BIOMEDICAL SCIENCES

2022 Awards Celebration



Introductory Statement

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Welcome students, faculty and families. It is my great pleasure to acknowledge our newest class of Graduates of Distinction in the Biomedical Sciences. Among the students being awarded the Graduates of Distinction honor are students that challenged and invigorated the Biomedical Sciences in their time with us. These Graduates of Distinction comprise a collective of extraordinary individuals, accomplished graduates, and mature thinkers.

This year's Biomedical Sciences Graduates of Distinction were nominated by faculty members because they set themselves apart from their peers, either in the classroom, in the research lab, in service to the university, or in all likelihood a combination of the three. In the opinion of the faculty, these students in Biomedical Sciences have set the academic standard for the rest of Grand Valley to follow. In fact, recognition as one of our Graduates of Distinction in the Biomedical Sciences is an exceptional achievement as they represent the top 2% of the Biomedical Sciences major, and top 0.1% of the University. Being recognized as a Graduate of Distinction in the Biomedical Sciences is a truly exceptional achievement.

The Department of Biomedical Sciences at Grand Valley plays a significant role in the educational experience of many students. Biomedical Sciences typically has one of the larger populations of undergraduate students enrolled within our program, with around 1000 students seeking Bachelor of Science degrees. In fact, many of our faculty met the Graduates of Distinction here today in one or more of our many classes. These students stood out among their peers by not only achieving a very high academic standard, but also by engaging with the faculty and the course materials.

In addition to classes, many faculty interacted with these students in some of our nationally-recognized research programs. These scholarly research activities are a key element of our continued student success at Grand Valley. Over the years, our research programs have become essential sources for high-impact experiential

Introductory Statement Continued

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learning and valuable research experiences for our students. Furthermore, our research foci on anatomy (e.g. comparative, evolutionary, functional and plastination), physiology (e.g. cardiovascular, endocrinology, molecular, neuroscience, reproductive and thermoregulatory), microbiology, (e.g. bacteriology, fungal, infectious disease, immunology and parasitology), and nutrition (e.g. aging, food design, and public health food access), support a new generation of Grand Valley graduates committed to the public good. Our research programs and students have direct impacts upon societal issues associated with global problems, health issues, agricultural impacts, and even the future of college education in the Biomedical Sciences. The Biomedical Sciences deals with the very processes of life, which in turn informs and guides our students in their future practices and professions.

Graduates of Distinction, we hope that you take the education that you received at Grand Valley and use it to further develop and integrate that education throughout your careers and lives. You have worked very hard to reach this graduation day and will continue to work hard well after you leave Grand Valley. As hard as you've worked though, please recognize that you have been fortunate to have excellent faculty teachers and research mentors, as well as supportive parents and family members (be sure to thank them) that encouraged you along your journey. Please take a moment to appreciate those that helped you along the way, because as it is often said, "it takes a village."

We feel privileged to have had the opportunity to educate, guide, and work with you all over these past challenging years. And we have confidence that these Graduates of Distinction will use their acquired education and skills to make positive and even significant impacts on others and the world.

Congratulations to our 2022 Graduates of Distinction!

Daniel A. Bergman, Ph.D. Chair and Professor, Biomedical Sciences

Ceremony Program

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Awards

Biomedical Sciences Excellence in a Discipline - Undergraduate

Tina Nguyen

Microbiology Excellence in a Discipline - <u>Undergraduate</u>

Paige Wilson

Biomedical Sciences Excellence in a Discipline -Graduate

Nicholas Bunda

Duke Tanaka Jr. Anatomy Scholarship

Garrett Falk Sydney Payne

Ilene I. Schooley Biomedical Sciences Scholarship

Jared Bengston

Ceremony Program

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Biomedical Sciences Graduates of Distinction

Ayah Ayesh
Ryan Blackmer
Jacob Bommarito
Ashley Brown
Sidney Caudell
Christopher Dabish
Connor Daly
Ethan Dunn
Sarah Ecenbarger
Michael Edozie
Matthew Eisenhardt
Carter Filchak
Trey Heliin
Madeline Kernahan
Robert Lackey

Savannah Leist
Olivia Ozark
Michael Pellizzari
Esabella Powers
Luke Redlon
AnnaLee Rose
Morgan Rose
Cazmir Sarnacki
Tess Scheidel
Evan Sidebotham
Allison Soffa
Maxine Taylor
Zachary Timmer
Taylor Wesley

Excellence in a Discipline

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Biomedical Sciences Excellence in a Discipline -Undergraduate 2022 Awardee: Tina Nguyen

Tina graduated in December 2021 with a Biomedical Science major and a Human Rights minor. She was also a member of the Frederik Meijer Honors College and has been accepted into a Physician Assistant program. Tina is passionate about advocacy for marginalized and vulnerable groups and she has chosen a career in healthcare as means to improve the quality of life for those in her community. Tina began volunteering with the Grand Rapids Red Project when she was 16 years old and by the time she was a freshman at Grand Valley, she became certified as an HIV test counselor, which allowed her to provide HIV and HepC testing and to evaluate and recommend HIV prevention strategies that were aligned with the individual's needs and risk factors. She also offered her expertise by volunteering in Kampala, Uganda in August 2019, where she provided HIV testing as part of a medical mission trip. In addition to her stellar academic work, Tina also has over 4000 hours of patient care experience, including her work as a neuro ICU nurse technician beginning in the summer of 2020 at the height of the COVID pandemic. Tina values sustainability, community, and social progress, and one of her strengths is to advocate for the vulnerable by looking for the unique needs and character of the individual to provide the most suitable solutions. She lives her values and has demonstrated them through her participation in four Alternative Break trips, her volunteer work and her diligence in patient care. For all these reasons, I am pleased to nominate Tina Nguyen as an outstanding candidate for Excellence in the Discipline and a wonderful representative of our major.

Deb Burg Associate Professor Biomedical Sciences

Excellence in a Discipline

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Biomedical Sciences Excellence in a Discipline -Undergraduate 2022 Awardee:

Tina Nguyen



Major: Biomedical Sciences

Minor: Human Rights

Awards/Scholarships: 2021 BMS Graduate of Dis-

tinction and GVSU Award for Excellence

<u>Clinical Experience:</u> My past clinical experiences include working as a lead certified nurse assistant, an inpatient phlebotomist, a Neuro ICU nurse technician, and a travel certified nurse assistant.

<u>Service:</u> I am involved with Alternative Breaks, Asian Student Union, Pre-PA Club, and Vietnamese Cultural Association. I volunteer as a certified HIV test counselor at Grand Rapids Red Project

<u>Future Plans:</u> I will be attending Western Michigan University's Physician Assistant Program in Fall 2022.

Excellence in a Discipline

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Microbiology Excellence in a Discipline Undergraduate 2022 Awardee: Paige Wilson

Paige joined my research lab in 2019 and she diligently pursued research experience in the midst of uncertainty during the beginning of the COVID-19 pandemic. My lab investigates the role of microbial experience on innate and adaptive immune cell development, and Paige continuously displayed critical thinking skills while working on a complex project. Paige had numerous roles in the lab over time, including effectively mentoring new students. She was always engaged and prepared, and her thoughtful guestions benefited not only Paige, but others in the lab. I have witnessed these same traits as she has assisted me in BMS 213 (Laboratory in Microbiology) as a teaching assistant. Paige efficiently balances a busy schedule with her coursework, volunteering, lab research, and employment at Spectrum Health Helen Devos Children's Hospital. All of her experiences have shaped her to be a phenomenal student, scientist, and person.

Kristin Renkema, PhD Assistant Professor Biomedical Sciences

Excellence in a Discipline

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Microbiology Excellence in a Discipline -Undergraduate 2022 Awardee:

Paige Wilson

Major: Microbiology

<u>Awards/Scholarships:</u>
Thompson Working Family Scholar, 2021 BMS Graduate of Distinction



Research: I conducted research with Dr. Kristin Renkema regarding how microbial experience impacts tumor immunology in a novel mouse model and with Dr. Kathryn Haley studying mechanisms of metal acquisition and detoxification in Staphylococcus lugdunensis.

<u>Clinical Experience:</u> I have worked in healthcare for over four years with positions as Certified Nurse Assistant, Nurse Technician, Medical Scribe, and Laboratory Assistant and have extensive training in pediatric emergencies.

<u>Service:</u> I volunteered for three years as a small group leader for 6th-8th grade girls at Ada Bible Church and was a middle school leader for a Grand Rapids Mission Trip. I also volunteered with One Heart Source in Cape Town, South Africa teaching middle schoolers about basic health topics.

<u>Future Plans:</u> I will be attending George Washington University Fall 2022 for a Master of Public Health in Global Health Epidemiology and Disease Control and plan to further my education with a PhD or MD after my MPH.

Excellence in a Discipline

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Biomedical Sciences Excellence in a Discipline Graduate 2022 Awardee: Nicholas Bunda

Nick has been highly successful in both his academic and research pursuits. As his mentor, I have been incredibly impressed with Nick's tenacity in the lab; he approaches complex immunology questions at a level I normally associate with upper-level PhD graduate students. Nick's thesis proposal revolves around the hygiene hypothesis and its impact on the immune system: does being too "clean", especially as children, result in an impaired immune system? Nick is particularly interested in whether microbial experiences influence anti-tumor T cell-mediated immune responses. Nick is an outstanding scientist and critical thinker. He is driven and independent, as is evident by his ability to set and meet notable yet realistic goals. Nick is one of those extremely rare mentees that I wish I could keep long-term in my lab; he has proven to be a valuable asset that his peers and I will miss when he graduates. As a person, Nick is mature, authentic, resilient and driven to succeed. He is also patient, caring, and self-reflective. I am absolutely confident that Nick's intelligence, drive, accomplishments, and personality will enable him to thrive in the next phase of his journey—medical school!

Kristin Renkema, PhD Assistant Professor Biomedical Sciences

Excellence in a Discipline

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Biomedical Sciences Excellence in a Discipline Graduate 2022 Awardee:

Nicholas Bunda

<u>Majors:</u> Biomedical Sciences (M.H.S.) and Legal Studies (B.S.)

Awards/Scholarships:

GVSU Presidential Research Grant (2021), General Chemistry Award from the Chemistry Department (2020)

Research: My thesis research explores how microbial exposure impacts anti-tumor immunity in a "dirty" mouse model of B16 melanoma. This work was conducted in the lab of Dr. Kristin Renkema whose lab focuses on how environmental signals shape the immune response to infection and cancer.

Clinical Experience: I worked as a Nursing Technician in the Emergency Department of Spectrum Health-Blodgett Hospital from 2020-2021

<u>Service:</u> I love to pack sack suppers or work on the farm at Kids' Food Basket of Grand Rapids, and I've also volunteered in the lunch room at Ada Vista Elementary School.

<u>Future Plans:</u> I will begin medical school in the Fall of 2022. While pursuing my medical degree, I hope to continue my research in the field of cancer immunology and immunotherapy. Ultimately, I hope to serve the greater West Michigan community as a physician.

Scholarships

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Duke Tanaka Jr. Anatomy Scholarship 2022 Awardee:

Garrett Falk

Major: Clinical Exercise Science

Awards/Scholarships: Thompson

Working Family Scholarship, GV Laker Scholarship,

and the Dean's List

Clinical Experience: I have worked as a certified nursing assistant for nearly a year at a skilled nursing facility and have had numerous shadowing opportunities including shadowing a physician's assistant in both urgent care and family medicine settings and a physical therapist in an outpatient setting.

Service: I have volunteered in my hometown for "Stuff a Cop Car" during which the Charlotte Police Department collects donations for local food banks. I have also volunteered at the Charlotte Area Recycling Authority assisting community members to recycle waste. In addition, I have volunteered at the Refugee Education Center in Kentwood and helped decorate lunch bags for children in need with the Pre-Physical Therapy Club. Finally, I have served on three church mission trips to help refugees and individuals living in impoverished communities in Kentucky.

<u>Future Plans:</u> I plan on applying to physician assistant programs this upcoming summer. I also plan on getting more clinical experience while completing my bachelor's degree next year.

Scholarships

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Duke Tanaka Jr. Anatomy Scholarship 2022 Awardee:

Sydney Payne



Major: Psychology

Minors: Adult and Aging Life

<u>Clinical Experience:</u> I have volunteered at Mary Free Bed rehabilitation hospital observing under various Occupational therapists.

<u>Service:</u> I volunteered at Mary Free Bed for three semesters. One of my jobs was to clean the therapy equipment after each use to ensure a healthy and sanitary environment for patients. I also volunteered at Exalta Health on Make a Difference Day and helped sort old health related documents. During the COVID era, I volunteered for K12 connect and tutored elementary age kids via zoom.

<u>Future Plans:</u> I plan to go onto graduate school in pursuit of a doctoral degree in occupational therapy.

Scholarships

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Ilene I. Schooley Biomedical Sciences Scholarship 2022 Awardee:

Jared Bengston



Major: Biomedical Sciences

Awards/Scholarships:

Ott-Stiner Endowed Fellowship in Chemistry and Natural Sciences, Student Summer Scholars Grant

Research: I have done research with genomic annotation of contig13 located in Drosophila kikkawai. I am also investigating ADC-73 which is the most prevalent ADC β-lactamase in Acinetobacter baumannii.

<u>Clinical Experience:</u> I am a licensed EMT-B and have worked as an ER Tech at Mercy Hospital Muskegon for the past four years

Service:

High School Ministry Health Officer, Adult Special Needs Camp Health Officer, High School Adventure Camp Team Lead/ Wilderness First Responder/ EMT-B, and Middle School Adventure Camp Team Lead/ Wilderness First Responder/ EMT-B

<u>Future Plans:</u> After finishing out my years at GVSU, I plan on applying to medical school.

Graduate of Distinction

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Ayah Ayesh



Major: Biomedical Sciences, Frederik Meijer Honors College

Minors: Chemistry, General Business

Awards/Scholarships: I Am Grand Valley Award, Excellence in Organic Chemistry Award, Grand Valley Award for Excellence, State Competitive Scholarship, Grand Finish Grant, GV Third Year Grant

Research: Cultural Competence on the Care of Muslim Women Patients

<u>Clinical Experience:</u> ED Medical Scribe, Child Life Specialist Volunteer, Spectrum Health General Volunteer, West Michigan Vaccine Clinics Scribe/Volunteer

<u>Service:</u> West Michigan Health Careers Pipeline Program Mentor, GVSU K-12 Connect Tutor, Human Anatomy Lab Teaching Assistant, Pre-Med Club Volunteer/Event Coordinator, Chemistry tutor, Islamic School Teacher, Mask-Making for a local senior home and Helen DeVos Children's Hospital, Science Olympiad Event Supervisor

<u>Future Plans:</u> I plan to attend medical school in the fall of 2023 with hopes of becoming a physician to combat health disparities and to undo their roots in social, cultural, and economic inequalities.

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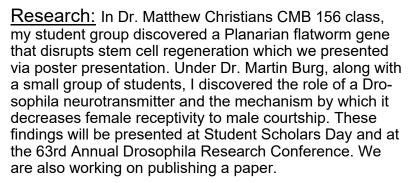
Ryan Blackmer

Major: Biomedical Sciences

Minor: Chemistry

Awards/Scholarships: Award for Excellence, Award of Distinction Presidential Scholarship, Dean's List, and from Life EMS Ambulance Company:

Star of Life Award for Exceptional Patient Care



Clinical Experience: Since 2020, I have worked for Life EMS Ambulance Company as a Basic Emergency Medical Technician. I also do standby medical support at local events as well as interfacility medical transport. Additionally, I shadowed board-certified internal medicine & pediatric physician Dr. Michael App, M.D., M.P.H.

<u>Service:</u> I volunteer as a member of the National Ski Patrol at the Cannonsburg Ski & Ride Area and as a scenario role-player for the Grand Valley Police Academy. I also volunteered for my local food bank and for the Region 12 Science Olympiad Tournament hosted by Grand Valley State University.

<u>Future Plans:</u> After graduation, I plan to take a gap year to focus on work and medical school applications. Then, I hope to attend medical school in order to pursue a Doctor of Medicine postgraduate degree.

Graduate of Distinction

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Jacob Bommarito



Major: Biomedical Sciences

Minor: General Business

<u>Awards/Scholarships:</u> The Malinoski Family Pre-Dental Scholarship, GV Award for Excellence, GV Faculty Scholarship

Research: I conducted a research on genes impacting the peripheral nervous system project using Drosophila melanogaster with Dr. Sass.

<u>Service:</u> I have volunteered for GVSU Alternative Breaks, the Holland Free Dental Clinic as a dental assistant and the GVSU Pre-Dental Club.

<u>Future Plans:</u> I will attend The University of Michigan School of Dentistry this upcoming school year.

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Ashley Brown

Major: Biomedical Sciences

Minor: Healthcare Ethics

Certifications: Certificates in Medical Health Humanities and a Foundational American Sign Language Badge



<u>Awards/Scholarships:</u> Benjamin A. Gilman International Scholarship, GVSU Thompson Working Family Achiever Scholarship, Military Order of the Purple Heart Scholarship, Dean's List: Winter 2020, Fall 2020, Fall 2021

Research: I participated in research performing behavioral and statistical analysis of Marmoset scent marking patterns related to foraging behaviors as well as research during my study abroad trip in London, England which focused on collecting data from human skeletal short bone remains to decipher sex.

<u>Clinical Experience:</u> My clinical experience includes volunteering at the Ann Arbor Veterans Administration Hospital in the Hematology-Oncology Infusion Clinic and volunteering at the Helen DeVos Children's Hospital with Child-Life Specialists.

<u>Service:</u> I am the president of the GVSU service club Chemocare and have volunteered on two service trips with GV Alternative Breaks.

Future Plans: I plan to apply to a Speech Language Pathology Master's program, work to gain an American Sign Language Interpreters license and possibly a Teaching English as a Foreign Language certificate to teach abroad.

Graduate of Distinction

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Sidney Caudell



Major: Biomedical Sciences

<u>Awards/Scholarships:</u> Dean's List, GV Award for Excellence, Grand Finish Grant, Mary/ Wilhelm Seeger Scholarship, Organic Chemistry Award

<u>Clinical Experience:</u> Since my freshman year of college, I have worked as a caregiver. During the pandemic, I was a nursing assistant at Beaumont Hospital on a medical surgical unit and job shadowed an OBGYN and Pulmonologist.

<u>Service:</u> I volunteer at the Lennon Pregnancy Center, a non-profit organization in Detroit. This past year, I have served as the President of Pre-Med Club. I have also enjoyed tutoring science courses and being a Transitions Leader for the past two summers.

<u>Future Plans:</u> In July, I will attend medical school at Wayne State School of Medicine. My future aspiration is to work in the field of women's health with underserved populations in Detroit.

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Christopher Dabish



Major: Biomedical Sciences

Research: GV Award for Excellence, I Am Grand Valley Award

<u>Service:</u> I am grateful to have been able to act as president and be a part of the Kids In Motion Club while at GVSU. I have also been able to spend time volunteering at a children's group home.

<u>Future Plans:</u> I plan on attending medical school after earning my bachelor's degree. Currently pediatrics is appealing, but with an open mind and a plethora of experiences ahead, only time will tell where this journey will lead me.

Graduate of Distinction

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Connor Daly



Majors: Biomedical Sciences and Chemistry

<u>Awards/Scholarships:</u> GV Faculty Scholarship, GV Award for Excellence

<u>Research:</u> I have completed biochemistry research under Dr. Paul Cook. We have been investigating the bacterial pathway responsible for resistance to the antibiotic fosfomycin.

<u>Clinical Experience:</u> I have work experience as a pharmacy technician.

<u>Service:</u> Pre-Pharmacy Association, Theta Chi Fraternity

<u>Future Plans:</u> I plan on attending the University of Michigan College of Pharmacy this upcoming fall.

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Ethan Dunn



Major: Biomedical Sciences/ Pre-Medical

Minor: Chemistry

<u>Awards/Scholarships:</u> I have made the Dean's List every semester and was awarded the General Chemistry Award my freshman year.

<u>Research:</u> During the summer I was a lead researcher with Dr. Shabani where we tested the effect of genetics on drug addiction. This was a joint research project with Oregon Health and Science University.

<u>Clinical Experience:</u> Currently, I am working in North Ottawa Community Hospital Emergency room where I am a unit tech. I help nurses care for patients, provide wound care, and perform EKGs on patients.

<u>Service:</u> I volunteer with K12 Connect. I have also worked as a GVSU covid tester and volunteered at multiple blood drives.

<u>Future Plans:</u> In the future I plan on going to medical school to become a pediatrician or emergency doctor.

Graduate of Distinction

Page 23

Sarah Ecenbarger



Majors: Biomedical Sciences and Vocal Music,

Frederick Meijer Honors College

<u>Awards/Scholarships:</u> Vocal Music Scholarship, Award for Excellence Merit Scholarship, Faculty Merit Scholarship, Linn Maxwell Keller Professional Vocalist Experience Award Endowment

Research: At Van Andel Institute, within the Heidi Lempradl lab, I worked on a project titled "The effect of high-sugar diet on maternal nutritional state and embryo development in Drosophila".

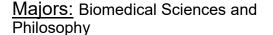
<u>Clinical Experience:</u> I work as an Ophthalmic Technician at Ecenbarger Eye Care.

<u>Service:</u> I volunteer on the planning committee for the West MI Chapter of the Crohn's and Colitis Foundation and I volunteer my singing within the community.

<u>Future Plans:</u> This summer I am performing and participating in the Musical Theatre studio at the Trentino Music Festival in Mezzanno, Italy. I plan to start medical school in the Fall of 2021 or 2022 as a hopeful gastroenterologist or laryngologist.

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Michael Edozie





in General Chemistry Award, Excellence in Organic Chemistry Award, Excellence-in-a-Discipline Award (Philosophy), GV Award for Excellence Scholarship, GV Presidential Scholarship

Research: I work at the Van Andel Institute as a laboratory aid in an Epigenetics Lab. I am currently advancing a project that involves identifying predictive markers for weight loss post bariatric surgery by utilizing the metabolic and transcriptomic profile of the patient cohort.

<u>Clinical Experience:</u> I have worked at Hope Network as a rehabilitation technician for three and a half years.

<u>Service:</u> I volunteered as an ESL tutor for the Literacy Center of West Michigan. I also volunteer currently as a hospice companion for Kindred Hospice.

<u>Future Plans:</u> After graduation, I am taking a gap year during which I plan to volunteer for 6 months while I am applying to medical schools. In January of next year, I plan on beginning a six month tour of South America and Europe, traveling to a new country each month. In Fall 2023, I hope to ultimately start medical school.

Graduate of Distinction

Page 25

Matthew Eisenhardt



Major: Biomedical Sciences

Minor: Psychology

<u>Awards/Scholarships:</u> GV Presidential Scholarship, GV Award for Excellence, St. Clair Foundation Fund Scholarship, Frederik Meijer Honors College

<u>Clinical Experience:</u> I recently worked as a Physical Therapy Technician at Hulst Jepsen Physical Therapy where I led patients through a variety of flexibility and strength exercises, learned how to effectively communicate with and welcome patients, and balanced multiple patients at once.

<u>Service:</u> Resident Assistant at GVSU, Teaching Assistant in the Frederik Meijer Honors College, Community Representative on GVSU RA Council, Delivery Driver for Meals on Wheels of Western Michigan, Food Truck Volunteer for Feeding America

<u>Future Plans:</u> I look forward to applying to medical school for admission in the fall of 2023. Over the next year, I plan on attending the GVSU Scribe Academy and becoming a medical scribe in addition to continuing volunteer opportunities to give back to the West Michigan community.

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Carter Filchak



Major: Biomedical Sciences

<u>Awards/Scholarships:</u> GV Award for Excellence, GV Presidential Scholarship

Research: I have done research with Dr. Baxter in the Microbiology department examining Salmonella with the hope to reduce incidence of food borne illness in the United States.

<u>Clinical Experience</u>: I have been a Nursing Technician at Spectrum Health for one year. I have gained valuable experience treating and caring for patients in a clinical setting.

<u>Service:</u> I volunteered at Urban Roots which provides produce for underserved communities within Grand Rapids. My duties included tending to compost piles and equipment maintenance.

<u>Future Plans:</u> I am hoping to attend medical school in the fall of 2023 at Michigan State College of Human Medicine.

Graduate of Distinction

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Trey Heliin



Major: Biomedical Sciences

Minor: Chemistry

<u>Awards/Scholarships:</u> Grand Valley Award For Excellence, GVSU Organic Chemistry Award, Grand Finish Grant. Dean's List

<u>Clinical Experience:</u> I had the opportunity to shadow two primary care physicians at Roscommon Community Health Center. For the past year, I have worked as a Direct Care Worker at Green Acres of Allendale, an assisted living facility.

<u>Service:</u> I volunteer at Feeding America West Michigan, a food bank in Comstock Park, MI. I also serve at the Elk's Lodge of Grand Rapids. At GVSU, I volunteered with the K12 Connect Program as a tutor and mentor. I also serve as the president and treasurer of GVSU's Pre-SOMA club.

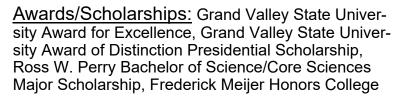
<u>Future Plans:</u> I am currently in the process of applying to osteopathic medical schools in the hopes of pursuing a specialty in either primary care or orthopedic surgery. I would like to become a Doctor of Osteopathic Medicine so I can incorporate osteopathic manipulative treatment into my practice.

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Madeline Kernahan

Major: Microbiology

Minor: Chemistry



<u>Service:</u> I was an environmental health intern in the Environmental Health Laboratory at the Kent County Health Department. I was responsible for conducting bacterial tests and assisting with chemical and metal analysis of water samples.

As a student in the Honors College, I was able to be an Honors College Mentor for two years, helping freshmen become acquainted with Grand Valley and conducting events during welcome week.

I have volunteered in a Michigan Medicine Microbiology and Immunology Laboratory at the University of Michigan. I performed various laboratory practices including PCR, tissue digestion, and protein and DNA quantification.

<u>Future Plans:</u> In the Fall of 2022, I will be attending graduate school for my Master of Public Health degree. My emphasis will most likely be on Global Health Epidemiology and Disease Control. My ultimate goal is to be a field or infectious disease epidemiologist, working alongside the community to promote health equity for all.

Graduate of Distinction

Page 29

Robert Lackey



Major: Biomedical Sciences

Awards/Scholarships: Michigan Covid-19 Response Service Ribbon, Michigan Active State Service Ribbon, Armed Forces Service Medal, Silver Medal in Siciliano's Market Homebrew Competition with my CMB 350 - Foundations of Brewing group

<u>Clinical Experience:</u> I have been working as an Emergency Medical Technician throughout my time in school and have worked with many health departments doing Covid-19 doing vaccine administration, reconstitution, transportation, and testing.

<u>Service:</u> I volunteered with the Michigan Army National Guard to assist health departments across Northern Michigan and the Upper Peninsula with Covid -19 vaccine administration. I am an active member of the Laker Vets chapter of the Student Veterans of America.

<u>Future Plans:</u> I plan on pursuing a master's degree in either Bioinformatics or Computational Biology.

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Major: Biomedical Sciences

<u>Awards/Scholarships:</u> GV Award for Excellence, Grand Finish Grant, Dean's List

<u>Clinical Experience:</u> I have worked for 3 years as a physical therapy technician performing ultrasounds, helping set up modalities, and taking patients through exercises. I worked for a year as a CNA in a memory-care unit assisting residents with all activities of daily living.

<u>Service:</u> I have volunteered for Alpha Phi Omega, Mu Epsilon Delta, and Best Buddies. My favorite community service opportunities have been through 20 Liters Filter Build, Kids' Food Basket, and making/distributing dinners to homeless in Grand Rapids.

<u>Future Plans:</u> I will be applying to medical school in 2023 in hopes of one day becoming a surgeon. I also plan on maintaining my focus on volunteer work.

Graduate of Distinction

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Olivia Ozark



Major: Biomedical Sciences

Awards: Thompson Family

Working Scholarship, Grand Valley State University Presidential Scholarship, Ruth Chamberlain Global Scholarship, Grand Valley State Award of Excellence, Phi Kappa Phi Freshman Honoree, Grand Finish Grant, Ilene I. Schooley Biomedical Sciences Scholarship, Benjamin A. Gilman Scholarship

Research: I participated in research with Dr. David Linn in GVSU's BMS Department. We examined the neuroprotective effect of drugs that selectively activate a specific type of nicotinic acetylcholine receptor on retinal ganglion cells from the pig eye.

<u>Clinical Experience:</u> I worked as a resident aide at Fountainview Assisted Living in Coopersville, MI during my freshman year. I currently work as a Patient Care Technician at University of Michigan Health-West in Wyoming, MI.

<u>Service</u>: I currently volunteer at LOVE I.N.C., a non-profit Christian organization and at Kindred Hospice as a companion volunteer.

<u>Future Plans:</u> I will be applying to medical schools this summer with the hope of starting in Fall of 2023. My goal is to become a primary care physician and practice in an underserved area of Michigan where medical care is not readily available.

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Michael Pellizzari



Major: Biomedical Science

Minor: Chemistry

Awards/Scholarships: Thompson Scholar

Research: I have done research with Dr. Paul Cook regarding the structural and functional characterization of the Bacilithiol Transferase A enzyme and will be continuing research with him this coming summer. I am currently doing research with Dr. Debra Burg and Dr. Martin Burg in which we are attempting to detect and analyze the Drosophila histidine decarboxylase enzyme.

Clinical Experience: I worked as a resident aid at an assisted living home specializing in Alzheimer's and dementia care for two summers. I am currently working at Metro Health Hospital as a patient care technician.

<u>Service:</u> I am a part of Kids in Motion.

<u>Future Plans:</u> I plan to take a gap year and obtain more volunteer hours. Although I have many direct-patient hours in an assisted living home setting, I plan to gain hours in a hospital setting at Metro. I will be applying to medical school this June.

Graduate of Distinction

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Esabella Powers



Majors: Biomedical Sciences and Chemistry

<u>Awards/Scholarships:</u> GV Faculty Scholarship, GV Award for Excellence, Grand Finish Grant, Dean's List, and Kessler Scholarship

Research: I performed research with Dr. McBane and Dr. Schaertel during which I investigated the pressure broadening coefficients from the collisions between carbon monoxide with neon or nitrogen.

<u>Clinical Experience:</u> I worked at Pine Rest Christian Mental Health Hospital as a Nurse Technician.

<u>Future Plans:</u> I plan to attend graduate school to pursue a doctorate in chemistry in the fall of 2023. My career goal is to become a chemistry professor at a university where I can teach in the classroom and instruct in a research lab.

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Luke Redion



Major: Biomedical Sciences

Minor: Chemistry

Awards: Kaplan MCAT Scholarship, Senior Airman

Below the Zone

Research: I work in the lab of Dr. Steensma (MD) at Van Andel Institute on the determination of energetic phenotypes for NF1 mutant MCF-7 breast cells to uncover therapeutic treatment options in breast cancer as well as previous work in the lab of Dr. Bergman (PhD) studying the effects of Nonylphenol stimulation on cray-fish aggression.

<u>Clinical Experience:</u> Prior Medic for the United States Air Force with ~7000 hours in emergency departments performing tasks such as suturing, medication administration, splinting and phlebotomy.

Service: USAF, Premed club

<u>Future Plans:</u> I plan to attend medical school beginning the summer of 2023 followed by an emergency medicine residency. I then eventually plan to take part in a pediatric EM fellowship and work here in Michigan as a pediatric emergency physician.

Graduate of Distinction

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AnnaLee Rose



Major: Biomedical Sciences

<u>Awards/Scholarships:</u> Swim with Mike Scholarship (A scholarship awarded to athletes who have become disabled from an illness or an accident.)

<u>Clinical Experience:</u> I completed a shadowing opportunity in a hospital for a month in Barcelona, Spain and I currently work at Helen Devos Children's Hospital.

<u>Future Plans:</u> I plan on taking a gap year and then attend physician assistant school.

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Morgan Rose



Major: Biomedical Sciences,

Emphasis in Pre-Med

Minor: Psychology

Awards/Scholarships: Dean's List Fall (2018, 2019, 2020, 2021), Murray International Travel Scholarship, Gilman Scholarship, Fund for Education Abroad Scholarship, Upperclass Honor Scholarship, Nat Cohen Scholarship, Grand Finish Grant

Research: I have done research with Dr. Pearl in which I investigated male infertility by using mice testes treated with atrazine, a possible endocrine disrupting compound, to see how spermatogenesis is affected.

<u>Clinical Experience:</u> I shadow OB/GYNs in clinic and during surgeries when I am home for breaks from GVSU.

<u>Service:</u> I have volunteered at Momsbloom where I helped take care of moms, their newborns and families. I also have volunteered at Cook Leadership Academy, Premed Club, Red Cross Club, and Omicron Delta Kappa Honor Society.

<u>Future Plans:</u> My future plans are to take a gap year and then following my gap year, attend MSU College of Osteopathic Medicine.

Graduate of Distinction

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Cazmir Sarnacki

Major: Biomedical Sciences

Minor: Psychology

Awards/Scholarships:

Aramark Scholarship, Dean's List (5)



Research: I have been involved in BMS research into the presentation and effects of histamine in Drosophila alongside Dr. Martin Burg. Our research team will be presenting at the 63rd Annual Drosophila conference in San Diego in the neural circuits and behavior panel. We will be presenting our abstract titled "Impact of histamine deficiency on accessory gland secondary cell differentiation, persistence, and post-mating responses in Drosophila melanogaster."

<u>Clinical Experience:</u> I have clinical experience as a volunteer in the DeVos Children's Hospital emergency room. I also have experience working as a pharmacy technician.

Service: I have become the president of the Lions Club's International GV Chapter, hosting fundraisers, vision projects and other service events. This organization helps to bring younger individuals like myself closer to community service, which has provided lifelong meaning and direction for my life. Additionally I have been a participant on two GVSU Alternative Spring Break service trips.

<u>Future Plans:</u> My career goal is to become a primary physician, as I enjoy problem solving, scientific inquiry and forming relationships with patients. Currently, I am pursuing medical school and have had interviews at Wayne State University as well as Oakland University.

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Tess Scheidel



Major: Biomedical Sciences

Frederick Meijer Honors College

Minor: Applied Statistics

<u>Awards/Scholarships:</u> GVSU Award for Excellence, GVSU Presidential Scholarship, Grand Finish Grant, General Chemistry Award, Dean's List

<u>Service:</u> I have been a four year participant of Grand Valley Alternative Breaks, where I have been a site and community leader for the past two years. My service project topics included Water Restoration, Native American Cultural Awareness and Animal Rescue. I have also organized and coordinated a park clean up with Kent County Parks through my time in GVAB.

<u>Future Plans:</u> I will be continuing my education at Grand Valley State University this upcoming fall in the Masters of Public Health Program, with an emphasis in epidemiology. I am looking forward to working with my community and pursuing opportunities in research during my time in the program.

Graduate of Distinction

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Evan Sidebotham

Major: Biomedical Sciences

<u>Awards/Scholarships:</u> GVSU General Chemistry Award, GVSU Dean's List, GVSU Excellence Scholarship, Samual



Mckeown Scholarship, HPS Woody Wyngarden Scholarship, Thomas Hamilton Scholarship, TK Teacher Nominated Scholarship, Community West Vern Hyde Scholarship, Thompson Working Family GVSU Scholarship, Perry BS Core Scholarship, GV State Competitive Scholarship, GV Pathway Scholarship, Dykstra EMT Scholarship

Research: Candida albicans fungus commonly infects IVs and catheters which can lead to life threatening sepsis. During space flight the expression of certain genes is altered making the microbe more pathogenic. Through the NASA Michigan Space Grant, along with Dr. Cleary and Dr. Thomas, I explored these genes to better understand the proteins whose expression was being altered and their functions within the cells.

Clinical Experience: I have worked as an EMT for my hometown of Middleville. I have loved working as a first responder and especially enjoy providing comfort and medical care to people of my home community.

<u>Service:</u> Tutoring and mentoring first-generation African Immigrants through the Learning Cafe for the past two years, Vice president of Pre-Med club, and Hurricane relief cleanup in Louisiana.

<u>Future Plans:</u> I plan to go to medical school to become either an emergency medicine physician or a general practitioner. I would love to return to my rural hometown and medically serve my community. I would also plan to maintain my position as a first responder.

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Allison Soffa



Major: Biomedical Sciences

Minor: Studio Art

Awards/Scholarships: Phi Kappa Phi inductee, S-

Cubed Grant

Research: I worked with Dr. Werner to create novel bacterial vectors in order to study a specific protein known for its ability to inhibit snake venom. I also created illustrations to accompany the research which outlined the process. I had the opportunity to work with Dr. Strickler in the plastination lab by dissecting the facial region of a cadaver. From there I worked to develop a pigment that could successfully color the plastinates.

<u>Clinical Experience:</u> I currently work as a nurse technician in the emergency room of St. Mary's hospital.

<u>Service:</u> Oakland Hills Community Garden

<u>Future Plans:</u> After graduation, I plan on applying to graduate programs in Physician Assistant studies while continuing to work at St. Mary's.

Graduate of Distinction

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Maxine Taylor

Majors: Biomedical Sciences and

Behavioral Neuroscience

Minor: Chemistry



<u>Awards/Scholarships:</u> GV Award for Excellence, State Competitive Scholarship, Dean's list - all semesters, Malinoski Pre-Dental Scholar

Research: I conducted a research paper for my honors senior project titled "The Interactions Between Oral Biofilms, Antibiotic Resistance, and Dentistry." This research paper explored the mechanisms of oral biofilm development and the interactions between oral microbiota since this knowledge is necessary to combat further antibiotic resistance development and generate even more effective dental treatments. I feel the project allowed me to take a strong first step in my career path, and it provided invaluable insight into my analytical and organizational skills. It was a fulfilling accomplishment and a highlight of my undergraduate experience.

<u>Clinical Experience:</u> I have worked as a dental assistant since 2018, gaining well over a thousand hours of chairside clinical experience. It was satisfying to serve and build relationships with my community, especially during the pandemic.

<u>Future Plans:</u> I will be taking the next step in my career path by attending dental school at the University of Michigan School of Dentistry, entering the class of 2026.

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Zachary Timmer

Major: Biomedical Sciences

Minor: Philosophy

Awards/Scholarships: I am GV Award, BMS Graduate of Distinction, Grand Finish Grant, Dean's List



Research: I have done research with Dr. Burg studying the effects of histamine deficient secondary cells on the copulation behaviors of Drosophila. I have also studied the effects of tau knockout with simultaneous alpha synuclein expression in the mushroom bodies of Drosophila.

<u>Clinical Experience:</u> Over the years, I have worked at Spectrum Health as a medical assistant, nurse technician, and radiology assistant. Each job was spent either in the cardiology office, progressive cardiology floor, or the radiology department.

<u>Service:</u> I have volunteered with the Holland Hospital as an errand and escort volunteer, with the Exalta Health clinic in Grand Rapids as a medical assistant, as a member of the recruitment committee for the Alzheimer's Association Walk to End Alzheimer's and have served as a mentor for the Healthcare Career Pipeline Program of West Michigan. I am also the founder of the Andrew Cook Foundation; a foundation that raises awareness of neurodegenerative disorders.

<u>Future Plans:</u> I plan to attend medical school this summer.

Graduate of Distinction

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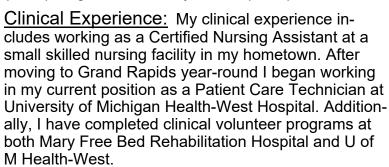
Taylor Wesley

Major: Biomedical Sciences

<u>Certificates:</u> Certificate in Medical and Health Humanities

<u>Awards/Scholarships:</u> GV Faculty Scholarship, GV Award

for Excellence, Phi Kappa Phi Freshman Honoree (2018), Organic Chemistry Award (2020)



Service: I served on the executive board for GV's Women's Club Soccer Team as Risk Manager (2020) and President (2021) and GV's Club Sport Conduct and Community Engagement Committee (2020-2021). I have also volunteered with and served on the board of GV's branch of the ASPIRAS Foundation as well as Special Olympics of MI and the Kids' Food Basket of Grand Rapids.

<u>Future Plans:</u> I am applying to medical schools this spring and hope to begin in Fall 2023. During my gap year, I plan to continue my volunteer interests as well as work full time in a clinical setting.

CLOSING STATEMENT

Dear Students, Family Members, and Faculty,

Each year, the Biomedical Sciences Department commemorates our outstanding student awardees. We would like to recognize our graduating awardees and scholarship winners for their exceptional accomplishments both this year, and throughout their undergraduate career. These achievements exemplify the integrity of the highest caliber students within the Biomedical Sciences and Microbiology programs. Our awardees truly inspire confidence for our future, and we look forward to seeing them flourish as active life long learners and global citizens. We are confident they will apply their initiative and unique skills to positively influence their communities, their professions, and the broader world.

We wish all of our awardees great success and are honored to have them among the Laker for a Lifetime family.

Sincerely,

Cynthia L. Thompson, Ph.D. Chair, Awards & Scholarships Committee Associate Professor Department of Biomedical Sciences Grand Valley State University

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