

## **EDUCATION**

|                                                                                    |                      |
|------------------------------------------------------------------------------------|----------------------|
| <b>University of Kansas School of Medicine</b><br>M.D. Candidate                   | Expected<br>May 2027 |
| <b>Wichita State University</b><br>Badge Credit: Grants, Narrative & Budget        | 2025                 |
| <b>University of Kansas</b><br>B.S. Molecular, Cellular, and Developmental Biology | 2018-2022            |

## **HONORS AND AWARDS**

|                                                      |              |
|------------------------------------------------------|--------------|
| Gold Humanism Honor Society                          | 2026-present |
| AOA Medical Student Service Leadership Project Grant | 2025-2027    |
| Eugene W. and Margaret M. Schwartz Scholarship       | 2025         |
| Palmquist Scholarship                                | 2024         |
| Ogden Warren and Anna M. Search Scholarship          | 2023         |

## **POSTERS, PRESENTATIONS, & PUBLICATIONS**

### **Publications**

1. Kerr, M. E., **Mueller, M.**, Kuckelman, D., Chang, T.H., & Witt, L. (2026). *A Cross-Sectional Study on Geographic Alignment of Student-Run Free Clinics with Medically Underserved and Underinsured Areas in the United States*. Kansas Journal of Medicine, 19(S1), 24. <https://doi.org/10.17161/kjm.vol19.25393> May 2026
2. Hertel, A., Frederick-Fisher, S., Fernandes, J., El-Geneidy, M., Parikh, R., Dalla, S., Pfannenstiel, M., Meljanac, A., Asoh, S., **Mueller, M.**, Ajlan, R. (2026). *Comparison of perfluorocarbon liquid utilization in endoscopic pars plana vitrectomy and microscopic pars plana vitrectomy during retinal detachment repair: a retrospective review*. International Journal of Retina and Vitreous. 12. 10.1186/s40942-026-00802-9. February 2026
3. Frederick Fisher, S. Fernandes, J., **Mueller, M.**, Kubica, S., Sample, S., Harding, O., Mainster, M., Champion, M., Ajlan, R. (2025). *Retinal detachment repair outcomes after open globe injury in a tertiary referral center in the midwest*. Accepted for publication to the American Society of Retina Specialists (ASRS). February 2025
4. Fernandes, J., Frederick Fisher, S., Meljanac, A., **Mueller, M.**, Asoh, S., Pfannenstiel, M., Ajlan, R., (2025). *Endoscopy assisted pars plana vitrectomy in retinal detachment repair*. Accepted to the Association for Research in Vision and Ophthalmology. January 2025

### **Posters & Presentations**

5. **Mueller, M.**, Gallegos, J., Quick, A. (2026) *EyeTok: An Analysis of Dry Eye Content on TikTok*. Accepted to the Women in Ophthalmology 2026 Summer Symposium. August 2026
6. **Mueller, M.**, Evans, L., Kerr, ME., Kuckelman, D., Strong, S., Chang, T., Witt, L. (2026) *A Cross-Sectional Study on Geographic Alignment of Student-Run Free Clinics with County-Level Environmental Hazards*. Society of Student Run Free Clinics 2026. May 2026
7. Weischaus, N., Vu, K., **Mueller, M.**, Kerr, ME., Kuckelman, D., Strong, S., Chang, Witt, L. (2026) *A Cross-Sectional Study on Geographic Alignment of Student-Run Free Clinics with County-Level College Matriculation Rates*. Society of Student Run Free Clinics 2026. May 2026
8. **Mueller, M.**, Umar, Z., Kerr, ME., Kuckelman, D., Strong, S., Chang, T., Witt, L. (2026) *A Cross-Sectional Study on Geographic Alignment of Student-Run Free Clinics with County-Level Median Household Income Disparities*. Society of Student Run Free Clinics 2026. May 2026
9. **Mueller, M.**, Gad El Sayed, M., Kamal, S., Pina, L., Zakhary, M., Zakhary, M., Khaksar, P., Aziz, M., Aziz, M., Kuriakose, R. (2025). *Association Between Semaglutide and Risk of Central Retinal Artery Occlusion in Type 2 Diabetes and Obesity: A Retrospective Matched-Cohort Analysis*. Presented at the Association of Research in Vision and Ophthalmology 2026 Conference. May 2026
10. Kerr ME, **Mueller M**, Kuckelman D, Chang T, Witt L. *Geographic Alignment of Student-Run Free Clinics with Medically Underserved and Uninsured Areas: A Cross-Sectional Analysis*. Oral Presentation. The 34th Annual Wichita Research Forum; Wichita, KS. April 23, 2026. April 2026
11. **Mueller, M.**, Greiner, A., (2026). *Defining the patient population of a student-run free clinic in the setting of severe county-level health care access disparities*. Presented at the 2026 Kansas Journal of Medicine Student Research Forum. April 2026
12. Andoyo, A., **Mueller, M.**, Chang, J., Meljanac, A., Kempker, R., Harding, O., Quick, A. (2026). *Free Vision Clinic Referral Completion Rates*. Accepted to the 2026 Kansas Journal of Medicine Student Research Forum. February 2026
13. Geraghty, M., Wright, E., **Mueller, M.**, Hotze, C., Strong, S., Witt, L. (2026) *Professional Fulfillment and Burnout Among Physician Volunteers at JayDoc Free Clinic*. Accepted to the 2026 Kansas Journal of Medicine Student Research Forum. February 2026
14. Veenis, A., **Mueller, M.**, Quick, A. (2025). *Near-peer mentoring in ophthalmology medical student education*. Third place at the Table Rock Regional Roundup. September 2025
15. Strong, S., Ruiz-Aguilera, E., **Mueller, M.**, Greiner, K. (2025). *Factors associated with successful patient follow-up after free clinic care*. Presented at the Society of Student Run Free Clinics. September 2025
16. Hane, B., **Mueller, M.**, Ruiz-Aguilera, E., Strong, S., (2025). *Evaluating the Impact of an In-Person Reminder and Reference Guide for Student Physicians on Prediabetes Screening at JayDoc Free Clinic*. Presented at the Society of Student Run Free Clinics. September 2025
17. Frederick Fisher, S. Fernandes, J., **Mueller, M.**, Kubica, S., Sample, S., Harding, O. Mainster, M., Champion, M., Ajlan, R. (2025). *Demographics of open-globe injury* April 2025

*a tertiary referral center.* Presented at the Association of Research in Vision and Ophthalmology 2025 Conference.

18. **Mueller, M.**, Mao, X., Linheng, L. (2021). *The effects of YTHDF2-targeted drug therapy on acute myeloid leukemia.* Poster presentation at the 2021 Stowers Research Symposium. August 2021
19. **Mueller, M.**, Li, W., Linheng, L., (2019). *A home for stem cells: the fetal hematopoietic stem cell niche.* Poster presentation at the 2019 Stowers Research Symposium. August 2019

### **Pending**

20. Mueller, M., Ajlan, R. (2026) *Interdisciplinary treatment of fulminant idiopathic intracranial hypertension: a case series.* Manuscript submitted to the American Journal of Ophthalmology Case Reports. Pending. August 2026

### **Current Projects**

1. Meljanac, A., **Mueller, M.**, Choudry, T., Garcia, J., Quick, A. *Assessing access and utilization of the Changing Life Through Lenses program at the University of Kansas Lions Club.* Plan to submit to the American Academy of Ophthalmology in Spring 2027. 2026
2. Christ, N., **Mueller, M.**, Quick, A. *Evaluating medical student confidence at a free ophthalmology clinic following a near-peer training program.* Plan to submit to the American Academy of Ophthalmology in Spring 2027. 2026

### **GRANT FUNDING**

**Mueller, M.**, Hane, B., Ruiz-Aguilera, E., Strong, S., Witt, L., Greiner, A., (2025) AOA Medical Honor Society. Medical Student Service Leadership Project Grant. *The Development of a Longitudinal Leadership Community within JayDoc Free Clinic.* Accepted. February 2025

- Lead program development, literature review, and proposal drafting for the AOA Medical Student Service Leadership Project Grant to procure \$9,000 for JayDoc Free Clinic to develop a Senior Advisor program and public health curriculum.

**Mueller, M.** Wright, E. (2026). *Development of a robust safety-net program for patients of JayDoc Free Clinic in the Kansas City Area.* REACH Healthcare Fund Rapid Equity Grant. Pending. May 2026

- Lead program development, literature review, and proposal drafting for the Kansas Innovation Fund to procure \$10,000 for JayDoc Free Clinic to provide free, reliable, and flexible transportation to clinic patients and support general operations.

**Mueller, M.** (2026). *Development of a reliable transportation program for patients of JayDoc Free Clinic.* Awesome Foundation. Pending May 2026

- Lead program development, literature review, and proposal drafting to procure \$1000 to fund 100 free rides to clinic appointments.

### **TEACHING EXPERIENCE**

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| <b>Anatomy of a Grant</b>                                                                                                                                                                                                                                                                      | May 12, 2026       |
| <ul style="list-style-type: none"> <li>- I was asked to present an instructional lecture to American Medical Association student members across the region. There were over 50 attendees and I provided templates and spreadsheets in addition to the lecture.</li> </ul>                      |                    |
| <b>JayDoc Free Clinic Senior Advisors</b>                                                                                                                                                                                                                                                      | 2025-Present       |
| <ul style="list-style-type: none"> <li>- A key component of the Senior Advisor program is mentorship and education. I have coordinated and taught lectures on topics such as Grant Writing 101, Community Resources in Wyandotte County, and Ethics in the Free Clinic Environment.</li> </ul> |                    |
| <b>Health Careers Collaborative Mentor</b>                                                                                                                                                                                                                                                     | 2023-2025          |
| <ul style="list-style-type: none"> <li>- Engaged and mentored students longitudinally at Wyandotte High School via a series of healthcare career lectures, health science fairs, and guided dissections.</li> </ul>                                                                            |                    |
| <b>Visual Disturbances 101</b>                                                                                                                                                                                                                                                                 | October 2024, 2025 |
| <ul style="list-style-type: none"> <li>- Led a lecture on types of visual disturbances for undergraduate medical students, emphasizing neuronal pathways and lesions, drug relationships, and utilizing visual disturbance simulation glasses.</li> </ul>                                      |                    |
| <b>Lawrence Family Vision Clinic Contact Lens Instructor</b>                                                                                                                                                                                                                                   | 2021-2023          |
| <ul style="list-style-type: none"> <li>- Instructed new contact lens wearers of all ages on the proper procedure for inserting and removing traditional and scleral contact lenses.</li> </ul>                                                                                                 |                    |

## **SERVICE & LEADERSHIP**

### **University of Kansas School of Medicine**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |
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| <b>JayDoc Free Clinic – Executive Director, Senior Advisor</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Jan 2024-Present  |
| <ul style="list-style-type: none"> <li>- Served as Executive Director and Director of Specialty Nights for a student-run free clinic. I was responsible for the day-to-day coordination of clinic operations for more than 2000 patients and 300 volunteers.</li> <li>- Executed a grant application, curriculum, and ongoing program development to create the Senior Advisors, a board of MS3-MS4 students aimed at longitudinal clinic leadership, public health education, and leadership development.</li> </ul> |                   |
| <b>Ophthalmology Student Interest Group – Co-President, Advisor</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Jan 2024-Present  |
| <ul style="list-style-type: none"> <li>- Served as co-president and coordinated lectures, guided dissections, physician and resident panels, and volunteer opportunities for undergraduate medical students interested in ophthalmology. Continuing to provide guidance, develop programs, and participate in research.</li> </ul>                                                                                                                                                                                    |                   |
| <b>Clinical Anatomy Mentorship Program – Director of Scholarship</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Dec 2025-Present  |
| <ul style="list-style-type: none"> <li>- Responsibilities include coordination of 60+ independent research projects and leading education for MS3 students as they prepare for their surgery clerkships</li> </ul>                                                                                                                                                                                                                                                                                                    |                   |
| <b>Gastroenterology Student Interest Group – Co-President</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Jan 2024-Jan 2025 |
| <ul style="list-style-type: none"> <li>- Served as co-president and coordinated lectures, fermentation workshops, physician and resident panels, and volunteer opportunities for undergraduate medical students interested in gastroenterology.</li> </ul>                                                                                                                                                                                                                                                            |                   |
| <b>Health Care Careers Collaborative – Mentor</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aug 2023-Jan 2025 |
| <ul style="list-style-type: none"> <li>- Served as a longitudinal mentor and tutor for a group of freshman-senior level high school students at Wyandotte High School.</li> </ul>                                                                                                                                                                                                                                                                                                                                     |                   |

## **WORK EXPERIENCE**

### **Messenger Coffee – Barista**

Aug 2023 - present

- Prepared specialty coffee with an emphasis on guest education, recipe creation, and marketing materials (murals, rotating specialty signs, etc)

### **Switchyards KC – ClubKeep**

Oct 2024-2025

- Responsible for maintenance and upkeep of shared workspaces with emphasis on member relations and experience.

### **Lawrence Family Vision Clinic – Optometric Technician**

Aug 2021 - July  
2023

- Prepared patients for eye exams with a variety of preliminary tests, conducted advanced ocular imaging
- Worked with patients to coordinate appointments, insurance, referrals, and contacts/glasses orders
- Taught one-on-one contact lens classes

June 2020 - Dec  
2021

### **COVID Care Force (now Global Care Force)**

- Conducted volunteer and donor outreach in order to staff 20 different sites across the US and Mexico
- Traveled to AZ and NM to meet with hospital and Navajo (Indian Health Services) leadership to develop a plan to best support their communities
- Worked in hospitals to assist staff with running samples, transporting patients, and coordinating volunteers
- Worked and lived in the St. Joseph Homeless Shelter to provide operations assistance and basic medical care

2015 - Present

### **Fine Art Commissions**

- Work displayed in the Albrecht Kemper Museum of Art, Nelson Atkins Museum of Art, funeral services, and personal homes

## **LANGUAGE SKILLS**

### **Spanish** – conversational, medical

- Completion of Medical Spanish I at The University of Kansas School of Medicine

### **American Sign Language** – conversational

- Completion of ASL I and II at the University of Kansas

### **Navajo** – basic

- Immersion in Navajo community

## **PERSONAL INTERESTS & SKILLS**

**Hobbies:** film photography, Sashiko embroidery, fine art portraiture, watching A24 films, hiking, specialty coffee

**Technical:** R Statistical Analysis, Java, Optical Coherence Tomography, Visual Field Confrontation, Fundus Photography, Adobe Suite, Film/Digital Photography, 3D rendering

**Laboratory:** Immunohistochemistry, Flow Cytometry, Western Blots, Advanced Microscopy

