Andrew Gregory

andrew.gregory@med.wayne.edu

Education:

<u>High school:</u> Brookline High School

<u>Undergraduate:</u> 1. University of Massachusetts, Amherst

- dates attended: 9/2015-12/2016

2. Boston College

- dates attended: 1/2017-5/2019

- degree conferred: B.S., major: Psychology, Magna Cum Laude

Medical school: Wayne State University School of Medicine (WSUSOM)

- dates attended: 7/2021-5/2025

- degree expected: Doctor of Medicine (M.D.)

USMLE Scores: Step 1: PASS

Step 2: 248

Honors/Awards: 1. Comprehensive Honors Year 1 in medical school

2. Comprehensive Honors Year 2 in medical school

3. Comprehensive Honors Year 3 in medical school

- 4. Medical school graduation with high distinction awarded to Wayne State University School of Medicine (WSUSOM) graduating students who have achieved Comprehensive Honors in Years 1, 2, and 3 of medical school, placing them into the top 5% of the graduating medical school class
- 5. Junior Alpha Omega Alpha (AOA) Honor Medical Society national medical school honors society that selects the top 6% of medical students after the first 2 years of medical school at the WSUSOM based on the combined excellence in the areas of academics, scholarly work, service, and leadership
- 6. Distinction in biomedical research awarded to 7% of graduating medical students for sustained participation with and significant contribution to substantive research and scholarly work during medical school based on selection criteria determined by the Office of Medical Student Research Programs
- 7. Robert C. Fraser Endowed Scholarship in Ophthalmology 2023 and 2024 this scholarship is awarded to WSUSOM students who have demonstrated an interest and dedication to ophthalmology
- 8. Featured Student Teacher fourth-year medical students are nominated for this award by first and/or second-year medical students for going above and beyond in their teaching sessions, such as the clinical skills or anatomy courses

- 9. Wayne State University Medical Alumni Association Endowed Scholarship 2022 this scholarship is awarded to WSUSOM students who have promoted a positive image of the medical school through participation in university activities
- 10. New England Science Symposium 2022 first place poster award (second author on poster) Public Health, Epidemiology, or Biostatistics, Bioinformatics, Physics, Chemistry, or Engineering and Clinical or Social Science (including Translational Research) Categories
- 11. American Thoracic Society (ATS) Conference 2020 Allergy, Immunology, and Inflammation Scholarship (first author) out of more than 300 abstracts submitted to this conference, only a limited number of abstracts were awarded this scholarship based on their outstanding quality as determined by the ATS Assembly Program Committee
- 12. Boston College Magna Cum Laude (with high honors)
- 13. Nu Rho Psi National Honor Society for undergraduate students who have excelled academically in their class and have a strong interest in neuroscience
- 14. Alpha Lambda Delta Honor Society college freshmen who have received a cumulative GPA of at least 3.7 are inducted into this honor society
- 15. Dean's List for Fall 2015, Spring 2016, Fall 2016, Spring 2017, Spring 2018, Fall 2018, and Spring 2019 semesters awarded to college students who have received a cumulative GPA of at least 3.7
- 1. Vichar Trivedi, Qisheng You, Patrick S. Lee, Jacob Im, David V. Tran, Rao Me, Brian Benenati, Andrew Gregory, Kim Le, Xihui Lin. Efficacy of Split-Thickness Thin Amniotic Membrane Graft for Closure of Refractory or Large Macular Holes. Retina. 2025 Jan 7. doi: 10.1097/IAE.0000000000004399. Epub ahead of print. PMID: 39805138.
- 2. Robin Lu, Andrew Gregory, Rahul Suryadevara, Zhonghui Xu, Dhawal Jain, Jarrett D. Morrow, Brian D. Hobbs, Jeong H. Yun, Noah Lichtblau, Robert Chase, Jeffrey L. Curtis, Maor Sauler, Brian J. Bartholmai, Edwin K. Silverman, Craig P. Hersh, Peter J. Castaldi, Adel Boueiz. Lung Transcriptomics Links Emphysema to Barrier Dysfunction and Macrophage Subpopulations. Am J Respir Crit Care Med. Published online June 27, 2024. PMID: 38935868.
- 3. Parker J. Williams, Andrew Gregory, Jack Komro, Qisheng You, Bing Ross, Clara Colón, Mark S. Juzych, Bret A. Hughes, Faisal Ridha. The impact of intraocular pressure on optical coherence tomography angiography: A review of current evidence. Saudi Journal of Ophthalmology 38(2):p 144-151, Apr–Jun 2024. doi: 10.4103/sjopt.sjopt_112_23.
- 4. Rahul Suryadevara, Andrew Gregory, Robin Lu, Zhonghui Xu, Aria Masoomi, Sharon Lutz, Seth Berman, Jeong H. Yun, Aabida Saferali, Min Hyung Ryu, Matthew Moll, Don D. Sin, Craig P. Hersh, Edwin K. Silverman, Jennifer Dy, Katherine A. Pratte, Russell P. Bowler, Peter J. Castaldi, Adel Boueiz. Blood-

Publications:

- based Transcriptomic and Proteomic Biomarkers of Emphysema. Am J Respir Crit Care Med. 2024;209(3):273-287. PMID: 37917913.
- 5. Nicole Oska, Shaimaa Eltanani, Mohamed Shawky, Armaan Naghdi, Andrew Gregory, Thangal Yumnamcha, Ahmed S. Ibrahim. Upper glycolytic components contribute differently in controlling retinal vascular endothelial cellular behavior: Implications for endothelial-related retinal diseases. PLoS One. 2023;18(11):e0294909. Published November 30, 2023. PMID: 38033124.
- 6. Andrew Gregory, Thangal Yumnamcha, Mohamed Shawky, Shaimaa Eltanani, Armaan Naghdi, Bing X. Ross, Xihui Lin, Ahmed S. Ibrahim. The Warburg effect alters amino acid homeostasis in human retinal endothelial cells: implication for proliferative diabetic retinopathy. Sci Rep. 2023;13(1):15973. Published September 25, 2023. PMID: 37749155.
- 7. Shaimaa Eltanani, Thangal Yumnamcha, Andrew Gregory, Mahmoud Elshal, Mohamed Shawky, Ahmed S. Ibrahim. Relative Importance of Different Elements of Mitochondrial Oxidative Phosphorylation in Maintaining the Barrier Integrity of Retinal Endothelial Cells: Implications for Vascular-Associated Retinal Diseases. Cells. December 19, 2022;11(24):4128. PMID: 36552890.
- 8. Artem Oganesyan, Andrew Gregory, Florent Malard, Nerses Ghahramanyan, Mohamad Mohty, Dickran Kazandjian, Arsène Mekinian, Yervand Hakobyan. Monoclonal gammopathies of clinical significance (MGCS): In pursuit of optimal treatment. Front Immunol. 2022;13:1045002. Published November 23, 2022. PMID: 36505449.
- 9. Andrew Gregory, Zhonghui Xu, Katherine Pratte, Sool Lee, Congjian Liu, Robert Chase, Jeong Yun, Aabida Saferali, Craig P Hersh, Russell Bowler, Edwin Silverman, Peter J. Castaldi, Adel Boueiz. Clustering-based COPD subtypes have distinct longitudinal outcomes and multi-omics biomarkers. BMJ Open Respir Res. 2022;9(1):e001182. PMID: 35999035.
- 10. Adel Boueiz, Zhonghui Xu, Yale Chang, Aria Masoomi, Andrew Gregory, Sharon M Lutz, Dandi Qiao, James D. Crapo, Jennifer G. Dy, Edwin K. Silverman, Peter J. Castaldi. Machine Learning Prediction of Progression in Forced Expiratory Volume in 1 Second in the COPDGene® Study. Chronic Obstr Pulm Dis. 2022;9(3):349-365. PMID: 35649102.
- 11. Suneeta Godbole, Wassim W. Labaki, Katherine A. Pratte, Andrew Hill, Matthew Moll, Annette T. Hastie, Stephen P. Peters, Andrew Gregory, Victor E. Ortega, Dawn DeMeo, Michael H. Cho, Surya P. Bhatt, J Michael Wells, Igor Barjaktarevic, Kathleen A. Stringer, Alejandro Comellas, Wanda O'Neal, Katerina Kechris, Russell P. Bowler. A Metabolomic Severity Score for Airflow Obstruction and Emphysema. Metabolites. 2022;12(5):368. PMID: 35629872.
- 12. Zhonghui Xu, John Platig, Sool Lee, Adel Boueiz, Rob Chase, Dhawal Jain, Andrew Gregory, Rahul Suryadevara, Seth Berman, Russell Bowler, Craig P. Hersh, Alain Laederach, Peter J. Castaldi. Cigarette smoking-associated isoform switching and 3' UTR lengthening via alternative polyadenylation. Genomics. 2021;113(6):4184-4195. PMID: 34763026.

- 13. R Chad Wade, J Patrick Simmons, Adel Boueiz, Andrew Gregory, Emily S. Wan, Elizabeth A. Regan, Surya P. Bhatt, MeiLan K. Han, Russell P. Bowler, James D. Crapo, Edwin K. Silverman, George R. Washko, Mark T. Dransfield, J Michael Wells. Pulmonary Artery Enlargement Is Associated with Exacerbations and Mortality in Ever-Smokers with Preserved Ratio Impaired Spirometry. Am J Respir Crit Care Med. 2021;204(4):481-485. PMID: 34014810.
- 14. Nkiruka V. Arinze, Andrew Gregory, Jean M. Francis, Alik Farber, Vipul C. Chitalia. Unique aspects of peripheral artery disease in patients with chronic kidney disease. Vasc Med. 2019;24(3):251-260. PMID: 30823859.

Presentations:

Oral presentations

- 1. "Unraveling the Impact of Aging on Retinal Pigmental Epithelium/Choroid Proteomics: Insights into AMD Pathogenesis and Therapeutic Avenues". Andrew Gregory, Shaimaa Eltanani, Thangal Yumnamcha, Mohamed Shawky, Mark Gregory, and Ahmed S Ibrahim. Kresge Eye Institute Vision Research Workshop 2024. 10/2024. Detroit, Michigan.
- 2. "Acute eye pressure spike in the clinic." Andrew Gregory. Cool Cases in Detroit conference 2024. 09/2024. Detroit, Michigan.
- 3. "Vessels stealing vision." Andrew Gregory. Henry Ford ophthalmology elective rotation grand rounds presentation. 08/2024. Detroit, Michigan.
- 4. "Anterior uveitis". Andrew Gregory. Kresge Eye Institute subinternship rotation presentation. 6/2024. Detroit, Michigan.
- 5. "Long-term Outcomes from the HORIZON Randomized Trial for a Schlemm's Canal Microstent in Combination Cataract and Glaucoma Surgery". Andrew Gregory. Wayne State University School of Medicine Ophthalmology Journal Club. 6/2024. Detroit, Michigan.
- 6. "The Impact of the Warburg Effect on Amino Acid Homeostasis in Human Retinal Endothelial Cells and its Implications for Proliferative Diabetic Retinopathy". Andrew Gregory, Thangal Yumnamcha, Mohamed Shawky, Shaimaa Eltanani, Armaan Naghdi, Bing X. Ross, Xihui Lin, Ahmed S Ibrahim. Kresge Eye Institute Vision Research Workshop 2023. 10/2023. Detroit, Michigan.
- 7. "Diabetic macular edema." Andrew Gregory. 6th International Medical Congress of Armenia. 7/2023. Online, but conference was in Yerevan, Armenia.
- 8. "Vismodegib for Preservation of Visual Function in Patients with Advanced Periocular Basal Cell Carcinoma: The VISORB Trial". Andrew Gregory. Wayne State University School of Medicine Ophthalmology Journal Club. 10/2022. Detroit, Michigan.

- 9. "Electronic nicotine delivery systems use is associated with multi-omic biomarkers and prospective cardiopulmonary health outcomes". Andrew Gregory, Zhonghui Xu, Katherine Pratte, Noah Lichtblau, Robin Lu, Robert Chase, Jeong Yun, Aabida Saferali, Edwin Silverman, Craig P. Hersh, Russell P. Bowler, Adel Boueiz, Peter Castaldi. 5th Annual Lung Research Center Symposium Brigham and Women's Hospital. 2/2022. Boston, Massachusetts.
- 10. "Prediction of Electronic Nicotine Delivery Systems Use in COPDGene Using Multi-omics Biomarkers". Andrew Gregory, Zhonghui Xu, Katherine Pratte, Noah Lichtblau, Robin Lu, Robert Chase, Jeong Yun, Aabida Saferali, Edwin K. Silverman, Craig P. Hersh, Russell P. Bowler, Adel Boueiz, Peter J. Castaldi. Wayne State University School of Medicine Medical Student Research Symposium 2021. 10/2021. Detroit, Michigan.
- 11. "Multi-Omic Biomarkers of Electronic Cigarette Use and Their Association to Cardiopulmonary Health Outcomes". Andrew Gregory, Zhonghui Xu, Katherine Pratte, Noah Lichtblau, Robin Lu, Robert Chase, Jeong Yun, Aabida Saferali, Edwin Silverman, Craig P. Hersh, Russell P. Bowler, Adel Boueiz, Peter Castaldi. Fall 2021 NIH Tobacco Regulatory Science Meeting. 10/2021. Online.
- 12. "Vaping-associated Proteomic and Gene Expression Biomarkers in the COPDGene Cohort". Andrew Gregory, Seth Berman. 2021 New England Science Symposium of Harvard Medical School. 4/2021. Online.

Poster presentations

- 1. "Clinical Implications of Densiron 68 Endotemponade after Pars Plana Vitrectomy: A Systematic Review and Meta Analysis". Karim Dirani, Jeff Park, Andrew Gregory, Ahsan Mir, Priya Sharma, Chaesik Kim, Daniel Juzych, Pradeepa Yoganathan. Association for Research in Vision and Ophthalmology (ARVO) 2024. 5/2024. Seattle, Washington.
- 2. "Purine and pyrimidine monophosphate vs polyphosphate homeostasis in human retinal endothelial cells". Andrew Gregory, Jenna Hart, Thangal Yumnamcha, Mohamed Shawky, Shaimaa El Tanani, Ahmed Ibrahim. Wayne State University School of Medicine Medical Student Research Symposium 2024. 2/2024. Detroit, Michigan.
- 3. "Corticosteroid-induced masseteric space abscess formation in a patient with type 2 diabetes mellitus". Andrew Gregory, Matt Corsi, Rachel Beaupre, Patrick Drockton, Jessica Liang, Diane Levine. Society of General Internal Medicine Midwest 2023. 10/2023. Chicago, Illinois.
- 4. "Glycine is Dysregulated in Human Retinal Endothelial Cells and Proliferative Diabetic Retinopathy". Andrew Gregory, Shaimaa Eltanani, Thangal Yumnamcha, Mohamed Shawky, Bing Ross, Xihui Lin, Ahmed Ibrahim. Wayne State University School of Medicine Medical Student Research Symposium 2023. 1/2023. Detroit, Michigan.

- 5. "Prediction of Electronic Nicotine Delivery Systems Use in COPDGene Using Multi-Omic Biomarkers". Andrew Gregory, Zhonghui Xu, Katherine Pratte, Noah Lichtblau, Robin Lu, Robert Chase, Jeong Yun, Aabida Saferali, Edwin Silverman, Craig P. Hersh, Russell P. Bowler, Adel Boueiz, Peter Castaldi. American Thoracic Society Conference 2022. 5/2022. Online.
- 6. "Comparison of Lung and Blood Transcriptomics Reveals Shared Emphysema-Associated Pathways and Alternatively Spliced Genes". Robin Lu, Rahul Suryadevara, Zhonghui Xu, Dhawal Jain, Andrew Gregory, Brian D. Hobbs, Noah Lichtblau, Robert Chase, Jeong H. Yun, Aabida Saferali, Edwin K. Silverman, Craig P. Hersh, Peter Castaldi, Adel Boueiz. American Thoracic Society Conference 2022. 5/2022. Online.
- 7. "Blood-Transcriptomics Based Machine Learning Prediction of Emphysema in Smokers". Rahul Suryadevara, Robin Lu, Zhonghui Xu, Andrew Gregory, Aria Masoomi, Seth Berman, Jeong H. Yun, Aabida Saferali, Craig P. Hersh, Edwin K. Silverman, Jennifer Dy, Peter J. Castaldi, Adel Boueiz. 2022 New England Science Symposium of Harvard Medical School. 4/2022. Online.
- 8. "Blood transcriptomics-based machine learning prediction of emphysema in smokers". Rahul Suryadevara, Andrew Gregory, Aria Masoomi, Zhonghui Xu, Seth Berman, Jeong Yun, Aabida Saferali, Craig Hersh, Edwin Silverman, Jennifer Dy, Peter Castaldi, Adel El Boueiz. CHEST Annual Meeting 2021. 10/2021. Online.
- 9. "Blood transcriptomic and proteomic biomarkers of electronic nicotine delivery systems use in the COPDGene cohort". Andrew Gregory, Zhonghui Xu, Katherine Pratte, Noah Lichtblau, Robin Lu, Robert Chase, Jeong Yun, Aabida Saferali, Edwin K. Silverman, Craig P. Hersh, Russell P. Bowler, Adel Boueiz, Peter J. Castaldi. American Thoracic Society Conference 2021. 5/2021. Online.
- 10. "Proteomics-based Machine Learning Prediction of Pulmonary Artery Enlargement in COPD". Andrew Gregory, Katherine Pratte, Raymond C. Wade, James M. Wells, Raul San Jose Estepar, George R. Washko, John E. Hokanson, Russell P. Bowler, Edwin K. Silverman, Peter J. Castaldi, Adel Boueiz. Pulmonary Vascular Research Institute Digital Webinar Series 2021. 1/2021. Online.
- 11. "Pulmonary artery enlargement in COPD is associated with distinct COPD-related outcomes and protein biomarker and transcriptomic patterns". Andrew Gregory, Raymond Wade, James Wells, Zhonghui Xu, Sool Lee, Robert Chase, Jeong Yun, Aabida Saferali, Craig Hersh, Raul San Jose Estepar, John Hokanson, George Washko, Russell Bowler, Edwin Silverman, Peter Castaldi, Adel Boueiz. CHEST Annual Meeting 2020. 10/2020. Online.
- 12. "K-Means Subtypes of Smokers in the COPDGene Study Have Distinct Patterns of COPD Progression and Distinct Serum Protein Biomarker and Transcriptomic Profiles". Andrew Gregory, Zhonghui Xu, Sool Lee, Jeong H. Yun, Aabida Saferali, Craig P. Hersh, Russell P. Bowler, Edwin K. Silverman,

Adel R. El Boueiz, Peter J. Castaldi. American Thoracic Society Conference 2020, 8/2020, Online.

Non-peer reviewed publications:

- 1. Nicholas Livingston, Laura Aravena, Tabassum Chowdhury, Kia Sweeney, Andrew Rabah, Andrew Gregory. "Resiliency Storyboard: Mental Health". https://digitalcommons.wayne.edu/pat_edu_proj/232/.
- 2. Tabassum Chowdhury, Kia Sweeney, Andrew Rabah, Andrew Gregory, Nicholas Livingston, Laura Aravena. "Debunking Medical Myths: 3 MYTHS Surrounding Coconut Oil".

https://digitalcommons.wayne.edu/pat_edu_proj/281/.

3. Maria Awad, Andrew Gregory, Andrew Rabah, Kia Sweeney, Laura Aravena, Nicholas Livingston, Tabassum Chowdhury. "Chronic Illness Education 2022: A Recipe For Healthy Living".

https://digitalcommons.wayne.edu/pat_edu_proj/335/.

4. Laura Aravena, Tabassum Chowdhury, Andrew Gregory, Nicholas Livingston, Andrew Rabah, Kia Sweeney. "Conflict With Peers: One Student Shows up Late and Unprepared".

https://digitalcommons.wayne.edu/pat_edu_proj/423/.

5. Andrew Gregory, Andrew Rabah, Kia Sweeney, Laura Aravena, Nicholas Livingston, Tabassum Chowdhury. "Conflict With Patients: frustration to Working with a Student Doctor".

https://digitalcommons.wayne.edu/pat_edu_proj/422/.

6. Andrew Gregory, Andrew Rabah, Kia Sweeney, Laura Aravena, Nicholas Livingston, Tabassum Chowdhury. "Conflict With Administrators: Student Frustrated with the Lack of Opportunities".

https://digitalcommons.wayne.edu/pat_edu_proj/421/.

Manuscripts under review:

- 1. "Impact of the Warburg Effect on Nucleotide Homeostasis in Human Retinal Endothelial Cells and its Relevance to Proliferative Diabetic Retinopathy." Andrew Gregory, Shaimaa Eltanani, Thangal Yumnamcha, Mohamed Shawky, Jenna Hart, Rao Me, Bing X. Ross, Xihui Lin, and Ahmed S Ibrahim. Frontiers in Cell and Developmental Biology. Submitted 2/2025.
- 2. "Clinical Implications of Densiron Oil Endotamponade after Pars Plana Vitrectomy: A Systematic Review and Meta-Analysis". Karim Dirani, Chaesik Kim, Jeff Park, Andrew Gregory, Ahsan Mir, Vivian Rajeswaren, Zach Saad, Gary Abrams, Pradeepa Yoganathan. Survey of Ophthalmology. 1/2025.
- 3. "Blood RNA and protein biomarkers are associated with vaping and dual use, and prospective health outcomes". Andrew Gregory, Zhonghui Xu, Katherine Pratte, Seth Berman, Robin Lu, Rahul Suryadevara, Robert Chase, Jeong H. Yun, Aabdida Saferali, Craig P. Hersh, Edwin K. Silverman, Russell P. Bowler, Laura E. Crotty Alexander, Adel Boueiz, Peter J. Castaldi. F1000 Research. Submitted 2/2023.

Non-submitted research projects:

1. Investigation of the nucleic acid profiles in an experimental model of

proliferative diabetic retinopathy using human retinal endothelial under the dual Warburg stressor effects of hypoxia and hyperglycemia. Dr. Ahmed Ibrahim laboratory, Wayne State University Department of Ophthalmology, Visual and Anatomical Sciences.

- 2. Proteomic profiles of retinal pigment epithelium in an experiment model of age-related macular degeneration. Dr. Ahmed Ibrahim laboratory, Wayne State University Department of Ophthalmology, Visual and Anatomical Sciences.
- 3. Armenia EyeCare project is a non-profit organization dedicated to providing eye care to the underserved villages in Armenia. I am leading a data analysis project comparing the prevalence of diabetic retinopathy across several different regions and comparing these statistics across several years to analyze trends over time

Volunteering:

1. Sight Savers

- Initiated and led a multi-institutional ophthalmology outcomes study; designed proposal and secured participation from student-run free clinics in ophthalmology from Sight Savers, Malta clinic, University of Minnesota and Johns Hopkins
- Spearheaded collaboration across these student-run eye clinics to evaluate the disparities in vision care outcomes
- 2. Community Homeless Interprofessional Program (CHIP)
- dates: 7/2021-11/2022
- I helped prepare and distribute lunch boxes and meals to the homeless and food-insecure community members in Detroit
- I spoke with the people we were serving about their own experiences to gauge additional needs that CHIP could assist with

3. Cass Clinic

- dates: 7/2021-11/2022
- I assisted in caring for patients without medical insurance in Detroit by collecting histories and performing physical exams as well as discussing treatments with attendings in a student-run free clinic
- As a second-year medical student in the clinic, I taught first-year medical students history-taking and physical exam skills to help supervise their learning
- 4. Diabetes Education and Wellness (DEW) Clinic
- dates: 7/2021-11/2022
- I helped in providing care for patients in the Detroit community with diabetes, in a student-run free clinic, by educating patients on the value of regularly monitoring A1c and blood sugar levels
- Additionally, I discussed the visits with the patients with a multidisciplinary care team including dieticians, occupational therapists, social workers, and many more

- 5. Chronic Illness Project Type 2 Diabetes Mellitus Brochure
- dates: 4/2022-6/2022
- During the second year of medical school, students, paired in groups, engaged in a chronic illness project and we chose to design a brochure that included healthy recipes and meal ideas for patients affected by type 2 diabetes mellitus
- Our cookbook was published on the medical school's library website and can be found here: https://digitalcommons.wayne.edu/pat_edu_proj/335/

6. Special Olympics of Massachusetts

- dates: 6/2017-6/2019
- I led soccer and baseball training sessions for children with developmental disabilities in the greater Boston area
- I also supervised a group of 20-30 volunteers during these sessions who ensured that the weekly practices ran smoothly

1. Ophthalmology interest group coordinator

- dates: 5/2024-5/2025
- I organize events and information sessions for medical students interested in ophthalmology
- I coordinate sending emails to the student body about resources to help prospective students connect with ophthalmology clinical and basic science faculty for research projects and shadowing

2. Ophthalmology journal club coordinator

- dates: 5/2024-5/2025
- I arrange journal club meetings where medical students present ophthalmology research articles.
- I facilitate discussion regarding ophthalmological research and application to clinical practice with the guidance of faculty mentors in the field of the topic being presented at the journal club

3. CHIP hygiene and clothing drive coordinator

- dates: 9/2022-3/2023
- I expanded upon CHIP by organizing the Hygiene Accessories and Necessities (HANDs) of Heart program
- Through this program, I coordinated and organized the collection of gloves, socks, and hygiene items for distribution to the homeless community in Detroit and the program was handed off to a medical student a year below me

4. Warrior MD Ambassadors Program Ambassador

- dates: 9/2022-5/2025
- I represented my medical school to prospective students and helped them navigate the medical school campus as well as discussed the various aspects of the education and curriculum.
- I responded to any questions students may have and shared experiences as a student to help engage prospective students.

Leadership:

- 5. Medical Research Lectures and Workshops Founder
- dates: 9/2019-1/2020
- I organized monthly workshops for medical students and doctors in Armenia that taught topics related to medical research, including literature search strategies and statistics
- I led journal clubs and meetings where participants could share their own research and receive feedback; I continue to provide mentorship on an individual basis

Hobbies and outside interests:

1. Learning languages

- native fluency in Russian and intermediate fluency in Armenian and French

2. Playing piano

- favorite genres to play are classical music, electronic dance music and music from the video games of my childhood

3. Fitness

- I enjoy home body weight workouts, running, going to the gym and playing basketball and table tennis

4. Reading

- my favorite genres are science fiction and detective novels; my favorite authors are Sir Arthur Conan Doyle and Isaac Asimov

5. Going to the museum

- in medical school I go to the Detroit Institute of Arts (DIA) and in Boston I enjoy going to the Museum of Fine Arts; I have recently liked the Rembrandt and the Dutch Golden Age exhibit at the DIA

6. Programming

- I have been programming in the language R for nearly a decade
- Taught myself JavaScript, HTML and CSS in the last year

Gap years activities (2019-2021):

- 1. Channing Division of Network Medicine Research Student
- dates: 5/2019-8/2019, 2/2020-7/2021, location: Brigham and Women's Hospital, Boston, MA
- I used machine learning tools with the programming language R (which I learned on my own without any programming experience beforehand) to characterize disease phenotypes and longitudinal outcomes of patients with pulmonary disease
- My work yielded 6 presentations during my gap years and 7 full article publications across my gap years and medical school

2. Pediatric allergy and pulmonology hospital shadowing

- dates: 9/2019-1/2020, location: Arabkir Medical Center, Yerevan, Armenia
- I shadowed pediatric allergists and pulmonary physicians at a pediatric hospital in Armenia, witnessing the practice of medicine in a resource-limited

environment

- I learned about basic physical exams, diagnostic testing and imaging and observed the practice of medicine in both the inpatient and outpatient settings
- 3. Inpatient Unit Service Aide (employed position)
- dates: 10/2020-5/2021, location: Spaulding Hospital, Cambridge, MA
- I worked in the pulmonary unit of a rehabilitation hospital cleaning patient rooms, medical equipment and assisted in transporting patients between departments
- I helped deliver meals to patient rooms and assisted the licensed nurses in feeding the patients, was the first to respond to patient call bells and performed one-on-one supervisions of patients when needed