

August 12, 2024

CURRICULUM VITAE
Carolina A. Chiou, MD

Lifespan Physician Group Ophthalmology
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EDUCATION

Florida International University, Miami, FL

Bachelor of Science in Biological Science, *magna cum laude* 6/2006-5/2012

Bachelor of Arts in Chemistry, *magna cum laude* 6/2006-5/2013

Harvard Medical School, Boston, MA

Doctor of Medicine 8/18/2014-5/24/2018

POSTGRADUATE TRAINING

Transitional Year, Signature Healthcare, Brockton, MA 6/2018-6/2019

Residency, Harvard Ophthalmology Residency, Boston, MA 7/2019-7/2022

Fellowship, ASOPRS Ophthalmic Plastic Reconstructive Surgery Fellowship, 7/2022-Present
Massachusetts Eye and Ear, Boston, MA

POSTGRADUATE HONORS AND AWARDS

Thomas McClelland Brown Scholarship Recipient, Rotary Club of Miami, *Merit-based, four-time recipient* 2014, 2015, 2016, 2017

Harvard Resident's Course Visiting Professorship, *Selected as Co-Chair* 2021

Women in Ophthalmology URiM Scholarship Recipient, *Merit-based* 2021

Harvard Ophthalmology 2023 Fellow of the Year Award 2023

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

American Board of Ophthalmology Certified 2022

Massachusetts State Medical License #291901 Current

Rhode Island State Medical License #MD19988 Current

ACADEMIC APPOINTMENTS

Instructor of Surgery, Warren Alpert Medical School, Brown University Current

Assistant in Ophthalmology, Mass General Brigham/Mass Eye and Ear Current

HOSPITAL APPOINTMENTS

Ophthalmic Plastic and Reconstructive Surgery, Lifespan Physician Group 2024

HOSPITAL COMMITTEES

Mass Eye and Ear Diversity Equity and Inclusion, Committee Member 2020-2024

Mass Eye and Ear CPR Committee, Committee Member 2019-2022

UNIVERSITY COMMITTEES

Harvard Crimson Care Collaborative, Operations Committee 2015-2017

MEMBERSHIP IN SOCIETIES

American Society of Ophthalmic Plastic and Reconstructive Surgery 2022-Current

American Academy of Ophthalmology 2019-Current

OTHER

New England Xeroderma Pigmentosum, Advisory Board 2022-Current

PUBLICATIONS LIST

PEER-REVIEWED

1. Herrera KJ, Lowery RK, Hadden L, **Chiou CA**, Calderon S, Yepiskoposyan L, Regueiro M, Underhill PA, Herrera RJ. Neolithic Patrilineal Signals Indicate that the Armenian Plateau was Repopulated by Agriculturalists. *Eur J Hum Genet.* 2012 11; 20:313–20.
2. Nascimento E Silva R, **Chiou CA**, Wang M, Wang H, Shoji MK, Chou JC, D'Souza EE, Greenstein SH, Brauner SC, Alves MR, Pasquale LR, Shen LQ. Microvasculature of the Optic Nerve Head and Peripapillary Region in Patients with Primary Open-Angle Glaucoma. *J Glaucoma.* 2019 04; 28(4):281-288.
3. Nascimento E Silva R, Shen LQ, **Chiou CA**, Shanbhag SS, Paschalis EI, Pasquale LR, Colby KA, Dohlman CH, Chodosh J, Alves MR. Glaucoma Management in Patients with Aniridia and Boston Type 1 Keratoprosthesis. *Am J Ophthalmol.* 2019 11; 207:258-67.
4. Nascimento E Silva R, **Chiou CA**, Wang M, Wang H, Devlin J, Li D, Lovelace S, Wang H, Greenstein SH, Brauner SC, Alves MR, Shen LQ. Quantification of the peripapillary microvasculature in eyes with glaucomatous paracentral visual field loss. *Ophthalmol Glaucoma.* 2020 10; S2589-4196 (20) 30273-8.
5. **Chiou CA**, Wolkow N, Freitag SK. Eyelid Keratoacanthoma in an 86-year-old Man: Clinical and Histopathologic Features. *Ophthalmic Plast Reconstr Surg Images.* 2020 07.
6. **Chiou CA**, Wang M, Taniguchi EV, Li D, Nascimento e Silva R, Greenstein SH, Brauner SC, Turalba AV, Pasquale LR, Shen LQ. Characterization of Wedge-Shaped Prelaminar Tissue in Primary Open Angle Glaucoma. *Curr Eye Res.* 2020 10;1-8.
7. **Chiou CA**, Gragoudas EV. Sturge Weber Syndrome: Retinal Detachment in a 40-year-old Man. *JAMA Ophthalmol.* 2021;139(5):581-582.
8. **Chiou CA**, Reshef, ER, Freitag, SK. Teprotumumab for the Treatment of Compressive Optic Neuropathy in Thyroid Eye Disease: A Report of Two Cases. *Am J Ophthalmol Case Reports* 2021 03; 22:101075.
9. **Chiou CA**, Liou VD, Lee NGL. Bilateral Uveitis and Myeloradiculopathy in a 12-year-old Girl. *JAMA Ophthalmol.* 2021; 140(2):203-204.
10. **Chiou CA**, Reshef ER, Yoon MK. Shewanella Algae Causing Pediatric Orbital Cellulitis. *Ophthalmic Plast Reconstr Surg.* 2022. 38(4):e101-e104
11. **Chiou CA**, Yoon MK. An Update on Fungal Orbital Infections. *Int Ophth Clinics.* 2022 04; 2(2):55-69.

12. **Chiou CA**, Reshef ER, Liebman D, Dmytriw A, Vranic J, Regenhardt R, Patel A, Stapleton C, Wolkow B. A Trans-orbital Pencil in the Left Carotid Artery of a 40-year-old Man: Clinical and Radiographic Images. *Orbit*. Online Ahead of Print.
13. Bal S, Lains I, **Chiou CA**, Patel N, Rudnick ND, Kim CB, Ma KK, Tong SO. Video-based surgical curriculum for open globe injury repair, IV: corneal wounds. *Digit J Ophthalmol*. 2022 28(4):86-99.
14. **Chiou CA**, Rajabi F, Fulton A, Acsadi G, Waitzman D, Gaier, ED. Membrane Frizzled-Related Protein (MFRP)-related disease mimicking idiopathic intracranial hypertension. Accepted for publication in *J Neuroophthal*.
15. Feng Y, **Chiou CA**, Lee NG. Intrusion, Extrusion, and Infection of a Hydrolyzed MIRAgel Scleral Buckle. *Am J Ophthalmol*. 2023; 247:e1-e2.
16. Reshef ER, Marsiglia M, Bouhadjer K, **Chiou CA**, O'Brien-Coon D, Reinshagen KL, Freitag SK. Reduction in Extraocular Muscle Cross-sectional Area Following Teprotumumab Treatment. *Ophthalmic Plast Reconstr Surg*. Online Ahead of Print.
17. Cubero Z, **Chiou CA**, Mukharesh L, Rizzo, JF. A 61-year-old male with blepharoptosis, dysphagia, and trouble focusing his eyes. Accepted for publication by *J Neuroophth*.
18. Boal N, **Chiou CA**, Sadlak N, Sarmiento A, Lefebvre DR, Distefano A. Antibiotic utilization in endoscopic dacryocystorhinostomy: a multi-institutional study and review of the literature. Accepted for publication by *Orbit*.
19. **Chiou CA**, Vickery TW, Reshef ER, Bleier BS, Freitag SK. Endonasal Endoscopic Approach to Orbital Tumors. *Int. Ophthalmol. Clin*. 2023 06;63(3):249-262.
20. Chang EK, **Chiou CA**, Lefebvre DR, Stagner AM. A Rapidly Expanding Hemorrhagic BRAF-Mutant Orbital Atypical Glomus Tumor. Accepted for publication by *Ophthalmic Plast Reconstr Surg*. 2023.
21. Rosenblatt TR, **Chiou CA**, Wolkow N, Lee NG, Yoon MK, Freitag SK. Proptosis Regression After Teprotumumab Treatment for Thyroid Eye Disease. Accepted for publication by *Ophthalmic Plast Reconstr Surg*. 2023.
22. Robinette ML, Weeks LD, Kramer RJ, Agrawal M, Gibson CJ, Yu Z, Sekar A, Mehta A, Niroula A, Brown J, McDermott G, Reshef ER, Lu JE, Liou VD, **Chiou CA**, Natarajan P, Freitag SK, Rao DA, Ebert BL. Somatic TET2 Mutations are Associated with Giant Cell Arteritis. *Arthritis Rheumatol*. 2023.
23. Feng Y, **Chiou CA**, Wolkow N. Cystic-Appearing Eyelid Lesion in a 62-Year-Old Man. *JAMA Ophthalmol*. 2024.
24. Azad AD, **Chiou CA**, Stagner AM, Freitag SK. Slate grey eyelid pigmentation in a patient with hemochromatosis and prior hydroxychloroquine use. Accepted for publication by *Ophthalmic Plast Reconstr Surg*. 2024.
25. Feng Y, **Chiou CA**, Stagner AM, Freitag SK. Distinguishing Spheno-Orbital Metastatic Prostate Cancer Mimicking a Meningioma Using Novel ¹⁸F-PSMA PET/CT Imaging. *Orbit*. 2024.
26. Vongsachang H, **Chiou CA**, Azad AD, Lin LY, Yoon MK, Stagner AM, Lefebvre DR. Periorbital Necrotizing Sweet Syndrome: A Report of Two Cases Mimicking Necrotizing Soft Tissue Infections. *Am J Ophthalmol*. 2024.
27. Lin LY, Azad AD, **Chiou CA**, Kozanno L, Stemmer-Rachamimov A, Stone J, Lee NG. Antisynthetase Syndrome Causing Necrotizing Myositis Involving Extraocular Muscles. *Orbit*. 2024.

28. **Chiou CA**, Lin LY, Stagner AM, Lee NG. Melanoma Arising Beneath the Lateral Rectus Muscle in a Teenager with Ocular Melanocytosis: Possible Origin From Intrasccleral Melanocytes. *Ophthalmic Plast Reconstr Surg*. 2024.
29. Rosenblatt TR, **Chiou CA**, Yoon MK, Lee NG, Wolkow N, Freitag SK. Change in Upper Eyelid Position After Teprotumumab Treatment for Thyroid Eye Disease. *Orbit*. 2024.
30. Rosenblatt TR, Lin LY, **Chiou CA**, Lee NG, Gulati GS, Bendapudi PK, Wolkow N. Recalcitrant postoperative bleeding after ectropion repair in the setting of undiagnosed chronic disseminated intravascular coagulation. *Orbit*. 2024.
31. Lin LY, **Chiou CA**, Lee NG. Bilateral Dacryocystoceles in Congenital Arrhinia. *Ophthalmic Plast Reconstr Surg*. 2024.
32. Sbeih F, Zhou HW, Ayoub NF, Ringel B, **Chiou CA**, Rizzo JF, Bleier BS. Transsphenoidal retrieval of a needlefish beak remnants from the optic canal. *Int Forum Allergy Rhinol*. 2024.

BOOKS AND BOOK CHAPTERS

Barron's New MCAT Prep Book, Physics Chapter Reviewer

OTHER NON-PEER REVIEWED PUBLICATIONS

1. Reshef ER, Marsiglia M, Bouhadjer K, **Chiou CA**, O'Brien-Coon D, Reinshagen KL, Freitag SK. Reply Re: "Reduction in Extraocular Muscle Cross-sectional Area and Correlation with Extraocular Motility and Diplopia Following Teprotumumab for Thyroid Eye Disease". *Ophthalmic Plast Reconstr Surg*. 2023 07. Epub.
2. Rosenblatt TR, Chiou CA, Yoon MK, Wolkow N, Lee NG, Freitag SK. Reply Re: "Proptosis Regression after Teprotumumab Treatment for Thyroid Eye Disease.". *Ophthalmic Plast Reconstr Surg*. 2024.

ABSTRACTS

1. Barrett F, **Chiou CA**, Meissa J, Olszewski A, Myers G, Ganeshan S, Diephuis B, Wallace R, Thakkar A, Fernandez-Golarz C, Cohen M. Piloting a Mobile Appointment Reminder System in an Underserved Population at a Student-Faculty Collaborative. Poster at. *HMS Center for Primary Care Innovations Conference* (December 2015); Boston, MA.
2. Barrett F, **Chiou CA**, Meissa J, Olszewski A, Myers G, Ganeshan S, Diephuis B, Wallace R, Thakkar A, Fernandez-Golarz C, Cohen M. Piloting a Mobile Appointment Reminder System in an Underserved Population at a Student-Faculty Collaborative. Poster at *Clinical Research Category, Massachusetts Medical Society's (MMS) Tenth Annual Research Poster Symposium for Residents, Fellows, and Medical Students* (December 2016); Waltham, MA.
3. **Chiou CA**, Mostaghimi A. Barriers to Accessing Care: Understanding Nonattendance Among Spanish-Speaking Patients. Poster at: *76th Annual Soma Weiss Medical and Dental Student Research Day* (January 2016); Boston, MA.
4. Utibe ER, Seigle JA, **Chiou CA**, Cohen M. Peer Mentorship in Diabetes: A Pilot and Feasibility Study in a Hispanic Population. Poster at: *Massachusetts American Family of Physicians Annual Meeting* (March 2017); Boston, MA.
5. **Chiou CA**, Wang M, Taniguchi E, Li D, Nascimento E, Silva R, Greenstein SH, Brauner SC, Turalba AV, Pasquale L, Shen LS. Characterization of Wedge-Shaped Defects in Prelaminar Tissue in Primary Open Angle Glaucoma. Poster at *American Glaucoma Society 28th Annual Meeting* (March 2018); New York, NY, USA.

6. **Chiou CA**, Wang M, Taniguchi E, Li D, Nascimento E, Silva R, Greenstein SH, Brauner SC, Turalba AV, Pasquale L, Shen LS. Characterization of Wedge-Shaped Defects in Prelaminar Tissue in Primary Open Angle Glaucoma. Poster at MGH Clinical Research Day (October 2018); Boston, MA.
7. **Chiou CA**, Reshef ER, Freitag SK. Understanding the Side Effect Profile of Teprotumumab. Virtual poster at ASOPRS 52nd Annual Fall Scientific Symposium (November 2021), New Orleans, LA, USA.
8. Reshef ER, **Chiou CA**, Reinshagen KL, Freitag SK. Reduction in Extraocular Muscle Cross-sectional Area Following Teprotumumab Treatment. Oral presentation at ASOPRS 52nd Annual Fall Scientific Symposium (November 2021), New Orleans, LA, USA.
10. **Chiou CA**, Reshef ER, Yoon MK. Shewanella Algae Causing Pediatric Orbital Cellulitis. Virtual poster at ASOPRS 52nd Annual Fall Scientific Symposium (November 2021), New Orleans, LA, USA
11. Dohlman J, **Chiou CA**, Boal N, Yoon MK. Success of DCR Surgery for Radioactive Iodine-Associated NLDO Compared to Primary NLDO. Virtual poster at ASOPRS 52nd Annual Fall Scientific Symposium (November 2021), New Orleans, LA, USA
12. **Chiou CA**, Rajabi F, Fulton A, Acsadi G, Waitzman D, Gaier, ED. Membrane Frizzled-Related Protein (MFRP)-related disease mimicking idiopathic intracranial hypertension. Oral presentation at Aegean Retina (May 2022), Elounda Island, Crete, Greece.
13. Lin LY, **Chiou CA**, Lee NG. Bilateral Dacryocystoceles in Congenital Arhinia: A Case Report. Oral presentation at ASOPRS 2023 Spring Scientific Symposium (Jun 2023), Quebec City, Canada.
14. Lee NG, Lin LY, Stagner AM, **Chiou CA**. Ocular Melanocytosis Associated Orbital Melanoma in a Pediatric Patient Arising from Intrascleral Uveal Melanocytes. Poster presentation at ASOPRS 2023 Spring Scientific Symposium (Jun 2023), Quebec City, Canada.
15. Feng Y, **Chiou CA**, Stagner AM, Yoon MK, Freitag SK. Positron Emission Tomography Computed Tomography Using Radiopharmaceuticals and Orbital Tumors: A Report of Two Cases. Poster presentation at Women in Ophthalmology Summer Symposium (August 2023), Marco Island, FL, USA.
16. Walsh H, **Chiou CA**, Freitag SK, Timing of Surgery and Flare Rates for Patients with Thyroid Eye Disease Treated with Teprotumumab: A Multicenter Analysis. Poster presentation at AAO 2023 (November 2023), San Francisco, CA, USA.
17. **Chiou CA**, Reinshagen KL, Yoon MKY. Resection of the frontal nerve with perineural spread: analysis of resectability from surgical margins and imaging. Oral presentation at ASOPRS 53rd Annual Fall Scientific Symposium (November 2023), San Francisco, CA, USA.
18. Rosenblatt TR, **Chiou CA**, Wolkow N, Lee NG, Yoon MK, Freitag SK. Proptosis Regression After Teprotumumab Treatment for Thyroid Eye Disease. Oral presentation at ASOPRS 53rd Annual Fall Scientific Symposium (November 2023), San Francisco, CA, USA.
19. Azad AD, **Chiou CA**, Wolkow N, Freitag SK. Thyroid Eye Disease and Marijuana: A Case Series. Poster presentation at ASOPRS 53rd Annual Fall Scientific Symposium (November 2023), San Francisco, CA, USA.
20. Rosenblatt TR, **Chiou CA**, Yoon MK, Lee NG, Wolkow N, Freitag SK. Change in Upper Eyelid Position After Teprotumumab Treatment for Thyroid Eye Disease. Oral presentation at EnVision Summit (February 2024), Fajardo, Puerto Rico.

21. Chiou CA, Yoon MK. Nasolacrimal Duct-ectomy – The Minimally Invasive Medial Maxillectomy. Poster presentation at ASOPRS 2024 mSpring Scientific Symposium (May 2023), Sea Island, Georgia, USA.

SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

PEER-REVIEWED

Bal S, **Chiou CA**, Lains I, Yuan A, Pineda R. Video-based surgical curriculum for open globe injury repair, VI: other trauma sequelae. *Digit J Ophthalmol.* 2022 28(4):86-99.

NON-PEER REVIEWED

Lopez-Canizares A, Tran JA, **Chiou CA**, Freitag SK. Evisceration. *CSurgeries.* Aug 2022.
Boal N, **Chiou CA**. Suspensory Ligament of the Eye (Lockwood’s Ligament). American Academy of Ophthalmology, EyeWiki, April 2023

INVITED PRESENTATIONS

NEJM MGH Clinicopathologic Conference, Case12/2021, Boston, MA, <i>Invited Presenter</i>	2020
Xeroderma Pigmentosa DCIP, Santo Domingo, Dominican Republic, International Invited Speaker	2023
MGH Harvard OMFS Residency Ophthalmic Trauma Session, Invited Lecturer	2022, 2023

UNIVERSITY TEACHING, ADVISING and MENTORING ROLES*

Kumon Learning Center/A-Z Tutoring/MCAT Prep, Tutor	2004-2014
FIU Chemistry I and II, ChemPal Program Tutor (4 semesters)	2009-2011
FIU Survey of Chemistry Lab, Teaching Assistant (2 semesters)	2011-2012
Harvard Latino Medical Student Association, Pipeline Chair	2014-2016
Harvard Crimson Care Collaborative, Senior Clinician, Senior Director	2014-2017
HMS BIDMC Principial Clinical Experience, Student Council Representative	2016-2017
Harvard Latino Medical Student Association, Undergraduate Student Mentor	2014-2018
HMS Alumni Advisors, Medical Student Advisor	2018-Current

HOSPITAL TEACHING, ADVISING and MENTORING ROLES*

Mass Eye and Ear Ophthalmology URiM Mentorship Program, Medical Student Mentor	2020-Current
Intro to Ophthalmology Harvard Medical School, Skills Practice Instructor	2021
MEE Underrepresented Minority Mentorship Program, Undergraduate Student Mentor	2021-Current
Harvard Research Summer Scholars Program, Medical Student Mentor	2021-2023
Mbarara Uganda Medical Mission, Invited Instructor and Surgeon	2024