



Charles C. Lin, MD

Clinical Associate Professor, Ophthalmology

CLINICAL OFFICES

- **Stanford Byers Eye Institute**

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

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Bio

BIO

Dr. Lin is a board-certified ophthalmologist and fellowship-trained cornea specialist, focusing on the medical and surgical management of cornea conditions, as well as cataract surgery. He has launched cutting edge surgical procedures at Stanford including ultra-thin DSAEK, DMEK and DALK at Stanford. He conducts clinical trials on cornea transplantation and ocular inflammation and infections. Dr. Lin sees patients at the Byers Eye Institute at Stanford University. If you wish to make an appointment, please call 650-723-6995 and ask to speak with Ruby Huang.

Charles Lin, MD received his AB in Environmental Science and Public Policy from Harvard University, graduating summa cum laude. He attended medical school at the University of California, San Francisco, where he received his M.D. with honors. Following an internship in Internal Medicine at Cedars-Sinai Hospital, he completed his ophthalmology residency at the University of California, San Francisco. Upon graduation, he was awarded the Heed Fellowship, a prestigious national award for ophthalmologists entering a career in academic medicine. He received subspecialty Cornea, External Disease, and Refractive Surgery training at the F.I. Proctor Foundation and University of California, San Francisco, one of the premier fellowships in the country.

He has extensive clinical and surgical experience in the following diseases:

- Cataract including complex cataract surgery
- Fuchs Dystrophy
- Corneal edema
- Keratoconus & Pellucid Marginal Degeneration
- Herpetic keratitis
- Cornea ulcers
- Pterygium
- Corneal Dystrophies
- Corneal & Conjunctival tumors
- Blepharitis & Dry Eye

CLINICAL FOCUS

- Ophthalmology
- Cornea Transplantation

ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Ophthalmology

ADMINISTRATIVE APPOINTMENTS

- Director of Cornea Fellowship, Byers Eye Institute, Stanford University, (2016- present)
- Operating Room Committee, Byers Eye Institute, Stanford University, (2016- present)

HONORS AND AWARDS

- Harvard-Yenching Fellowship, Harvard University (2001)
- Thomas Hoopes Prize, Harvard University (2001)
- Phi Beta Kappa, Harvard University (2001)
- Dean's Study Abroad Grant, University of California, San Francisco (2003)
- International Health Travel Grant, Rainer's Fund (2003)
- Best Poster, UCSF Global Health Symposium (2004)
- Fogarty-Ellison Fellowship for Global Health, National Institutes of Health (2005)
- Phi Beta Kappa Graduate Scholarship, Northern California Phi Beta Kappa (2006)
- Alpha Omega Alpha, University of California, San Francisco (2007)
- Garcia/Asbury Award, University of California, San Francisco (2010)
- Paul Langer Award, University of California, San Francisco (2011)
- Heed Fellowship, Heed Ophthalmic Foundation (2011-2012)
- Editors' Choice, American Academy of Ophthalmology (2016)
- Achievement Award, American Academy of Ophthalmology (2019)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, AAO Ophthalmic Technology Assessment Committee (2019 - present)
- ONE Network Editor, American Academy of Ophthalmology (2014 - 2019)
- Member, American Academy of Ophthalmology (2010 - present)
- Member, Cornea Society (2011 - present)
- Member, American Society of Cataract and Refractive Surgeons (2012 - present)
- Member, APEX Society (2013 - present)

PROFESSIONAL EDUCATION

- Internship: Cedars Sinai Medical Center Internal Medicine Residency (2008) CA
- Fellowship: UCSF Cornea Fellowship (2012) CA
- Residency: UCSF Ophthalmology Residency (2011) CA
- Medical Education: University of California at San Francisco School of Medicine (2007) CA
- Board Certification: Ophthalmology, American Board of Ophthalmology (2012)
- B.A., Harvard University , Environmental Science & Public Policy, summa cum laude (2001)

COMMUNITY AND INTERNATIONAL WORK

- Medical Missions, Bomet, Kenya

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Lin conducts clinical trials focused on cornea transplantation, corneal edema, and cornea infections at Stanford. His research interests include improving the success and safety of cutting edge surgeries such as ultra-thin DSAEK, DMEK, DALK, and DSO. He is actively researching surgical therapies for corneal edema and Fuchs' Dystrophy. He is among a handful of cornea specialists nationwide with extensive experience using intraoperative OCT imaging to perform cornea transplants.

CLINICAL TRIALS

- A Study of AK002 in Patients With Atopic Keratoconjunctivitis, Vernal Keratoconjunctivitis, and Perennial Allergic Conjunctivitis, Recruiting
- Zoster Eye Disease Study, Recruiting
- Descemet Endothelial Thickness Comparison Trial, Not Recruiting

Publications

PUBLICATIONS

- **Changes in Corneal Power up to Two Years after Endothelial Keratoplasty: Results from the Randomized Controlled DETECT Trial.** *American journal of ophthalmology*
Chamberlain, W., Shen, E., Werner, S., Lin, C., Rose-Nussbaumer, J.
2022
- **Femtosecond Laser-Assisted Cataract Surgery: A Report by the American Academy of Ophthalmology.** *Ophthalmology*
Lin, C. C., Rose-Nussbaumer, J. R., Al-Mohtaseb, Z. N., Pantanelli, S. M., Steigleman, W. A., Hatch, K. M., Santhiago, M. R., Kim, S. J., Schallhorn, J. M.
2022
- **Lirentelimab for Severe and Chronic Forms of Allergic Conjunctivitis.** *The Journal of allergy and clinical immunology*
Anesi, S. D., Tauber, J., Nguyen, Q. D., Chang, P., Berdy, G. J., Lin, C. C., Chu, D. S., Levine, H. T., Fernandez, A. D., Roy, N., Asbell, P. A., Kantor, A. M., Chang, et al
2022
- **Modified Gundersen Flap Using Inferior Palpebral-Bulbar Conjunctiva.** *Cornea*
Mekonnen, B., Kossler, A. L., Lin, C. C.
1800; 41 (2): 260-263
- **Differentiation of Active Corneal Infections From Healed Scars Using Deep Learning.** *Ophthalmology*
Tiwari, M., Piech, C., Baitemirova, M., Prajna, N. V., Srinivasan, M., Lalitha, P., Villegas, N., Balachandar, N., Chua, J. T., Redd, T., Lietman, T. M., Thrun, S., Lin, et al
2021
- **Descemet Endothelial Thickness Comparison Trial: Two-Year Results from a Randomized Trial Comparing Ultrathin Descemet Stripping Automated Endothelial Keratoplasty with Descemet Membrane Endothelial Keratoplasty** *OPHTHALMOLOGY*
Rose-Nussbaumer, J., Lin, C. C., Austin, A., Liu, Z., Clover, J., McLeod, S. D., Porco, T. C., Lietman, T. M., Dresner, S. M., Benetz, B., Lass, J. H., Chamberlain, W. D.
2021; 128 (8): 1238-1240
- **A novel device for descemetorhexis creation: 3D Printed Prototype Design and Ex Vivo Evaluation**
Buickians, D., Mbagwu, M., Lin, C. C., Myung, D.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2021
- **Predictors of Vision-Related Quality of Life After Endothelial Keratoplasty in the Descemet Endothelial Thickness Comparison Trials.** *Cornea*
Pickel, J., Chamberlain, W. D., Lin, C. C., Austin, A., Clover, J., Lietman, T. M., Rose-Nussbaumer, J.
2021; 40 (4): 449-52

- **Successful interventions to improve efficiency and reduce patient visit duration in a retina practice.** *Retina (Philadelphia, Pa.)*
Lin, C. C., Li, A. S., Ma, H., Lin, X., Olivares, M. Z., Haubrich, A., Sanislo, S., Do, D. V.
2021
- **Comprehensive pathogen detection for ocular infections** *JOURNAL OF CLINICAL VIROLOGY*
Doan, T., Sahoo, M. K., Ruder, K., Huang, C., Zhong, L., Chen, C., Hinterwirth, A., Lin, C., Gonzales, J. A., Pinsky, B. A., Acharya, N. R.
2021; 136
- **Comprehensive pathogen detection for ocular infections** *JOURNAL OF CLINICAL VIROLOGY*
Doan, T., Sahoo, M. K., Ruder, K., Huang, C., Zhong, L., Chen, C., Hinterwirth, A., Lin, C., Gonzales, J. A., Pinsky, B. A., Acharya, N. R.
2021; 136
- **Comprehensive pathogen detection for ocular infections.** *Journal of clinical virology : the official publication of the Pan American Society for Clinical Virology*
Doan, T. n., Sahoo, M. K., Ruder, K. n., Huang, C. n., Zhong, L. n., Chen, C. n., Hinterwirth, A. n., Lin, C. n., Gonzales, J. A., Pinsky, B. A., Acharya, N. R.
2021; 136: 104759
- **Multifocal and Accommodating Intraocular Lenses for the Treatment of Presbyopia: A Report by the American Academy of Ophthalmology.** *Ophthalmology*
Schallhorn, J. M., Pantanelli, S. M., Lin, C. C., Al-Mohtaseb, Z. N., Steigleman, W. A., Santhiago, M. R., Olsen, T. W., Kim, S. J., Waite, A. M., Rose-Nussbaumer, J. R.
2021
- **Intraocular Lens Power Calculation in Eyes with Previous Excimer Laser Surgery for Myopia: A Report by the American Academy of Ophthalmology.** *Ophthalmology*
Pantanelli, S. M., Lin, C. C., Al-Mohtaseb, Z. n., Rose-Nussbaumer, J. R., Santhiago, M. R., Steigleman, W. A., Schallhorn, J. M.
2021
- **Descemet Endothelial Thickness Comparison Trial: Two-year Results from a Randomized Trial Comparing Ultrathin Descemet Stripping Automated Endothelial Keratoplasty to Descemet Membrane Endothelial Keratoplasty.** *Ophthalmology*
Rose-Nussbaumer, J., Lin, C. C., Austin, A., Liu, Z., Clover, J., McLeod, S. D., Porco, T. C., Lietman, T. M., Dresner, S. M., Benetz, B. A., Lass, J. H., Chamberlain, W.
2020
- **Management of acute corneal hydrops with intracameral gas injection.** *American journal of ophthalmology case reports*
Sayadi, J. J., Lam, H., Lin, C. C., Myung, D.
2020; 20: 100994
- **Change in Central and Peripheral Corneal Thickness in UT-DSAEK and DMEK in the Descemet Endothelial Thickness Comparison Trial**
Gutowski, M., Rose-Nussbaumer, J., Lin, C., Austin, A., Labadzinski, P., Clover, J., Chamberlain, W.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2020
- **Phase 1b Study of AK002, an Anti-Siglec-8 Monoclonal Antibody, in Patients with Severe Allergic Conjunctivitis (KRONOS Study)**
Levine, H., Tauber, J., Nguyen, Q., Anesi, S., Chang, P., Berdy, G., Lin, C., Chu, D., Kantor, A., Rasmussen, H., Singh, B., Chang, A., Jeng, et al
MOSBY-ELSEVIER.2020: AB185
- **Corneal Light Scatter After Ultrathin Descemet Stripping Automated Endothelial Keratoplasty Versus Descemet Membrane Endothelial Keratoplasty in Descemet Endothelial Thickness Comparison Trial: A Randomized Controlled Trial.** *Cornea*
Hirabayashi, K. E., Chamberlain, W., Rose-Nussbaumer, J., Austin, A., Stell, L., Lin, C. C.
2020
- **The Stanford Acuity Test: A Precise Vision Test Using Bayesian Techniques and a Discovery in Human Visual Response**
Piech, C., Malik, A., Scott, L. M., Chang, R. T., Lin, C., Assoc Advancement Artificial Intelligence
ASSOC ADVANCEMENT ARTIFICIAL INTELLIGENCE.2020: 471-479
- **Oral miltefosine for refractory Acanthamoeba keratitis.** *American journal of ophthalmology case reports*
Hirabayashi, K. E., Lin, C. C., Ta, C. N.
2019; 16: 100555
- **Effect of Unilateral Endothelial Keratoplasty on Vision-Related Quality-of-Life Outcomes in the Descemet Endothelial Thickness Comparison Trial (DETECT): A Secondary Analysis of a Randomized Clinical Trial** *JAMA OPHTHALMOLOGY*
Ang, M. J., Chamberlain, W., Lin, C. C., Pickel, J., Austin, A., Rose-Nussbaumer, J.

2019; 137 (7): 747–54

- **Changes in Anterior and Posterior Corneal Astigmatism after Descemet Membrane Endothelial Keratoplasty versus Ultrathin Descemet Stripping Automated Endothelial Keratoplasty: Results from the Randomized Controlled DETECT Trial**
Werner, S., Rose-Nussbaumer, J., Lin, C., Austin, A., Chamberlain, W.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Corneal Higher-Order Aberrations in Descemet Membrane Endothelial Keratoplasty versus Ultrathin DSAEK in the Descemet Endothelial Thickness Comparison Trial A Randomized Clinical Trial** *OPHTHALMOLOGY*
Duggan, M. J., Rose-Nussbaumer, J., Lin, C. C., Austin, A., Labadzinski, P. C., Chamberlain, W. D.
2019; 126 (7): 946–57
- **Characteristics of cataract surgery patients influencing patient satisfaction scores** *JOURNAL OF CATARACT AND REFRACTIVE SURGERY*
Lee, M. D., Chen, S. P., Chen, T. A., Leibold, C., Li, Z., Fisher, A., Lin, C. C., Singh, K., Chang, R. T.
2019; 45 (4): 437–42
- **Characteristics of cataract surgery patients influencing patient satisfaction scores.** *Journal of cataract and refractive surgery*
Lee, M. D., Chen, S. P., Chen, T. A., Leibold, C., Li, Z., Fisher, A. C., Lin, C. C., Singh, K., Chang, R. T.
2019
- **Corneal Higher-Order Aberrations in DMEK versus UT-DSAEK in DETECT: A Randomized Clinical Trial.** *Ophthalmology*
Duggan, M. J., Rose-Nussbaumer, J., Lin, C. C., Austin, A., Labadzinski, P. C., Chamberlain, W. D.
2019
- **Effect of Unilateral Endothelial Keratoplasty on Vision-Related Quality-of-Life Outcomes in the Descemet Endothelial Thickness Comparison Trial (DETECT): A Secondary Analysis of a Randomized Clinical Trial.** *JAMA ophthalmology*
Ang, M. J., Chamberlain, W. n., Lin, C. C., Pickel, J. n., Austin, A. n., Rose-Nussbaumer, J. n.
2019
- **Ocular manifestations of herpes simplex virus.** *Current opinion in ophthalmology*
Valerio, G. S., Lin, C. C.
2019
- **Intraoperative Optical Coherence Tomography in DALK** *MASTERING DALK: A VIDEO TEXTBOOK ON DEEP ANTERIOR LAMELLAR KERATOPLASTY*
Hirabayashi, K. E., Lin, C. C., Jacob, S.
2019; 93–103
- **Descemet Stripping Only for a Chronic Descemet Detachment After Cataract Surgery.** *Cornea*
Hirabayashi, K. E., Mark, D. n., Lau, J. n., Lin, C. C.
2019
- **Descemet Endothelial Thickness Comparison Trial A Randomized Trial Comparing Ultrathin Descemet Stripping Automated Endothelial Keratoplasty with Descemet Membrane Endothelial Keratoplasty** *OPHTHALMOLOGY*
Chamberlain, W., Lin, C. C., Austin, A., Schubach, N., Clover, J., McLeod, S. D., Porco, T. C., Lietman, T. M., Rose-Nussbaumer, J.
2019; 126 (1): 19–26
- **Rescue technique for a partially expulsed descemet membrane endothelial keratoplasty (DMEK) graft.** *American journal of ophthalmology case reports*
Lee, M. D., Chen, L. Y., Lin, C. C.
2018; 11: 13–16
- **DMEK results in significantly less higher-order aberration than UT-DSAEK: Results from the DETECT trial.**
Duggan, M., Rose-Nussbaumer, J., Lin, C. C., Austin, A., Chamberlain, W.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Characteristics of cataract surgery patients influencing Press Ganey patient satisfaction scores**
Lee, M., Chen, S., Chen, T., Fisher, A., Lin, C. C., Singh, K., Chang, R.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Impact of Race on Press Ganey Measures of Ophthalmology Clinic Visits**
Chen, T., Chen, S., Lee, M., Fisher, A., Lin, C. C., Singh, K., Chang, R.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018

- **Effect of Donor Characteristics on Visual Outcomes and Endothelial Cell Count in the Descemet Endothelial Thickness Comparison Trial**
Lin, Y., Chamberlain, W., Lin, C. C., Austin, A., Shubach, N., Clover, J., McLeod, S., Porco, T., Lietman, T., Rose-Nussbaumer, J.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Outcomes of Wound Dehiscence After Penetrating Keratoplasty.** *Cornea*
Wang, K., Singh, K., Silva, R. A., Lin, C. C.
2016: -?
- **Successful DMEK After Intraoperative Graft Inversion** *CORNEA*
Yu, C. Q., Ta, C. N., Terry, M. A., Lin, C. C.
2015; 34 (1): 97-98
- **Scleral intraocular pressure measurement in cadaver eyes pre- and postkeratoprosthesis implantation.** *Investigative ophthalmology & visual science*
Lin, C. C., Chen, A., Jeng, B. H., Porco, T. C., Ou, Y., Han, Y.
2014; 55 (4): 2244-2250
- **Rapid corneal adrenochrome deposition from topical ibopamine in the setting of infectious keratitis** *EYE*
Bhosai, S. J., Lin, C. C., Greene, J., BLOOMER, M. M., Jeng, B. H.
2013; 27 (1): 105-106
- **Seasonal Trends of Microbial Keratitis in South India** *CORNEA*
Lin, C. C., Lalitha, P., Srinivasan, M., Prajna, N. V., McLeod, S. D., Acharya, N. R., Lietman, T. M., Porco, T. C.
2012; 31 (10): 1123-1127
- **Acanthamoeba Keratitis in South India: A Longitudinal Analysis of Epidemics** *OPHTHALMIC EPIDEMIOLOGY*
Lalitha, P., Lin, C. C., Srinivasan, M., Mascarenhas, J., Prajna, N. V., Keenan, J. D., McLeod, S. D., Acharya, N. R., Lietman, T. M., Porco, T. C.
2012; 19 (2): 111-115
- **Trachoma control - Is azithromycin the answer for trichiasis too?** *ARCHIVES OF OPHTHALMOLOGY*
Lin, C., Lietman, T.
2007; 125 (6): 819-820
- **Syphilis in China: results of a national surveillance programme** *LANCET*
Chen, Z., Zhang, G., Gong, X., Lin, C., Gao, X., Liang, G., Yue, X., Chen, X., Cohen, M. S.
2007; 369 (9556): 132-138
- **China's syphilis epidemic: A systematic review of seroprevalence studies** *SEXUALLY TRANSMITTED DISEASES*
Lin, C. C., Gao, X., Chen, X., Chen, Q., Cohen, M. S.
2006; 33 (12): 726-736
- **Poverty and the spread of bloodborne disease in central China** *JOURNAL OF INFECTIOUS DISEASES*
Tucker, J. D., Lin, C. C.
2006; 193 (6): 902-903
- **Determinants of bone and blood lead levels among minorities living in the Boston area** *ENVIRONMENTAL HEALTH PERSPECTIVES*
Lin, C., Kim, R., Tsaih, S. W., Sparrow, D., Hu, H.
2004; 112 (11): 1147-1151
- **Rapid photochemical generation of ubiquinol through a radical pathway: An avenue for probing submillisecond enzyme kinetics** *JOURNAL OF ORGANIC CHEMISTRY*
Schultz, B. E., Hansen, K. C., Lin, C. C., Chan, S. I.
2000; 65 (10): 3244-3247