

MARGARITA KRYLOVA

407.236.3581 | marharyta.krylova@gmail.com | [LinkedIn](#) | [Portfolio](#)

Master of Science in Bioethics candidate, with a background spanning clinical and translational research, AI in medicine, and medical ethics. My interests lie in neurosurgery, surgical ethics, and the responsible integration of emerging technology in clinical practice. I am driven by the intersection of innovation and integrity in healthcare, applying AI to improve patient outcomes, support ethical decision-making, and advance equitable, evidence-based care.

EDUCATION

Harvard Medical School — Boston, MA **Sept 2025 - May 2026**
Master's of Science in Bioethics Candidate *GPA: 4.0/4.0*

- **Honors:** HMS Dean's Scholarship
- **Relevant Coursework:** Research Ethics, Clinical Ethics, Clinical Ethics Practice, Health Law & Policy, Bioethics Advocacy, Foundations of Bioethics

Duke University — Durham, NC **Aug 2022 - May 2025**
Bachelor's of Science in Neuroscience; Minors in Chemistry & Russian Literature *GPA: 3.7/4.0*

- **Honors:** Graduation with Distinction
- **Relevant Coursework:** Medical Ethics, Aging, & End-of-Life Care in the USA, Leadership in Healthcare, History of Mental Illness, Human Evolutionary Physiology, Functional Neuroanatomy

Valencia College — Orlando, FL **Feb 2020 - May 2022**
Associate's of Arts Degree, Dual Enrollment while in High School *GPA: 4.0/4.0*

- **Honors:** Phi Theta Kappa Honor Society, President's List, Graduation with Honors recognition
- **Relevant Coursework:** Human Anatomy and Physiology I, Biological Sciences

OTHER TRAINING

Northwest Phlebotomy School — Orlando, FL **Oct 2023**
Phlebotomy Technician Certification

- Conducted over 100 successful blood draws, showcasing precision and adherence to venipuncture practices
- Mastered venipuncture medical terminology for effective healthcare communication

CREDENTIALS

Nationally Certified Phlebotomy Technician
National Performance Specialists; ID: 4724219427MK

Biotechnician Assistant Credential
Biotility; ID: 32648389

American Red Cross
Basic Life Support; ID: 020DFU6

American Red Cross
Adult First Aid/CPR/AED; ID: 018I956

WORK EXPERIENCE

Carbon Health **Jun 2025 - Present**
Medical Assistant — CVS Clinic with Carbon Health Urgent Care

- Deliver direct patient care for 15–25 patients per shift in an urgent care setting; performed triage, phlebotomy, venipuncture, specimen collection, and point-of-care testing
- Supported physicians, PAs, and NPs during examinations and procedures; rotated between front desk and clinical roles to maintain efficient patient throughput and care quality

- Applied de-escalation techniques to manage distressed or resistant patients, ensuring a safe and calm care environment

Duke University Health System

Mar 2024 - Aug 2024

Clinical Technician II — Phlebotomy, Duke University Hospital

Weekends, 3rd shift

- Performed venipuncture and specimen collection on 35–40 inpatients per overnight shift across neurology, transplant, LVAD, and oncology units — among the most clinically complex patient populations in the hospital
- Developed de-escalation and adapted communication techniques for patients experiencing delirium, agitation, and active resistance to care during overnight hours
- Adhered to strict infection control and chain-of-custody protocols to ensure specimen integrity; prioritized STAT and time-sensitive orders in coordination with nursing and physician teams

Florida State University

Jun 2023 - Aug 2023

Young Scholars Program Head Counselor

- Led residential academic program for 40 high-achieving high school students pursuing college-level biology, research, and computer science coursework alongside faculty researchers
- Planned and executed field trips and extracurricular programming, coordinating schedules, transportation, and activities end-to-end
- Provided individual mentorship and tutoring in math, biology, and research throughout the program

EXTRACURRICULAR INVOLVEMENTS

Surgical Ethics Working Group

Jun 2025 - Present

Logistics Coordinator, Harvard Medical School Center for Bioethics

- Coordinate meeting logistics, membership records, and communications for an active surgical ethics working group at HMS
- Participate in working group discussions on emerging ethical issues in surgery

IvyLeague+ Pre-Health Society at Duke

Oct 2023 - Feb 2026

Founding President, Duke University

- Founded a free, inclusive pre-health society to address pre-med resource gaps; scaled to 250+ members.
- Managed a 31-person executive and committee team; hosted monthly on-campus events and coordinated cross-institutional programming at Ivy League+ schools nationwide
- Hosted speaker events featuring Nobel Laureates Dr. Karikó and Dr. Weissman, Atul Gawande, and more
- Consulted on and helped organize the inaugural [Duke National Health Research Conference](#) (the first student-led health research conference at Duke)

Duke Presidential Ambassadors

Mar 2023 - May 2025

Recruitment Committee Member (Mar 2023 - May 2025)

New Member Coordinator (Feb 2023 - May 2025)

- Selected from 200+ applicants as one of 16 Presidential Ambassadors; led high-profile campus tours for distinguished university guests
- Acted as a representative at the donor and trustee events hosted by the Office of Alumni Relations and the Office of the President to strengthen Duke's community bonds
- Served as primary onboarding contact for all newly recruited ambassadors; developed entrance exam and helped establish an equitable recruitment process
- Recognized with 2nd Most Hours Award for 70+ hours of service (2023–2024)

Duke Medical Ethics Journal

Aug 2024 - May 2025

Ethics Blog Writer, Duke University

- Authored published blogs on medical ethics including: "The Ethics of Tube Feeding in Dementia," "The Cost of Thinness: Socio-Cultural Forces Behind Anorexia Nervosa," and "Clean Eating: A Path to Wellness or a Veiled Form of Elitism?"

Duke American Medical Women's Association (AMWA)

Aug 2022 - May 2025

General Member (Aug 2022 - May 2022)

Member, Medical Resources Committee (Aug 2023 - May 2024)

Chair, Medical Resources Committee (May 2024 - Present)

- Facilitated access to medical resources for pre-med students and led discussions on women's health advocacy and medical leadership

TEDxDuke

Aug 2022 - May 2025

Member, Sponsorship Committee (Aug 2022 - May 2022)

Chair, Sponsorship Committee (Aug 2023 - May 2024)

Vice-President (May 2024 - May 2025)

- Secured \$10,000+ in community funding; managed 11 community partnerships and oversaw all club finances including contracts, budgets, and reimbursements
- Helped coordinate annual conference with 300+ attendees; curated speaker cohort of 12 from 100+ applications
- Mentored Sponsorship Committee of 5 students and Social and Recruitment Committee Chairs; oversaw full conference planning cycle along with the President

Mayo Clinic Neurosurgery Journal Club

May 2024 - May 2025

Journal Club Member & Participant

- Analyzed pivotal neurosurgery research and evaluated treatment modalities in a collaborative clinical discussion environment

Duke Undergraduate Research Support (URS) Office

Jan 2024 - May 2025

URS Student Advisory Council Member

- Advised the URS office on student research needs; contributed to policy decisions shaping Duke's undergraduate research infrastructure

First-Year Experiential Orientation

Aug 2023

Orientation Leader, Project Research, Duke University

- Supported incoming first-year students' integration into Duke through community-building and academic resource provision

RESEARCH

Harvard Medical School Center for Bioethics

Sept 2025 - Present

Patient Advocacy Researcher

- Conducting an ethics study on patient informed consent and shared decision-making in the context of AI in medical care
- Developing a [patient decision aid](#) to support informed patient choices regarding AI use in clinical settings

MESH Incubator, MGH

Aug 2025 - Present

Clinical AI Researcher

- Co-authored study on clinician attitudes toward LLM adoption and oversight in healthcare; [preprint](#) published in JMIR
- Leading an ongoing study on LLM capabilities to triage patients across bioethical frameworks

Surgical Ethics Working Group, HMS Center for Bioethics**Jun 2025 - Present***Ethics Researcher*

- Leading two systematic reviews on the ethical implications of AI in robotic surgery and AI in surgical training programs

Neurosurgical Equitable Wellness Lab, MGH**Oct 2024 - Present***Student Trainee*

- Conducting a study on how medical school curriculum prepares students to address health inequities in underserved communities

UC Irvine Health, Advanced Endoscopic & Outpatient Spine Program**June 2024 - July 2025***AI Health Informatics Researcher*

- Led a retrospective observational study evaluating the effectiveness of GPT-4o and Claude 3.5 Sonnet for patient education for endoscopic lumbar discectomy
- Managed full project lifecycle from study design through data collection, analysis, and manuscript preparation; manuscript submitted to Bulletin of the Hospital for Joint Diseases

Duke Health Neurosurgery**Dec 2023 - May 2025***Clinical Researcher*

- First author on a systematic review and case study of spontaneous and traumatic intraorbital arteriovenous fistulas, a rare entity with ~29 reported cases worldwide since 1974; [published](#) in JNS: Case Lessons

Waitkus Lab, The Preston Robert Tisch Brain Tumor Center at Duke**Oct 2022 - May 2025***Undergraduate Student Researcher*

- Conducted independent study on targeting DNA replication stress in cancer cells utilizing the Alternative Lengthening of Telomeres mechanism; contributed to a study [published](#) in Neuro-Oncology
- Completed summer study on the role of SMARCAL1 in DNA replication stress and chemosensitivity in ALT+ glioma cells

PROGRAMS & FELLOWSHIPS**Duke Summer Neuroscience Fellowship****Jun 2024 - Aug 2024**

- Continued research at the Waitkus Lab on glioblastoma treatment and telomeric DNA damage in ALT-positive cells
- Presented findings via poster presentation; attended weekly professional development sessions through the Duke Institute of Brain Sciences

Draw Your Way Through Medicine Fellowship**Jun 2024 - Aug 2024**

- Completed a 10-week fellowship on using digital art to communicate complex medical concepts and surgical procedures to patients
- Applied principles of narrative medicine to develop patient communication and health literacy tools

**Mayo Clinic Undergraduate Plummer Scholars & Virtual Extension Programs
May 2024****Oct 2023 -**

- Selected for a competitive nine-month academic program; engaged in specialized webinars on MCAT preparation, medical school admissions, and clinical training
- Participated in webinars on various medical specialties

Duke FOCUS: Medicine, Ethics, & Health Policy**Aug 2022 - May 2023***Leadership in Healthcare & End-of-Life Care*

- Studied narrative medicine, bioethics, and end-of-life care frameworks including Death with Dignity legislation

- Completed a comprehensive hospital management project integrating administrative, financial, and ethical dimensions of healthcare delivery

COMMUNITY ENGAGEMENT

Duke University Health System

Jan 2024 - Feb 2025

Surgical Waiting Room Volunteer, Duke Children's Hospital & Ambulatory Surgery Center

- Provided support to pediatric and adult patients and families in surgical waiting areas
- Developed insight into physician-patient dynamics and the role of empathetic communication in high-stress clinical environments

Females and Allies Excelling More in Math, Engineering, and Science

Aug 2022 - May 2025

After-School Programming Volunteer, High-School Research Mentor

- Taught hands-on STEM concepts in chemistry, biology, physics, and engineering to groups of 6 elementary school students from under-resourced schools in an after-school program
- Mentored 3 high school students through an independent research project on traumatic brain injuries

Croasdaile Village Retirement Community

Aug 2022 - May 2024

Volunteer, Assisted Living/Memory Care/Skilled Nursing

- Delivered companionship and support across across the Assisted Living, Memory Care, and Skilled Nursing facilities; engaged with residents experiencing dementia and end-stage illness
- Explored end-of-life care frameworks including hospice, palliative care, VSED, and Death with Dignity through direct service and reflection
- Developed interpersonal and empathetic skills for effective interactions in healthcare settings

Orlando Health Dr. P. Phillips Hospital

Jun 2022 - Jul 2022

Volunteer, Inpatient Pharmacy

- Assembled and quality-checked 200–300 pharmacy kits weekly; maintained pharmaceutical inventory and supported accurate medication distribution

AdventHealth Apopka Hospital

Jun 2022 - Jul 2022

Volunteer, Surgical ICU

- Restocked and quality-checked medical supplies across 80+ cabinets weekly; assisted nurses with patient care and assisted with patient admission and discharge at the SICU

PUBLICATIONS

- Brown A, Strickland LM, Erman EN, Pirozzi CJ, Low JT, Diplas BH, Gibson E, Shobande M, Khambati T, **Krylova M**, et al. SMARCAL1 is a targetable synthetic lethal therapeutic vulnerability in ATRX-deficient gliomas that use Alternative Lengthening of Telomeres. *Neuro-Oncology*. Published November 24, 2025. doi:10.1093/neuonc/noaf300.
- Rao A, Nwokemodo-Ihejirika C, Kincaid JWR, **Krylova M**, Nguyen D, Rivera C, Koranteng E, Succi MD. Clinician Attitudes Towards LLMs in Healthcare: Preferences for Adoption and Oversight. Preprint published November 24, 2025. doi:10.2196/preprints.87818.
- **Krylova M**, Hauck EF. Intraorbital arteriovenous fistulas: illustrative case. *Journal of Neurosurgery: Case Lessons*. Published June 9, 2025. doi:10.3171/CASE24857.

CONFERENCES

- RAISE Health Symposium, Stanford Medicine Jun 2, 2025
- Harvard Surgical Ethics Conference, Harvard Medical School Center for Bioethics Apr 7-28, 2025
- Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS) Nov 13-16, 2024

- National Research Conference at Penn (NRCP) **Oct 4-5, 2024**
- Duke Annual Undergraduate Research Symposium **April 15, 2024**
- National Collegiate Research Conference (NCRC) Harvard University **Jan 19 - 21, 2024**
- The Future Leaders in Surgery Symposium for Underrepresented Students (FLSSUS) **Sep 2023**
- The Future Leaders in Plastic Surgery Symposium for Underrepresented Students (FLPSUS) **Sep 2023**
- The Future Leaders in Neurosurgery Symposium for Underrepresented Students (FLNSUS) **Aug 2022**

AWARDS & GRANTS

Dean's Scholarship for HMS Master's Students **Jun 2025**

Grant Recipient

- Selected as one of 35 recipients across all HMS Master's programs; awarded for academic excellence, resilience, and commitment to serving under-resourced communities

Duke URS DiSTEM Award **Nov 2024**

Grant Recipient

- Selected from a competitive applicant pool as one of 16 recipients; grant funded attendance and presentation at the ABRCMS conference

Duke URS Conference Grant **Sept 2023, Jan 2024**

Grant Recipient

- Awarded \$500 on two separate occasions to support presentation of neurosurgery research at national conferences

MENTIONS

Duke University Department of Psychology and Neuroscience **Jul 2024**

“Student Spotlight: Margarita Krylova”

- Featured for contributions to neuroscience research, on-campus activities, and interest ethical issues in surgery — [Link](#)

Duke University Undergraduate Research Support **Jan 2025**

“URS Conference Stories: Margarita Krylova”

- Featured for presenting neurosurgery research at the National Collegiate Research Conference at Harvard University — [Link](#)

SHADOWING

Brian Skotko, MD — Boston, MA **Aug 2025 - Sept 2025**
Geneticist, Down Syndrome Program, Massachusetts General Hospital **5 hrs (Clinic)**

Max B. Medary, MD — Orlando, FL **Jun 2021 - May 2025**
Neurosurgeon, Greater Orlando Neurosurgery & Spine, Orlando Health **50 hrs (OR), 17 hrs (Clinic)**

Erik F. Hauck, MD — Durham, NC **Aug 2023 - May 2025**
Neurosurgeon, Duke Health **63 hrs (Cath-Lab & Clinic)**

Gerald A. Grant, MD — Durham, NC **Aug 2023 - May 2025**
Chair of the Department of Neurosurgery, Neurosurgeon, Duke Health **7.5 hrs (Clinic), 3.5 hrs (OR)**

David E. Attarian, MD, FACS — Durham, NC **Aug 2023 - May 2025**
Chief Medical Officer, Orthopaedic Surgeon, Duke Health Integrated Practice **11.5 hrs (OR)**

Robert J. Mentz, MD — Durham, NC **Aug 2023 - May 2025**

Chief of the Heart Failure Section, Advanced Heart Failure Specialist, Duke Health

10.5 hrs (Rounds)

John M. Choi, MD & Diana Lambie, MD — Orlando, FL

Aug 2023 - May 2025

Plastic Surgeons, Advanced Aesthetics

10 hrs (OR)

Debra L. Sudan, MD — Durham, NC

Aug 2023 - May 2025

Kidney/Pancreas, Liver, Small Intestine Transplant Surgeon, Duke Health

5 hrs (Clinic) 3.5 hrs (OR)

John K. Roberts, MD, MEd, MS — Durham, NC

Aug 2023 - May 2025

Kidney/Pancreas Transplant Specialist, Nephrologist

8 hrs (Rounds)

Alexander Fishberg, MD — Orlando, FL

Oct 2022

Primary Care Specialist, Primary Care Specialists of FL

4 hrs (Clinic)

LANGUAGES

- English (Full Proficiency)
- Russian (Full Proficiency)
- ASL 1 (Beginner)
- Ukrainian (Full Proficiency)
- Python (Intermediate)
- R (Intermediate)

SKILLS

- Rapid Learning
- Organization & Responsibility
- Analytical Skills
- Compassion & Empathy
- Ethical & Professional Behavior
- Written & Verbal Communication
- Collaborative Leadership
- Time Management
- Creativity
- Bedside Manner
- Cultural Competency
- Advocacy & Education

INTERESTS

- Research & Ethics
- Traveling
- Yoga/Meditation
- Reading (Psychology, Medical, Classics)
- Cross-Country Running
- Painting