to complete my Honors Senior Project, which emphasized integration into foreign cultures while studying abroad. This led to a partnership with International Studies Abroad to create media material for prospective study abroad students.

Clinical Experience: I obtained my CNA license to work at Resthaven, an assisted living facility, and as a home health aide. I currently work at the Meijer Heart Center as a Critical Care Nursing Technician in the Cardiovascular Recovery Unit.

Service: I continue to volunteer at Revive and Heart to Heart, local nonprofit thrift stores whose donations help community members. I organized a toothbrush and toothpaste drive for Hamilton Community Schools, which gave 1,200 students oral care kits. Additionally, I have utilized my university breaks to volunteer for hurricane disaster relief efforts in Florida and food bank services in Guatemala. During my semester abroad in Spain, I volunteered at a hospital and was a Teacher's Assistant at a bilingual school.

Future Plans: Upon graduation, I will continue pursuing my Master of Public Health at GVSU. After that, I hope to matriculate into medical school.

Colton Dysart



Major: Biomedical Sciences

Minor: Chemistry

Awards/Scholarships: General Chemistry Award, Dean's List, Biomedical Sciences Graduate of Distinction

Research: Under the supervision of Dr. Andrew Lantz from GVSU's Department of Chemistry, I have been studying the application of isotachophoresis (ITP) as a method for separating and quantifying *Escherichia coli* and *Lactobacillus casei* in mixed cultures. I have also conducted research at Van Andel Institute in Dr. Tim Triches' laboratory, researching epigenetic alterations in Multiple Myeloma patients.

Clinical Experience: I have shadowed at Helen DeVos Children's Hospital, where I observed open heart surgeries, intensive care unit rounds, and cardiac catheterization procedures.

Service: For two years, I have tutored BMS-related classes at the Tutoring and Reading Center (TRC) and been an SLA facilitator and Peer Mentor for CHM 109, 115, and 231. During my last two semesters, I have also been a research ambassador for the Office of Undergraduate Research and Scholarship.

Future Plans: I will be applying to medical school this spring with interests in pediatrics and oncology. During my gap year, I will work at Van Andel Institute full time as a Research Technician in the Triche laboratory, continuing my research on the epigenetic alterations in Multiple Myeloma patients.

Alyson Furstenau



Major: Biomedical Sciences

Minor: Chemistry

Awards/Scholarships: GVSU Award of Excellence

Research: I worked with Dr. Bergman in his lab for four years where I assisted with data analysis for a masters student's project and conducted my own research studying the effects of 17 beta-estradiol on crayfish. I presented at SSD for three years and attended the SICB conference in January of 2024.

Clinical Experience: My first clinical job was a resident aide position at Cambrian Senior Living and Memory Care Center. I later transitioned into a nurse technician role through Corewell Health in the resource center where I rotated between floors at both Butterworth and Blodgett Hospitals. I am now a nurse technician in the Neurology Critical Care Unit at Butterworth Hospital and have worked there for almost two years.

Service: I volunteered as an English as a Second Language (ESL) tutor through the Literacy Center of West Michigan for one year. I also served as a Naturalization tutor through the Thrive Refugee Program for six months. During this time, I assisted at the Mel Trotter Ministries' Shower Truck where we brought hot showers, clean clothes, toiletries, and breakfast to those experiencing homelessness.

Future Plans: I will be attending the College of Human Medicine at Michigan State University starting in August of 2025.

Nadia Gniatczyk



Major: Biomedical Sciences

Awards/Scholarships: Biomedical Sciences Graduate of Distinction, I Am Grand Valley Award, Frederick Meijer Honors College, and Deans List

Clinical Experience: For the past two years, I have worked as a Nursing Assistant at Corewell Health William Beaumont University Hospital on the CPCU unit. This position allowed me hands-on experience in patient care, communication, and medical procedures. I also had the pleasure to shadow numerous doctors in the following disciplines: dermatology, pediatrics, emergency medicine, and gynecology.

Service: For the past four years I have been a volunteer at the kids food basket making meals for local children in need. Additionally, I volunteered for a local women's shelter in Grand Rapids assisting the woman and children with basic necessities. I have also volunteered with many other organizations including Sheldon Meadows Nursing Home, Spectrum Health, and as a tutor for Learn To Be .

Future Plans: After graduation, I will be taking a gap year to complete some research before applying to medical school.

Graduate of Distinction

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Haarika Hebbur

Majors: Biomedical Sciences (B.S), Cell and Molecular Biology (M.S)

Awards/Scholarships: GVSU Dean's List -all semesters, GVSU International Scholarship, Student Scholar's Day, Reach Higher Showcase, Biomedical Sciences Graduate of Distinction, Frederik Meijer Honors College, Student Research Spotlight in AWRI: A Year in Review, and Literature Review published on Scholar Works.

Research: I worked with Dr. Sarah Hamsher studying diatom growth rates in different light and nutrient broth to find the best lab setting for conducting further experimentation. We presented the data on Student Scholar's day. I worked with Dr. Eric Synder and Dr. Peter Wampler to collect and analyze water chemistry and macroinvertebrates to better understand ecological and health risks. We presented this research at Reach Higher Showcase. I continued to work with Dr. Hamsher and Dr. Snyder to test the symbiotic relationship between diatom species and mussel populations to better understand diatom location and how to manipulate in vitro conditions. During this project, I wrote a literature review synthesizing over thirty scientific publications. I currently work with Dr. Kristin Renkema investigating immune system responses to melanoma and to test the hygiene hypothesis.

Clinical Experience: As a certified phlebotomy technician, I did an externship at Trinity Health, assisting the phlebotomist with complicated blood draws and conducting venipuncture draws individually. I am also a NHA Certified EKG technician. I have shadowed Internal Health and Pharmacology physicians at Corewell Health and volunteered at Mary Free Bed's Spinal Cord Clinic.

Service: I am a tutor for all the major BMS classes at the Tutoring Center and a teaching assistant for the Honors Live. Learn. Lead. course. I have volunteered at numerous Versiti blood drives, Mary Free Bed Rehabilitation Center, Science Olympiad Events, and other community events.

Future Plans: I will continue to work with Dr. Renkema, focusing on various immunological testing methods and analyzing oncogenes and tumor-suppressor genes to study the link between melanoma and immunology as a part of my master's thesis. After graduation I hope to further my education by pursuing an M.D and PhD, specializing in oncology.



Graduate of Distinction

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McKenna King

Majors: Biomedical Sciences and Sociology

Minor: Aging and Adult Life

Awards/Scholarships: Biomedical Sciences Graduate of Distinction, Dean's List, GV Laker Scholarship, Lakers Go Abroad Scholarship, and Alpha Kappa Delta Honors Society.

Research: With Dr. Laudicina as my mentor, I had the opportunity to combine my interests in aging and anatomy by investigating how aging affects articular cartilage at the knee joint. I presented my findings at Student Scholars' Day.

Clinical Experience: I have worked as a CNA at Suncrest Nursing Home in Lapeer, Michigan. Currently, I work as a CNA at Covenant Hospital in Saginaw, Michigan on a medical-surgical floor. This has allowed me to expand my knowledge in the medical field and work with underserved populations. I also have shadowed DO's in Internal Medicine, Obstetrics, and Gynecology.

Service: I have been on the Executive Board for Pre-Med Club as the co-President and Financial Officer. I have also volunteered at the Community Ministries Program working with kids to help teach math, science, and art through enrichment activities. I became a cadaver lab teacher assistant last semester, and now I am a cadaver lab tutor. Additionally, I joined other clubs on campus: Students for Aging and Gerontology Enrichment, Hunger and Homelessness, and Women in Medicine and Science. I have also volunteered for Dog's Day Out at West Michigan Humane Society, Care Team writing hospice letters, Kids' Food Basket, and Blodgett Hospital on a medical-surgical floor.

Future Plans: I am awaiting final decisions from medical schools through the EAP process. My goal is to become a Doctor of Osteopathic Medicine and work in underserved communities throughout Michigan. In the meantime, I plan to continue my clinical and volunteering experiences following graduation.



Graduate of Distinction

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Daan Louwerse

Major: Biomedical Sciences

Minors: Cell & Molecular Biology, Chemistry

Awards/Scholarships: Graduate of Distinction Award, Dean's List, GVSU International Scholarship, Women's Soccer Scholarship, All-American Third Team 2024 award, All-Midwest Region First Team 2024 award, GLIAC All-Conference Second Team 2024 award, GLIAC All-Conference First Team 2023 award, Midwest Regional Championship 2023 and 2024.

Research: I have conducted research in Dr. Martin Burg's lab. We were focused on studying the influence of N-acetylhistamine (AANATL-7) gene mutations on the behavior of *Drosophila melanogaster*. I was able to participate in two separate experiments, investigating the effect of N-acetylhistamine on mating behavior as well as localizing the uptake of N-acetylhistamine in AANATL-7 mutated flies during feeding. I also had the opportunity to present at the 2025 Student Scholars' Day.

Service: I have volunteered at the Compassionate Heart Ministries, David's House Ministries, and my BELONGings, collected clothes and soccer gear with the Aspiras Foundation for children in the Dominican Republic, helped organize the Special Olympics for soccer fans with disabilities, and helped arrange the "100 kids' vs the soccer team" game to promote soccer and sports for youth within the community.

Future Plans: After graduation, I plan to take a gap year during which I want to do an internship in the biomedical sciences field as well as continue to invest in my soccer career. In 2026, I plan to start my Masters in Infection and Immunity at the University of Amsterdam in the Netherlands. Eventually, I aim to pursue a research career in the Immunology field.



Graduate of Distinction

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Annabel Maag

Major: Biomedical Sciences

Minor: Psychology

Awards: Biomedical Sciences Graduate of Distinction, GV Lak-er Scholarship, Paul and Dianna Johnson STEM Pathways Scholarship, Ilene Schooley Biomedical Science Scholarship, Thompson Working Family Achiever Scholarship, Phi Kappa Phi Honor Society, 2024 Student Summer Scholars (S3) Award, 2024 S3 Ott-Stiner Endowed Fellowship in Chemistry and Natural Sciences, Dean's List (5/5 semesters)

Research: I worked in Dr. Martin Burg's lab and presented "Using Hdc-Gal4 Hybrid Genes to Identify Cells Expressing Hdc and Containing Histamine in *Drosophila melanogaster*" (Student Scholars Day 2023). I did research in Dr. Ruijie Liu's lab and presented "Analyzing the fatty acid metabolism gene expression in diabetic mouse hearts" (Student Scholars Day 2024) and "Identifying the key amino acids with DUSP8 protein that determine its activity" (2024 MSUMID-SURE, 2024 GVSU Summer Showcase, 2024 Van Andel Institute WMRUGS Research Conference, Student Scholars Day 2025). I am an author on "ERK1/2 inhibition alleviates diabetic cardiomyopathy by suppressing fatty acid metabolism" in the *Frontiers in Bioscience-Landmark Journal*.

Clinical Experience: I began my clinical experience by learning to care for my sister, Aliviah, after she suffered a stroke. I continued my clinical experience as a Recreational Aide and then worked as a Patient Attendant at the U of M Hospital (summer 2023), volunteered in the Brain Injury Unit at Mary Free Bed Rehabilitation Hospital, and currently work as a Behavior Technician with children who are diagnosed with autism.

Service: I worked as a virtual elementary math tutor through GVSU K-12 Connect (2 years). I currently volunteer as a cross-cultural partner and babysitter through Treetops Collective which works with refugees placed in Kent County. I was the previous president for the GVSU Partners in Health Engage team, an organization working to provide high-quality healthcare globally. I have also volunteered through the American Red Cross Club.

Future Plans: I will continue to apply to medical school and find opportunities to stay engaged in research.



Erin McLean



Major: Biomedical Sciences

Minor: Psychology

Awards/Scholarships: Modified Summer Scholar Grant, GVSU Award for Excellence, GV Grant, Michigan Competitive Scholarship, Elizabeth C. Heath Scholarship, Patricia M. Scholarship, GVSU Dean's List (x4), Frederik Meijer Honors College, Caring for the Community Student Life Award with the GVSU Alzheimer's Awareness Club

Research: I worked in Dr. Ruijie Liu's lab where I studied the effects of ERK1/2 on the development of diabetic cardiomyopathy in type I and type II diabetic mice. As an MS3 Summer Scholar, I treated groups of mice with a drug, U0126, to inhibit ERK1/2 and examine its impact on cardiac remodeling and the expression of key fatty acid metabolism. I presented this research through multiple posters and oral presentations. This research was recently published in the Frontiers in Bioscience-Landmark journal.

Clinical Experience: I was a patient care tech on the Ortho, Neuro, and Trauma Unit at U of M Health-West hospital for over 2 years. I also shadowed multiple MDs, DOs, and NPs in a variety of specialties.

Service: I was a Compassion in Action volunteer at Blodgett Hospital (1 year). I am President of the GVSU American Red Cross Club and organize and lead blood drives and various volunteer events in the community. I was on the executive board for the GVSU Alzheimer's Awareness Club and an active member in the Pre-Med Club.

Future Plans: I am applying to Medical Schools in the hopes of matriculating in 2026. During my gap year, I plan to further develop my clinical skills in my current role and get more involved in the community through volunteering.

Daniel Nichols



Major: Biomedical Sciences

Awards/Scholarships: Dean's List, Biomedical Sciences Graduate of Distinction

Research: I have conducted research under Dr. Sylvester, studying the vasoactive effects of Beta vulgaris on coronary and pulmonary arteries. I also did research under Dr. Burg in CMB 440, where I utilized bioinformatics tools such as FlyBase, BLAST, and the UCSC Genome Browser to annotate and compare insulin-signaling pathway genes across Drosophila species as part of the GEP PATHWAYS project.

Clinical Experience: I have volunteered in Mary Free Bed Rehabilitation Hospital's Inpatient Adult department, worked as a greeter at Health Bridge Post-Acute Rehabilitation, and served as an aide at Mission Point of Nursing and Physical Rehabilitation.

Service: I have worked as a private math and science tutor for grade school students, volunteered with Complete Restoration & Cleaning Services removing mold-damaged drywall and insulation, and served as an assistant coach for the Whitehall High School soccer team.

Future Plans: After graduation, I plan to apply to medical school, aiming to matriculate in 2026.

Connor Veen



Major: Biomedical Sciences

Minor: Chemistry

Awards/Scholarships: Biomedical Sciences Graduate of Distinction, General Chemistry Award, Faculty Scholarship, Dean's List all semesters, American Legion Post #47 Academic Scholarship, Grandville High School Class of '59 Scholarship.

Research: I have worked with Dr. Capodilupo researching the protein GAP-43 and its involvement in the progression of Alzheimer's Disease. Using techniques such as 2D gel electrophoresis and protein staining, we aim to quantify the amount of GAP-43 in Alzheimer's affected brains as compared to non-Alzheimer's brains. I was also fortunate to work with Dr. Jay Rook, a Colorado physician, on cerebral arteriovenous malformations and their origins. Through this project, I gained experience writing a clinical case report. I have presented on both of these research projects at various venues, including The Van Andel Research Institute, The Michigan Society for Neuroscience, The GVSU Art of Science of Aging Conference, and Student Scholars' Day.

Clinical Experience: For the past 3 years, I have worked as an EMT with Life EMS, providing emergency medical care in Kent and Ottawa counties.

Service: I am a founding E-board member of the GVSU Alzheimer's Awareness Club and have served as both Research Officer and Secretary. In the past 2 years, we have raised a significant amount of money for the Alzheimer's Association and have organized fundraising events such as 5k runs and informational seminars. We also organize volunteer opportunities at nursing homes in support of the residents. I have also been volunteering at the American Legion Post #47 for the past 5 years.

Future Plans: After graduation, I plan to take a gap year to obtain more clinical, volunteer, and job shadowing experiences, as well as take the MCAT. After that, I want to attend medical school and specialize in a field related to cardiology, anesthesia, or critical care.

Elise Voglewede



Major: Biomedical Sciences

Awards/Scholarships: Grand Valley Award for Excellence Scholarship, Dean's List Recipient, Biomedical Sciences Graduate of Distinction, Lakeland Foundation Scholarship, and Believe in Yourself Scholarship

Research: As the Undergraduate Research Assistant for the Vertebrate Microfossil Lab, I used a dissecting microscope to search for and meticulously analyze fossils, participated in researching various methods for sediment breakdown to ensure increased efficiency of the process, categorized and documented fossil finds using Excel to organize results and trained new lab members.

Clinical Experience: I volunteered in Corewell Health Lakeland's Emergency Department for 2 years. I have also worked as a Nursing Technician at Corewell Health Lakeland's Critical Care Unit. Currently, I am working as a Patient Care Technician at University of Michigan Healthwest's outpatient OB/GYN office. In these roles, I've focused on rooming patients, assisting with activities of daily living, and performing point of care testing to ensure high quality patient care.

Service: As the Co-President of Mu Epsilon Delta pre-healthcare fraternity, I participated in a variety of volunteer organizations including Kids' Food Basket, Exodus Place, and the Alzheimer's Association Club. I also currently volunteer regularly as a Crisis Counselor with Crisis Text Line.

Future Plans: During my gap year, I will be working as a Medical Assistant at University of Michigan Healthwest's OB/GYN outpatient office. Next year, I plan to attend Physician Assistant school.

**Congratulations from the
Biomedical Sciences Department
on your accomplishments and
best of luck in your
future endeavors!**

