



Jennifer Rose-Nussbaumer

Associate Professor of Ophthalmology

CLINICAL OFFICE (PRIMARY)

- **Stanford Byers Eye Institute**

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Bio

BIO

Jennifer Rose-Nussbaumer is a board-certified ophthalmologist and fellowship-trained cornea specialist at the Byers Eye Institute at Stanford University. Her clinical practice focuses on corneal transplant, complex cataract surgery and treatment of infectious keratitis. After completing her fellowship in Cornea and External Disease at the University of California, San Francisco, she stayed on faculty and remained there until she transitioned to Stanford in 2021. She continues to collaborate closely with the FI Proctor Foundation as an Associate Proctor Researcher.

In addition to her clinical work, Dr. Rose-Nussbaumer is an NIH-funded researcher who focuses on randomized clinical trials in ophthalmology. She is the PI on a UG1 grant, Descemet Endothelial Thickness Comparison Trial (DETECT), a randomized clinical trial comparing UT-DSAEK to DMEK and ripasudil versus placebo in patients with endothelial disease such as Fuchs Endothelial Dystrophy. She is also the PI on a UG1 grant, the Steroids and Cross-linking for Ulcer Treatment Trial (SCUT II), a randomized clinical trial in collaboration with Aravind Eye hospital in India and the University of Sao Paulo looking at the benefit of adjunctive topical steroids, corneal crosslinking or rose bengal photodynamic therapy in the treatment of infectious ulcers.

As a native of Northern California, she loves spending time with her family and Bernese Mountain Dog, Kenji, exploring California's natural beauty through hiking and camping.

CLINICAL FOCUS

- Cornea and External Diseases Specialist

ACADEMIC APPOINTMENTS

- Associate Professor - University Medical Line, Ophthalmology

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- President, Ocular Microbiology Interest Group (2023 - present)
- Director-at-Large, Cornea Society (2023 - present)

- Associate Editor, *Cornea* (2021 - present)
- Managing Editor, *JAMA Ophthalmology* (2021 - present)
- Methodologist, AAO, OTAC Refractive Panel (2018 - present)

PROFESSIONAL EDUCATION

- Board Certification: Ophthalmology, American Board of Ophthalmology (2014)
- Fellowship: UCSF Cornea Fellowship (2013) CA
- Residency: OHSU Casey Eye Institute (2012) OR
- Cornea Fellowship, F.I. Proctor Foundation, University of California, San Francisco (2013)
- Internship: Legacy Emanuel Hospital and Health Center (2009) OR
- Ophthalmology, Casey Eye Institute, Oregon Health & Science University (2012)
- Medical Education: University of California at San Francisco School of Medicine (2008) CA
- MD, University of California, San Francisco, Medicine (2008)

Research & Scholarship

CLINICAL TRIALS

- Cross-linking for Corneal Ulcers Treatment Trial, Recruiting
- Descemet Endothelial Thickness Comparison Trial I, Recruiting
- Descemet Endothelial Thickness Comparison Trial II, Recruiting
- Descemet Endothelial Thickness Comparison Trial, Not Recruiting
- Rose Bengal Electromagnetic Activation With Green Light for Infection Reduction, Not Recruiting

Publications

PUBLICATIONS

- **Toric Monofocal Intraocular Lenses for the Correction of Astigmatism during Cataract Surgery: A Report by the American Academy of Ophthalmology.** *Ophthalmology*
Al-Mohtaseb, Z., Steigleman, W. A., Pantanelli, S. M., Lin, C. C., Hatch, K. M., Rose-Nussbaumer, J. R., Santhiago, M., Olsen, T. W., Kim, S. J., Schallhorn, J. M.
2023
- **Mediators of Visual Acuity in Descemet Membrane Endothelial Keratoplasty and Ultrathin Descemet Stripping Automated Endothelial Keratoplasty.** *Cornea*
Lin, C. C., Chamberlain, W. D., Kakigi, C., Arnold, B. F., Rose-Nussbaumer, J.
2023
- **Validation of the C-DU(KE) Calculator as a Predictor of Outcomes in Patients Enrolled in Steroids for Corneal Ulcer and Mycotic Ulcer Treatment Trials.** *Cornea*
Arboleda, A., Prajna, N. V., Lalitha, P., Srinivasan, M., Rajaraman, R., Krishnan, T., Mousa, H. M., Feghali, J., Acharya, N. R., Lietman, T. M., Perez, V. L., Rose-Nussbaumer, J.
2023
- **Optimizing Office-Based Pterygium Surgery**
Collis, S., Sun, C., Parikh, N., Padmanabhan, S., Schallhorn, J., Rose-Nussbaumer, J., Yang, D., Bloomer, M., Pasricha, N., Chan, M.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Effect of Simultaneous Endothelial Keratoplasty and Cataract Surgery: A Secondary Analysis of the Descemet Endothelial Thickness Comparison Trial.** *Cornea*
Chamberlain, W., Lin, C. C., Yue, J., Cavallino, V., Benetz, B. A., Lass, J. H., Arnold, B., Lietman, T. M., Rose-Nussbaumer, J.
2023

- **Comparison of Water-Free Commercially Available Cyclosporine Ophthalmic Preparations-Different, but the Same.** *JAMA ophthalmology*
Lozano, A. N., Shen, A., Rose-Nussbaumer, J.
2023
- **Management of Pain after Photorefractive Keratectomy: A Report by the American Academy of Ophthalmology.** *Ophthalmology*
Steigleman, W. A., Rose-Nussbaumer, J., Al-Mohtaseb, Z., Santhiago, M. R., Lin, C. C., Pantanelli, S. M., Kim, S. J., Schallhorn, J. M.
2022
- **Role of Ophthalmology in Emerging Infectious Diseases.** *JAMA ophthalmology*
Rose-Nussbaumer, J., Doan, T.
2022
- **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
- **Clinical Trial Design-The Best Approach Is Often the Simple One.** *JAMA ophthalmology*
Ma, K. K., Rose-Nussbaumer, J.
2022
- **Patterns of Antifungal Resistance in Adult Patients With Fungal Keratitis in South India: A Post Hoc Analysis of 3 Randomized Clinical Trials.** *JAMA ophthalmology*
Prajna, N. V., Lalitha, P., Krishnan, T., Rajaraman, R., Radnakrishnan, N., Srinivasan, M., Devi, L., Das, M., Liu, Z., Zegans, M. E., Acharya, N. R., Porco, T. C., Lietman, et al
1800
- **Survey of the American Glaucoma Society Membership on Current Glaucoma Drainage Device Placement and Postoperative Corticosteroid Use.** *Clinical ophthalmology (Auckland, N.Z.)*
Yonamine, S., Ton, L., Rose-Nussbaumer, J., Ying, G., Ahmed, I. I., Chen, T. C., Weiner, A., Gedde, S. J., Han, Y.
2022; 16: 2305-2310
- **Double-masked, sham and placebo-controlled trial of corneal cross-linking and topical difluprednate in the treatment of bacterial keratitis: Steroids and Cross-linking for Ulcer Treatment Trial (SCUT II) study protocol.** *BMJ open ophthalmology*
Radhakrishnan, N., Prajna, V. N., Prajna, L. S., Venugopal, A., Narayana, S., Rajaraman, R., Amescua, G., Porco, T. C., Lietman, T. M., Rose-Nussbaumer, J.
2021; 6 (1): e000811
- **Double-masked, sham and placebo-controlled trial of corneal cross-linking and topical difluprednate in the treatment of bacterial keratitis: Steroids and Cross-linking for Ulcer Treatment Trial (SCUT II) study protocol** *BMJ OPEN OPHTHALMOLOGY*
Radhakrishnan, N., Prajna, V. N., Prajna, L. S., Venugopal, A., Narayana, S., Rajaraman, R., Amescua, G., Porco, T. C., Lietman, T. M., Rose-Nussbaumer, J.
2021; 6 (1)
- **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
- **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
- **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

- **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
- **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
- **The Prognostic Value of Persistent Culture Positivity in Fungal Keratitis in the Mycotic Antimicrobial Localized Injection Trial** *AMERICAN JOURNAL OF OPHTHALMOLOGY*
Pickel, J., Narayana, S., Krishnan, T., Ramakrishnan, S., Samantaray, P., Porco, T. C., Redd, T., Lietman, T. M., Rose-Nussbaumer, J.
2020; 215: 1-7
- **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., Labadzinzki, P., Clover, J., Chamberlain, W.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2020
- **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
- **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., Labadzinzki, P. C., Chamberlain, W. D.
2019; 126 (7): 946-57
- **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
- **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
- **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., Labadzinzki, P. C., Chamberlain, W. D.
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
- **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
- **Therapeutic Penetrating Keratoplasty Button Cultures in The Mycotic Ulcer Treatment Trial II: A Randomized Trial Comparing Oral Voriconazole Versus Placebo** *AMERICAN JOURNAL OF OPHTHALMOLOGY*
Cho, J., Prajna, N., Lalitha, P., Rajaraman, R., Krishnan, T., Lin, Y., Ray, K. J., Lietman, T. M., Rose-Nussbaumer, J., Mycotic Ulcer Treatment Trial Grp
2018; 192: 142-145
- **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

- **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

- **Inter-grader Agreement of the Ocular Staining Score in the Sjogren's. International Clinical Collaborative Alliance (SICCA) Registry** *AMERICAN JOURNAL OF OPHTHALMOLOGY*

Rose-Nussbaumer, J., Lietman, T. M., Shiboski, C. H., Shiboski, S. C., Bunya, V. Y., Akpek, E. K., Srinivasan, M., Mascarenhas, J., Massaro-Giordano, G.,
Mcnamara, N. A., Whitcher, J. P., Gaynor, B. D., Sjogren's Int Collaborative Clinic
2015; 160 (6): 1150-1153