
BIOGRAPHICAL SKETCH

NAME: Anirudh Mukhopadhyay

eRA COMMONS USERNAME (credential, e.g., agency login):

POSITION TITLE: Heed Fellowship

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
Rice University – Houston, Texas	BS	08/2015	05/2019	Biochemistry & Cell Biology
Baylor College of Medicine – Houston, Texas	MD	08/2019	05/2023	Medicine
Louisiana State University Health Sciences Center – New Orleans, Louisiana		07/2023	06/2027	Ophthalmology

A. Personal Statement

I am an ophthalmology resident at LSU Health Sciences Center - New Orleans with a definitive career goal of becoming an independent physician-scientist in academic ophthalmology. My research interests are centered on leveraging large-scale clinical data (clinical trials, claims, and registries) to generate real-world evidence and decision-support strategies to improve long-term outcomes in chronic retinal diseases. My primary objective is to translate these "big data" insights into clinically implementable decision support frameworks. A significant milestone in my career was securing a \$50,000 grant from the Brown Foundation to further research in macular degeneration. Specifically, I am investigating the relationship between complement dysregulation in inflammatory liver disease and progression of age-related macular degeneration. By identifying biomarkers of macular degeneration progression, this work seeks to clarify systemic-retinal inflammatory links relevant to AMD progression and potentially offer avenues for early intervention.

Beyond my research, I am deeply committed to the academic mission through the advancement of surgical and clinical education. As LSU's wet lab coordinator, I spearheaded new hands-on surgical sessions in collaboration with industry leaders including Alcon, Glaukos, and Zeiss. These experiences have refined my ability to manage complex institutional projects. As I transition toward a surgical retina fellowship, I am eager to leverage the mentorship of the Heed Resident Retreat to balance clinical excellence with a sustainable career of academic investigation.

B. Positions, Scientific Appointments and Honors

- **Joe W and Dorothy Dorsett Brown Foundation Research Grant** – \$50,000. Funded translational research for macular degeneration and geographic atrophy.
- **Viatrix In-Kind Research Grant** – est. \$15,000. Supported research on corneal protection in neurotrophic keratitis through provision of study drug.
- **Ochsner Program Philanthropic Research Grant** – \$1,500. Funded cost-utility analysis of anti-VEGF therapy for macular degeneration.
- **1st place, Fifth Annual Retina Summit for Residents and Fellows.** Awarded for top abstract presentation.
- **Distinction in Ophthalmic Knowledge, LSU Health Sciences Center.** Awarded for OKAP score greater than the 90th percentile nationally.

- **Edgar King Scholarship, Baylor College of Medicine.** Full merit-based scholarship for academic excellence.

C. Contributions to Science

1. Peer reviewed publications

- **Mukhopadhyay A**, Go CC, Wortmann W, Coulon SJ. Carotid cavernous fistula in a young adult with Bannayan-Riley-Ruvalcaba syndrome. *Orbit*. Accepted March 2026.
- Goldblatt NP, **Mukhopadhyay A**, Mazzulla DA. Short term intraocular pressure trends following intravitreal pegcetacoplan injection. *J Vitreoretinal Dis*. Accepted February 2026.
- Del Piero J, Yennam S, **Mukhopadhyay A**, Chen EM, Weng CY, Parikh R. Demographics of ophthalmology and optometry practices and changes in utilization patterns of procedures and services following private equity acquisition. *Int Ophthalmol Clin*. 2025;65(1):91–97. doi:10.1097/IIO.0000000000000554.
- Saleem MA, Raviskanthan S, **Mukhopadhyay A**, Malik AI, Lee AG. Follicular lymphoma isolated to the superior oblique muscle. *Can J Ophthalmol*. 2023;58(1):e38–e40. doi:10.1016/j.cjco.2022.06.004.
- Pudakalakatti S, Audia A, **Mukhopadhyay A**, Enriquez JS, Bourgeois D, Tayob N, et al. NMR spectroscopy–based metabolomics of platelets to analyze brain tumors. *Reports*. 2021;4:32. doi:10.3390/reports4040032.
- Naguib MM, Ghauri S, **Mukhopadhyay A**, Scheffler AC. Endophthalmitis after intravitreal injections during the COVID-19 pandemic with implementation of universal masking. *Retina*. 2021;41(11):2208–2214. doi:10.1097/IAE.0000000000003193.

2. Book Chapters

- Nussdorf JD, **Mukhopadhyay A**. Low pressure but high stakes: neovascular glaucoma. In: Francis BA, Rhee D, Piltz-Seymour J, Chopra V, eds. *Glaucoma Grand Rounds*. Springer; 2026. In press.
- Weikert MP, **Mukhopadhyay A**. Cataract surgery in cases with prior corneal transplantation and high astigmatism. In: Alió JL, Dick HB, Osher RH, eds. *Cataract Surgery: Advanced Techniques for Complex and Complicated Cases*. Springer; 2022:123–133.

3. Published Abstracts

- **Mukhopadhyay A**, Puri S. Economic evaluation of high-dose aflibercept regimens in neovascular age-related macular degeneration using real world evidence. Accepted abstract, *Invest Ophthalmol Vis Sci*. Forthcoming 2026.
- **Mukhopadhyay A**, Puri S. Cost-effectiveness of faricimab in neovascular age-related macular degeneration: a real-world evidence approach. *Ophthalmic Surg Lasers Imaging Retina*. 2025;56(0):710–711. Abstract.
- **Mukhopadhyay A**, Go C, Puri S. Enhancing uveal melanoma staging: a volume-based system for improved prognostication. *Invest Ophthalmol Vis Sci*. 2025;66(8):971. Abstract.

4. Presentations

- **Mukhopadhyay A**, Puri S. Economic evaluation of high-dose aflibercept regimens in neovascular age-related macular degeneration using real-world evidence. ARVO Annual Meeting; 2026; Denver, CO. Poster.
- **Mukhopadhyay A**, Kirvit J, Simon F, Wang V, Briggs E, Olet S, Nussdorf J. Population-based analysis of retinopathy of prematurity incidence in southeastern Louisiana and the Mississippi Gulf Coast. NOAO Annual Meeting; 2026; New Orleans, LA. Poster.
- **Mukhopadhyay A**, Puri S. Cost-effectiveness of faricimab in neovascular age-related macular degeneration: a real-world evidence approach. Retina Summit for Fellows and Residents; 2025; Virtual. Oral.
- **Mukhopadhyay A**, Williams M, Reinoso MA. Mountain or a mole hill: evaluation of large subretinal masses. New Orleans Retina Imaging Conference; April 2025; Virtual. Oral.
- **Mukhopadhyay A**, Go C, Puri S. Enhancing uveal melanoma staging: a volume-based system for improved prognostication. ARVO Annual Meeting; 2025; Salt Lake City, UT. Poster.
- **Mukhopadhyay A**, Go C, Leoni J, Iqbal L, Phelps T. Intraocular pressure prophylaxis prior to intravitreal injection: a systematic review and meta-analysis. NOAO Annual Meeting; 2025; New Orleans, LA. Poster.

- **Mukhopadhyay A**, Benevento J, Nussdorf J. Low pressure but high stakes: practical approaches for technicians. New Orleans Academy of Ophthalmology Technician’s Conference; 2025; New Orleans, LA. Oral.
 - **Mukhopadhyay A**, Go C, Puri S. Imaging-guided tumor volume stratification improves mortality prediction in medium-sized uveal melanoma. Retina Summit for Fellows and Residents; 2024; Virtual. Oral.
5. Digital Educational Content
- **Mukhopadhyay A**, Go C, Nelson C. Melanoma associated retinopathy. American Academy of Ophthalmology EyeWiki. Published April 2024.
 - Lee AG, Laylani N, Davila-Siliezar P, Minetos Y, **Mukhopadhyay A**, Wooten M, Al-Zubidi N, Al Deyabat O. Neuro-ophthalmology and cerebral amyloid angiopathy. American Academy of Ophthalmology EyeWiki. Published January 2023.
 - **Mukhopadhyay A**, Bhat N, Lee AG, Bindiganavile SH. Junctional scotoma and junctional scotoma of Traquair. American Academy of Ophthalmology EyeWiki. Published June 2020.

D. Scholastic Performance

YEAR	COURSE TITLE	GRADE
2026	Ophthalmic Knowledge Assessment Program Examination	616
2025	Ophthalmic Knowledge Assessment Program Examination	579
2024	USMLE STEP 3	241
2022	USMLE STEP 2	266