



## Theodore Leng, MD, MS, FACS

Professor of Ophthalmology (Ophthalmology Research/Clinical Trials) and, by courtesy, of Anesthesiology, Perioperative and Pain Medicine (MSD)

 NIH Biosketch available Online

### CLINICAL OFFICE (PRIMARY)

- **Stanford Byers Eye Institute**

2452 Watson Ct

Palo Alto, CA 94303

**Tel** (650) 723-6995      **Fax** (650) 725-6619

### ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

Sara Horca - Administrative Associate IV

**Email** shorca@stanford.edu

**Tel** 650-497-1182

## Bio

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### BIO

Dr. Leng is considered to be one of the top 150 worldwide leading innovators in the field of medical and surgical retina and serves the Department of Ophthalmology as both the Director of Clinical and Translational Research and the Director of Ophthalmic Diagnostics. He also serves the broader Stanford Health Care community as the Medical Informatics Director for Ambulatory Specialties, helping to integrate technology and AI solutions to advance clinical care.

As a board-certified ophthalmologist and fellowship-trained vitreoretinal surgeon, Dr. Leng uses the latest techniques and small-incisional sutureless technology to minimize patient discomfort and maximize functional outcomes. He is committed to bringing the highest level of patient-centered care for all types of retinal conditions.

### BIOGRAPHY

Theodore Leng, MD, MS, FACS received his AB in Philosophy and BS in Biological Sciences from Stanford University, graduating with Departmental Honors. He received his Masters of Science in Biological Sciences from Stanford University while conducting biophysics and electrophysiology research at the Hopkins Marine Station in Pacific Grove, CA on cellular ion membrane channels. Dr. Leng received his medical degree from the Stanford University School of Medicine, during which he completed a Howard Hughes Medical Institute Research Training Fellowship and helped to establish the world's first ophthalmic tissue engineering laboratory.

Dr. Leng completed his ophthalmology residency at Bascom Palmer Eye Institute, the highest ranked eye hospital and residency training program in the country. He was awarded the Heed Fellowship, the most prestigious national award for ophthalmologists entering a career in academic medicine. Dr. Leng returned to Stanford University to complete a fellowship in vitreoretinal diseases and surgery and was awarded the Paul Kayser International Travel Scholarship to work in Santiago, Chile. He has been a full-time faculty member of the Stanford University Department of Ophthalmology since

2010 and has been named one of "America's Top Ophthalmologists" by the Consumers' Research Council of America and is a Castle Connolly "Top Doctor."

In addition to his clinical practice, Dr. Leng has a vibrant clinical and basic science research program and has published over 200 peer-reviewed scientific manuscripts, book chapters and abstracts. He is frequently invited to speak at national and international meetings. Dr. Leng serves as the Associate Editor of the peer-reviewed journal, Ophthalmic Surgery Lasers & Imaging Retina.

Dr. Leng is a Fellow of the American Academy of Ophthalmology, the American College of Surgeons, and the American Society of Retina Specialists. He is also a member of the Association for Research in Vision and Ophthalmology, the Retina Society, the Macula Society, the Vit-Buckle Society, and is a founding board member of the Digital Ophthalmic Society. He volunteers his time as a Command Pilot for the Angel Flight West organization. Dr. Leng has served as the President of the Stanford Medicine Alumni Association to support its mission of reaching, inspiring, serving and engaging over 26,000 Stanford Medicine alumni.

### **CLINICAL FOCUS**

- Macular Degeneration, Diabetic Retinopathy, Retinal Vascular Disease, Retinal Detachment
- Macular Edema, Macular Hole, Epiretinal Membrane
- Branch and Central Retinal Vein Occlusion, Macular Pucker
- Retina Specialist

### **ACADEMIC APPOINTMENTS**

- Professor - University Medical Line, Ophthalmology
- Professor - University Medical Line (By courtesy), Anesthesiology, Perioperative and Pain Medicine
- Member, Bio-X
- Member, Wu Tsai Neurosciences Institute

### **ADMINISTRATIVE APPOINTMENTS**

- Medical Informatics Director, Ambulatory Specialties, Stanford Health Care, (2023- present)
- Director, Clinical and Translational Research, (2015- present)
- Co-Founder and Co-Chair, Ophthalmic Artificial Intelligence Summit, (2021- present)
- Member, Ophthalmology Department Wellness Committee, (2022- present)
- Director, Ophthalmic Diagnostics, (2010- present)
- Founder and Medical Director, Stanford Ophthalmic Reading Center (STARC), (2016- present)
- Member, Stanford EPIC Provider SuperUser Network (SUN), (2016- present)
- IT Physician Advocate, Stanford Health Care, (2015- present)
- Ophthalmology Department Liaison, Stanford Health Care Main Operating Rooms, (2013-2017)

### **HONORS AND AWARDS**

- Top Doctor, Castle Connolly (2017 - 2026)
- Top AAPI Doctors, Castle Connolly (2024 - 2025)
- Best of Palo Alto, Ophthalmologists, Palo Alto Business Award Program (2019, 2024)
- Honor Award, American Society of Retina Specialists (2019)
- Achievement Award, American Academy of Ophthalmology (2017)

- OSN Retina 150, Healio (2016)
- Certificate of Recognition for a Technical Innovation, NASA (2015)
- America's Top Ophthalmologists, Consumers Research Council of America (2012 - 2014)
- Heed Fellowship, Heed Ophthalmic Foundation (2010)
- Mentoring Program in Ophthalmology Scholarship, Annenberg Center for Health Sciences at Eisenhower (2009)
- Paul Kayser International Travel Scholar, Pan-American Ophthalmological Foundation (2009)
- ARVO Travel Award, National Eye Institute (2003)
- Certificate of Recognition for Technical Innovation, NASA (2003)
- Certificate of Recognition for a US Patent, NASA (2003)
- Howard Hughes Medical Institute Research Training Fellowship, Howard Hughes Medical Institute (2003)
- Medical Scientist Research Fellowship, Stanford Medical Scholars Program (2003)
- AMA Travel Award, American Medical Association (2001)
- Baxter Foundation Scholar, Stanford Medical Scholars Program (2001)
- Kolos Scholar, Stanford Medical Scholars Program (2001)
- Award for Excellence in Teaching, Stanford Department of Biological Sciences (2000)
- Firestone Medal for Excellence in Research, Stanford University (1999)

## **BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS**

- Grant Scientific Review Committee Member, BrightFocus Macular Degeneration Research Foundation (2022 - present)
- Planning Committee Member, American Society of Cataract and Refractive Surgery Digital Subspecialty Day (2022 - present)
- Mentor, American Society of Retina Specialists Underrepresented in Retina Mentorship Program (2022 - present)
- Founding Board Member, Digital Ophthalmic Society (2021 - present)
- Associate Editor, Ophthalmic Surgery, Lasers, and Imaging Retina (2016 - present)
- Editorial Board Member, Journal of Ophthalmology (2013 - 2022)
- Editorial Board Member, Asia-Pacific Journal of Ophthalmology (2019 - 2021)
- President, Stanford Medicine Alumni Association Board of Governors (2015 - 2017)
- Director, Stanford Medicine Alumni Association Board of Governors (2010 - 2020)
- Fellow, American Academy of Ophthalmology (2011 - present)
- Fellow, American College of Surgeons (2012 - present)
- Member, The Retina Society (2014 - present)
- Member, The Macula Society (2016 - present)
- Member, American Society of Retina Specialists (2009 - present)
- Member, Vit-Buckle Society (2012 - present)
- Life Member, Society of Heed Fellows (2012 - present)
- Member, Association for Research in Vision and Ophthalmology (2001 - present)
- Editorial Board Member, Ophthalmic Surgery, Lasers, and Imaging Retina (2012 - present)
- Editorial Board Member, American Society of Retina Specialists Retina Image Bank (2013 - present)
- Editorial Board Member, The Open Ophthalmology Journal (2014 - present)
- Editorial Board Member, Journal of Ophthalmic Research (2013 - present)
- Editorial Board Member, Journal of Clinical & Medical Case Reports (2013 - present)

- Member, Ophthalmology Innovation Network (2012 - present)
- Member, American Academy of Ophthalmology EyeWiki Retina/Vitreous Section Committee (2014 - 2021)
- Medical and Surgical Retina Section Editor, The Eye Handbook (2012 - 2021)
- Member, Howard Hughes Medical Institute Bay Area Alumni Network Steering Committee (2012 - 2021)
- Lead Faculty Member, WebMedCentral (2011 - 2021)
- Contributing Editor, OphthalmologyWeb (2008 - 2021)

## PROFESSIONAL EDUCATION

- Residency: Bascom Palmer Eye Institute (2009) FL
- Board Recertification, American Board of Ophthalmology , Ophthalmology (2021)
- Fellowship: Stanford University Retina and Vitreous Fellowship (2010) CA
- Board Certification: Ophthalmology, American Board of Ophthalmology (2010)
- Internship: Huntington Memorial Hospital (2006) CA
- Medical Education: Stanford School of Medicine (2005) CA
- MS, Stanford University , Biological Sciences (2000)
- AB/BS, Stanford University , Philosophy & Biological Sciences (1999)

## COMMUNITY AND INTERNATIONAL WORK

- Angel Flight West
- Veterans Airlift Command
- Arbor Free Clinic, Menlo Park
- Haitian Eye Initiative, Cap Haitian, Milot, Thomonde

## LINKS

- Leng Research Group: <http://med.stanford.edu/leng.html>
- LinkedIn: <https://www.linkedin.com/in/theodoreleng/>
- Twitter: <https://twitter.com/tedleng>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Leng was the first surgeon in California to perform a subretinal transplant of adult neural stem cells into patients with macular degeneration and is actively researching cell and gene regenerative therapies for macular degeneration, retinitis pigmentosa, Stargardt disease, and other degenerative conditions of the macula and retina. He also has an active program in imaging informatics, oculomics, and deep learning to identify patients who are at risk for eye and systemic disease. The end goal is earlier detection and rapid treatment to maximize outcomes.

### CLINICAL TRIALS

- Belzupacap Sarotalocan (AU-011) with Suprachoroidal in Subjects with Metastases to the Choroid, Recruiting
- 3T, Not Recruiting
- A Phase I Study of Episcleral Dexamethasone for Treatment of Macular Edema, Not Recruiting
- A Study Investigating the Safety and Efficacy of Lampalizumab Intravitreal Injections in Participants With Geographic Atrophy Secondary to Age-Related Macular Degeneration, Not Recruiting
- Efficacy and Safety Study of Squalamine Ophthalmic Solution in Subjects With Neovascular AMD, Not Recruiting

- Endogenous Endophthalmitis in the Inpatient Setting, Not Recruiting
- Long-Term Follow-up Safety Study of Human Central Nervous System Stem Cells in Subjects With Geographic Atrophy of Age-Related Macular Degeneration, Not Recruiting
- Outcomes of Diabetic Macula Edema Patients Switched to Aflibercept From Bevacizumab and/or Ranibizumab, Not Recruiting
- Phase I Study of Episcleral Celecoxib for Treatment of Macular Edema and Inflammatory Disorders of the Posterior Pole, Not Recruiting
- QRK207, Not Recruiting
- Rates of Apnea in Patients Undergoing Vitreoretinal Surgery, Not Recruiting
- Safety and Efficacy of Abicipar Pegol in Participants With Neovascular Age-related Macular Degeneration, Not Recruiting
- Study Evaluating Intravitreal hI-con1™ in Patients With Choroidal Neovascularization Secondary to Age-related Macular Degeneration, Not Recruiting
- Study of HUCNS-SC Subretinal Transplantation in Subjects With GA of AMD, Not Recruiting
- Study of Human Central Nervous System Stem Cells (HuCNS-SC) in Age-Related Macular Degeneration (AMD), Not Recruiting
- Study of Pegcetacoplan (APL-2) Therapy in Patients With Geographic Atrophy, Not Recruiting

## PROJECTS

- Automated Analysis of Retinal OCT Images - Stanford University (2012 - present)

## Publications

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### PUBLICATIONS

- **Correction: Aflibercept 8 mg versus Faricimab Treat-and-Extend for Diabetic Macular Edema or Neovascular Age-Related Macular Degeneration: A Bayesian Fixed-Effect Network Meta-analysis of Clinical Trials.** *Ophthalmology and therapy*  
Friedman, S. M., Xu, Y., Sherman, S., Kuznik, A., Mojebi, A., Keeping, S., Chan, K., Leng, T., Patel, N.  
2026
- **A Simplified Classification for Age-Related Macular Degeneration Based on Optical Coherence Tomography.** *medRxiv : the preprint server for health sciences*  
Yeh, T. C., Lin, J. B., Mruthyunjaya, P., Leng, T., DeBoer, C., Sepah, Y. J., Almeida, D. R., Smith, S., Mahajan, V. B.  
2026
- **One-year Real-world Outcomes With Faricimab in Neovascular Age-related Macular Degeneration.** *Ophthalmic surgery, lasers & imaging retina*  
Tabano, D. C., Ali, F. S., Borkar, D. S., Leng, T., Ahmed, A., Ko, S., Myrick, A., Zwick, E., Downey, A., Barteselli, G., Singh, R. P.  
2026: 1-9
- **Federated Learning for Multi-Disease Ophthalmic Diagnostics Using OCT Angiography.** *Ophthalmology science*  
Nabil, A. S., Gholami, S., Leng, T., Lim, J. I., Alam, M. N.  
2026; 6 (3): 101030
- **Longitudinal Validation of the Artificial Intelligence Algorithm in Home OCT for Age-Related Macular Degeneration—Report 3** *OPHTHALMOLOGY SCIENCE*  
Leng, T., Leung, E. H., Mukkamala, S., Taban, M. R., Havilio, M., Nahen, K., Mohan, N., Benyamini, G., Keenan, T. D. L.  
2026; 6 (2)
- **Longitudinal Validation of the Artificial Intelligence Algorithm in Home OCT for Age-Related Macular Degeneration-Report 3.** *Ophthalmology science*  
Leng, T., Leung, E. H., Mukkamala, S. K., Taban, M. R., Havilio, M., Nahen, K., Mohan, N., Benyamini, G., Keenan, T. D.  
2026; 6 (2): 100907
- **A Framework for Healthcare from the Eye: Oculomics as a Powerful Window to Systemic Health.** *Ophthalmology*  
Weinreb, R. N., Keane, P. A., Cooley, A., Chaglasian, M., Lee, A. Y., McConnell, M. V., Leng, T., Hashemi, Z., Ferrara, D., Rhew, D.  
2026
- **OCT to OCTA translation using Brownian Bridge diffusion model**

- Badhon, R., Thompson, A., Lim, J. I., Leng, T., Alam, M.  
edited by Hammer, D. X., Nankivil, D., Tao, Y. K.  
SPIE-INT SOC OPTICAL ENGINEERING.2026
- **Anatomically guided vision-language model for efficient OCT disease classification and reporting**  
Haghighi, T., Gholami, S., Sokol, J., Biswas, A., Lim, J. I., Leng, T., Thompson, A. C., Tabkhi, H., Alam, M.  
edited by Hammer, D. X., Nankivil, D., Tao, Y. K.  
SPIE-INT SOC OPTICAL ENGINEERING.2026
  - **GlaucomaVLM: A Domain-Specific Vision-Language Model for Glaucoma**  
Nabil, A., Thompson, A., Lim, J. I., Leng, T., Alam, M.  
edited by Hammer, D. X., Nankivil, D., Tao, Y. K.  
SPIE-INT SOC OPTICAL ENGINEERING.2026
  - **FedSim - Foundational Federated Multi-task Learning for Ophthalmic Diagnostics**  
Gholami, S., Ali, A., Kamanda, H., Haghighi, T., Ong, S., Lim, J. I., Leng, T., Arafa, A., Alam, M.  
edited by Hammer, D. X., Nankivil, D., Tao, Y. K.  
SPIE-INT SOC OPTICAL ENGINEERING.2026
  - **Compact vision language models enable efficient and interpretable optical coherence tomography through layer-specific multimodal learning.** *Communications medicine*  
Haghighi, T., Gholami, S., Sokol, J. T., Biswas, A., Lim, J. I., Leng, T., Thompson, A. C., Tabkhi, H., Alam, M. N.  
2025
  - **Diffusion model based OCT to OCTA translation.** *Frontiers in medicine*  
Badhon, R. H., Thompson, A. C., Lim, J. I., Leng, T., Alam, M. N.  
2025; 12: 1655453
  - **Semaglutide and diabetic retinopathy: an OHDSI network study.** *BMJ open diabetes research & care*  
Cai, C. X., Nishimura, A., Baxter, S., Goetz, K., Hribar, M., Toy, B., Barkmeier, A., Wang, S., Swaminathan, S., Flowers, A., Brown, E., Xu, B., Chen, et al  
2025; 13 (6)
  - **One-year Real-world Outcomes and Durability With Faricimab in Patients With Diabetic Macular Edema.** *Ophthalmic surgery, lasers & imaging retina*  
Singh, R. P., Tabano, D. C., Borkar, D. S., Ali, F. S., Ahmed, A., Myrick, A., Zwick, E., Downey, A., Barteselli, G., Leng, T.  
2025: 1-9
  - **Assessing and monitoring abnormal retinal blood circulation for early detection of pre-structural damage and enhanced diabetic retinopathy staging using non-invasive, high-resolution biophotonic imaging technology.** *Eye (London, England)*  
Basiri, A., Luo, C., Shokoohi-Yekta, M., Leng, T., Taheri, H., Jan Noordmans, H., Bryan, J., Soheilypour, M., Amiri, P., Or, C., Hung, J. H., ElHassan, A. A., Dong Nguyen, et al  
2025
  - **Aflibercept 8 mg versus Faricimab Treat-and-Extend for Diabetic Macular Edema or Neovascular Age-Related Macular Degeneration: A Bayesian Fixed-Effect Network Meta-analysis of Clinical Trials.** *Ophthalmology and therapy*  
Friedman, S. M., Xu, Y., Sherman, S., Kuznik, A., Mojebi, A., Keeping, S., Chan, K., Leng, T., Patel, N.  
2025
  - **Code-Free Machine Learning for the Detection of Common Ophthalmic Diseases.** *Translational vision science & technology*  
Lin, T., Leng, T.  
2025; 14 (9): 16
  - **Compact Vision-Language Models Enable Efficient and Interpretable Automated OCT Analysis Through Layer Specific Multimodal Learning.** *bioRxiv : the preprint server for biology*  
Haghighi, T., Gholami, S., Sokol, J. T., Lim, J. I., Leng, T., Thompson, A. C., Tabkhi, H., Alam, M. N.  
2025
  - **EYE-Llama, an in-domain large language model for ophthalmology.** *iScience*  
Haghighi, T., Gholami, S., Sokol, J. T., Kishnani, E., Ahsaniyan, A., Rahmanian, H., Hedayati, F., Leng, T., Alam, M. N.

2025; 28 (7): 112984

- **Two-year real-world clinical outcomes in patients with diabetic macular edema treated with faricimab in the US: The FARETINA-DME study**  
Singh, R. P., Zwick, E., Bonine, N., Leng, T., Ko, S., Shaia, J., Ali, F. S., Borkar, D.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Federated collaboration for training and validation of a deep learning model for retinal disease classification in OCT images**  
Thakoor, K., Luthra, A., Alam, M., Lau, W., Mahesh, A., Leng, T.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **A vision-language model to generate high-quality OCT images from text prompts**  
Haghighi, T., Gholami, S., Nabil, A., Lim, J., Leng, T., Thompson, A. C., Alam, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Diffusion-based foundational model for multi-disease ophthalmic diagnosis**  
Gholami, S., Jannat, F., Haghighi, T., Ong, S., Tabkhivayghan, H., Lim, J., Leng, T., Alam, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Early insights from real-world use of aflibercept 8 mg among eyes with neovascular age-related macular degeneration (nAMD) switching from other anti-VEGF agents**  
Leng, T., Sherman, S., Murdock, D., Moll, K., Boucher, N., Mehta, N., Javaheri, M., Borkar, D., Singh, R. P., Ali, F. S.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Diffusion Based OCT to OCTA Translation**  
Badhon, R., Gholami, S., Thompson, A. C., Lim, J., Leng, T., Alam, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Two-year real-world clinical outcomes in patients with neovascular age-related macular degeneration treated with faricimab in the US: The FARETINA-nAMD study**  
Borkar, D. S., Ali, F. S., Zwick, E., Bonine, N., Leng, T., Ko, S., Shaia, J., Singh, R. P.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Indirect comparison of the relative effectiveness of faricimab vs aflibercept 8 mg in DME and nAMD**  
Nudleman, E., Keane, P., Holekamp, N., Leng, T., Siedlecki, J., Mar, F., Gibson, K., Margaron, P., Paulo, T., Buehrer, C., Tabano, D.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Early real-world use of aflibercept 8 mg in treatment-naive patients with neovascular age-related macular degeneration**  
Ali, F. S., Sherman, S., Murdock, D., Moll, K., Boucher, N., Mehta, N., Javaheri, M., Borkar, D., Leng, T., Singh, R.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Development of Potent Bispecific Inhibitors Targeting Complement Pathways and Cytokines for the Treatment of Geographic Atrophy**  
Cho, C., Kwong, J., Shen, Y., Prasad, N., Lin, J., Purchel, A., Song, K., Liu, L., Leng, T., Liang, H., Chang, D., Perlroth, D., Correa, et al  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Unveiling an Uncharted Retinal Landscape: OCT-Guided Microperimetry Reveals Previously Undetected Sensitivity Patterns in Geographic Atrophy and iAMD**  
Sepah, Y., Ahmed, M. I., Janjua, K., Halim, M., Shaik, M., Yamaguchi, T., Esmaeelpour, M., Leng, T., Do, D., Yucel, H., Campigotto, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Early insights from real-world use of aflibercept 8 mg among eyes with diabetic macular edema (DME) switching from other anti-VEGF agents**  
Javaheri, M., Sherman, S., Moll, K., Murdock, D., Boucher, N., Singh, R. P., Ali, F. S., Borkar, D., Leng, T., Mehta, N.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Longitudinal Analysis of Choriocapillaris Flow Voids in Intermediate Age-Related Macular Degeneration and Geographic Atrophy**  
Janjua, K., Shaik, M., Hung, J., Ahmed, M. I., Halim, M., Baluyot, S., Guzman, H., Yamaguchi, T., Esmaeelpour, M., Leng, T., Do, D., Yucel, H., Sepah, et al  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Early insights on the real-world use of aflibercept 8 mg among treatment-naive eyes with diabetic macular edema**  
Mehta, N., Sherman, S., Moll, K., Murdock, D., Boucher, N., Singh, R. P., Ali, F. S., Borkar, D., Leng, T., Javaheri, M.

ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025

- **Early Outcomes After Initiation of Faricimab for Neovascular Age-Related Macular Degeneration** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Ali, F. S., Tabano, D. C., Borkar, D. S., Leng, T., Garmo, V., Ahmed, A., Myers, R., Shaia, J. K., Barteselli, G., Singh, R. P.  
2025: 1-10
- **Early Outcomes After Initiation of Faricimab in Patients With Diabetic Macular Edema** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Borkar, D. S., Tabano, D. C., Ali, F. S., Leng, T., Garmo, V., Ahmed, A., Myers, R., Shaia, J. K., Barteselli, G., Singh, R. P.  
2025: 1-9
- **Application of Artificial Intelligence to Deliver Healthcare From the Eye.** *JAMA ophthalmology*  
Weinreb, R. N., Lee, A. Y., Baxter, S. L., Lee, R. W., Leng, T., McConnell, M. V., El-Nimri, N. W., Rhew, D. C.  
2025
- **Targeted Interventions Lead to Quality Improvement in Year 2 of an Artificial Intelligence-Based Diabetic Retinopathy Detection Program in Northern California.** *Retina (Philadelphia, Pa.)*  
Chen, K. M., Zhao, C. S., Knapp, A., Dow, E., Phadke, A., Tan, M., Desai, K., Or, C., Mahajan, V., Do, D. V., Mruthyunjaya, P., Leng, T., Myung, et al  
2025
- **Using blood biomarkers and ophthalmological indicators of optical coherence tomography and angiography for the diagnosis of fundus lesions in patients with diabetes mellitus.** *Frontiers in clinical diabetes and healthcare*  
Huang, F., Yu, M., Huang, L., Wang, R. K., Leng, T., Wang, S. Y., Liao, Y. J.  
2025; 6: 1499344
- **Semaglutide and Nonarteritic Anterior Ischemic Optic Neuropathy.** *JAMA ophthalmology*  
Cai, C. X., Hribar, M., Baxter, S., Goetz, K., Swaminathan, S. S., Flowers, A., Brown, E. N., Toy, B., Xu, B., Chen, J., Chen, A., Wang, S., Lee, et al  
2025
- **Distributed training of foundation models for ophthalmic diagnosis.** *Communications engineering*  
Gholami, S., Jannat, F. E., Thompson, A. C., Ong, S. S., Lim, J. I., Leng, T., Tabkhivayghan, H., Alam, M. N.  
2025; 4 (1): 6
- **Denoising Diffusion Probabilistic Models for Classifying Ophthalmic Disease**  
Gholami, S., Jannat, F., Haghghi, T., Thompson, A., Ong, S., Lim, J. I., Leng, T., Tabkhivayghan, H., Alam, M.  
edited by Nankivil, D., Tao, Y. K., Hammer, D. X.  
SPIE-INT SOC OPTICAL ENGINEERING.2025
- **Retinal Feature Analysis from AI Driven OCT to OCTA Translation**  
Badhon, R., Thompson, A., Lim, J. I., Leng, T., Alam, M.  
edited by Nankivil, D., Tao, Y. K., Hammer, D. X.  
SPIE-INT SOC OPTICAL ENGINEERING.2025
- **How intravitreal anti-vascular endothelial growth factor initial dosing impacts patient outcomes in diabetic macular oedema.** *BMC ophthalmology*  
Singh, R. P., Tabano, D., Kuo, B. L., LaPrise, A., Leng, T., Kim, E., Hatfield, M., Garmo, V.  
2024; 24 (1): 552
- **Real-World Functional Outcomes and Quality of Life in Geographic Atrophy.** *Ophthalmology. Retina*  
Borkar, D., Rahimy, E., Khan, M. A., Ho, A. C., Hatfield, M., Nguyen, T. H., Jones, D., Fineman, M. S., McKeown, A., Leng, T., Baumal, C. R., Holekamp, N.  
2024
- **Impact of Anti-VEGF Treatment and Patient Characteristics on Vision Outcomes in Neovascular Age-related Macular Degeneration: Up to 6-Year Analysis of the AAO IRIS® Registry.** *Ophthalmology science*  
Wykoff, C. C., Garmo, V., Tabano, D., Menezes, A., Kim, E., Fevrier, H. B., LaPrise, A., Leng, T.  
2024; 4 (2): 100421
- **Editorial: Generalizable and explainable artificial intelligence methods for retinal disease analysis: challenges and future trends.** *Frontiers in medicine*

Chen, Q., Leng, T., Niu, S., Trucco, E.  
2024; 11: 1465369

- **Long-term Treatment Patterns for Diabetic Macular Edema: Up to 6-Year Follow-Up in the IRIS® Registry.** *Ophthalmology. Retina*  
Kuo, B. L., Tabano, D., Garmo, V., Kim, E., Leng, T., Hatfield, M., LaPrise, A., Singh, R. P.  
2024
- **To assess the potential and capabilities of large language models (LLMs) trained on in-domain ophthalmology data**  
Alam, M., Haghighi, T., Gholami, S., Leng, T.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Quantifying Features of Image-to-image Translated OCTA from OCT**  
Badhon, R., Gholami, S., Thompson, A. C., Lim, J. I., Leng, T., Alam, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Choriocapillaris (CC) Analysis in Subjects with Intermediate Age-Related Macular Degeneration and Geographic Atrophy using SD and SS OCT Angiography**  
Yucel, H., Halim, M., Janjua, K., Baluyot, S., Guzman, H., Yamaguchi, T., Esmaeelpour, M., Leng, T., Do, D. V., Sepah, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Real-world clinical and anatomical outcomes in patients with neovascular age-related macular degeneration (nAMD) treated with faricimab: The FARETINA-AMD study**  
Tabano, D., Ko, S., Borkar, D., Leng, T., Ali, F., Shaia, J. K., Myers, R., LaPrise, A., Singh, R. P.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Artificial Intelligence Quantified Outer Retinal Disruption On Optical Coherence Tomography As Clinical Endpoints For Geographic Atrophy**  
Pely, A., Gao, S. S., Litts, K. M., Wu, Z., Leng, T., Steffen, V., Chen, H., Chang, D., Hejrati, M., Zhang, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Automated Segmentation of Geographic Atrophy Using Machine Learning on Real-World Fundus Autofluorescence Ophthalmic Images in the IRIS Registry**  
Le, K., Borkar, D., Leng, T., Candano, C., Ramakrishnan, A., Khapare, K., Mbagwu, M., Torres, A. Z., Chu, Z.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Improving human neural stem cell formulations for geographic atrophy treatment**  
Arrizabalaga, S., Uchida, N., Curtis, A. G., Stoddard, J., Sheffield, A., Tsukamoto, A., Leng, T., Ryals, R.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **IRIS® Registry analysis of anti-VEGF treatment in patients with coexisting neovascular age-related macular degeneration and geographic atrophy**  
Leng, T., Schneider, E., Rahimy, E., Borkar, D., Harris, J., Arkin-Leydig, K., Schwartz, R., Jones, D., Shah, R., Coughlin, B., Baumal, C.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Real-world clinical and anatomical outcomes in patients with diabetic macular edema treated with faricimab: The FARETINA-DME study**  
Borkar, D. S., Tabano, D., Ko, S., Leng, T., Shaia, J. K., Myers, R., LaPrise, A., Ali, F., Singh, R.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Applying Novel AI-Based Generalizability Technology and Establishing an Uncertainty Range for Diabetic Macular Edema Detection from 3D Optical Coherence Tomography Scans: A Prospective Validation Analysis in a Lower-Middle-Income Country**  
Nguyen, T., Jiang, M., Yang, D., Lai, T. Y. Y., Szeto, S., Ho, M., Leng, T., Tan, G., Triet Thanh Nguyen, Dou, Q., Cheung, C.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **To assess the potential and capabilities of large language models (LLMs) trained on in-domain ophthalmology data**  
Alam, M., Haghighi, T., Gholami, S., Leng, T.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Quantifying Features of Image-to-image Translated OCTA from OCT**  
Badhon, R., Gholami, S., Thompson, A. C., Lim, J. I., Leng, T., Alam, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024

- **EYE-Llama, an in-domain large language model for ophthalmology.** *bioRxiv : the preprint server for biology*  
Haghighi, T., Gholami, S., Sokol, J. T., Kishnani, E., Ahsaniyan, A., Rahmanian, H., Hedayati, F., Leng, T., Alam, M. N.  
2024
- **Mirrored X-Net: Joint classification and contrastive learning for weakly supervised GA segmentation in SD-OCT PATTERN RECOGNITION**  
Ji, Z., Ma, X., Leng, T., Rubin, D. L., Chen, Q.  
2024; 153
- **Comparison of Methods of Clinical Trial Emulation Utilizing Data From the Comparison of AMD Treatment Trial (CATT) and the IRIS® Registry.** *Ophthalmology science*  
Fevrier, H., LaPrise, A., Mbagwu, M., Leng, T., Torres, A. Z., Borkar, D. S.  
2024; 4 (5): 100524
- **Feasibility of cross-vendor linkage of ophthalmic images with electronic health record data: an analysis from the IRIS Registry®.** *JAMIA open*  
Mbagwu, M., Chu, Z., Borkar, D., Koshta, A., Shah, N., Torres, A., Kalvaria, H., Lum, F., Leng, T.  
2024; 7 (1): o0ae005
- **Quantitative Characterization of Retinal Features in Translated OCTA.** *medRxiv : the preprint server for health sciences*  
Badhon, R. H., Thompson, A. C., Lim, J. I., Leng, T., Alam, M. N.  
2024
- **Acute Subretinal Fluid Accumulation Induced by Futibatinib Therapy for Malignant Metastatic Breast Cancer** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Chhoy, B., Wai, K. M., Leng, T.  
2024; 55 (2): 109-111
- **Quantitative characterization of retinal features in translated OCTA.** *Experimental biology and medicine (Maywood, N.J.)*  
Badhon, R. H., Thompson, A. C., Lim, J. I., Leng, T., Alam, M. N.  
2024; 249: 10333
- **AI-Human Hybrid Workflow Enhances Teleophthalmology for the Detection of Diabetic Retinopathy.** *Ophthalmology science*  
Dow, E. R., Khan, N. C., Chen, K. M., Mishra, K., Perera, C., Narala, R., Basina, M., Dang, J., Kim, M., Levine, M., Phadke, A., Tan, M., Weng, et al  
2023; 3 (4): 100330
- **Progression of Geographic Atrophy: Retrospective Analysis of Patients from the IRIS® Registry (Intelligent Research in Sight).** *Ophthalmology science*  
Rahimy, E., Khan, M. A., Ho, A. C., Hatfield, M., Nguyen, T. H., Jones, D., McKeown, A., Borkar, D., Leng, T., Ribeiro, R., Holekamp, N.  
2023; 3 (4): 100318
- **Artificial Intelligence Improves Patient Follow-Up in a Diabetic Retinopathy Screening Program.** *Clinical ophthalmology (Auckland, N.Z.)*  
Dow, E. R., Chen, K. M., Zhao, C. S., Knapp, A. N., Phadke, A., Weng, K., Do, D. V., Mahajan, V. B., Mruthyunjaya, P., Leng, T., Myung, D.  
2023; 17: 3323-3330
- **Vitreoretinal Specialist Use of Ancillary Testing: An IRIS® Registry Analysis.** *Clinical ophthalmology (Auckland, N.Z.)*  
Vishwakarma, S., Borkar, D. S., LaPrise, A., Mbagwu, M., Leng, T.  
2023; 17: 3077-3085
- **Federated learning for diagnosis of age-related macular degeneration.** *Frontiers in medicine*  
Gholami, S., Lim, J. I., Leng, T., Ong, S. S., Thompson, A. C., Alam, M. N.  
2023; 10: 1259017
- **Ophthalmology at the Forefront of Big Data Integration in Medicine: Insights from the IRIS Registry Database.** *The Yale journal of biology and medicine*  
Knapp, A. N., Leng, T., Rahimy, E.  
2023; 96 (3): 421-426
- **IMPUTATION OF DISEASE SEVERITY FOR DIABETIC RETINOPATHY CLINICAL ENCOUNTERS IN THE IRIS (R) REGISTRY (INTELLIGENT RESEARCH IN SIGHT)**  
Chapman, R., Nguyen, T., Hatfield, M., Leng, T., Mbagwu, M., Torres, A., Borkar, D.

ELSEVIER SCIENCE INC.2023: S386

- **Automated identification of geographic atrophy eyes with and without subfoveal involvement using machine learning and real-world ophthalmic images in the IRIS Registry**  
Chu, Z., Leng, T., Borkar, D. S., Candano, C., Le, K., Ramakrishnan, A., Khapare, K., Mbagwu, M., Torres, A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Real world outcomes from artificial intelligence to detect diabetic retinopathy in the primary care setting: 12 month experience**  
Knapp, A. N., Dow, E., Chen, K., Khan, N. C., Do, D. V., Mahajan, V., Mruthyunjaya, P., Leng, T., Myung, D.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **A federated learning framework for training multi-class OCT classification models**  
Gholami, S., Leng, T., Alam, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Geographic atrophy diagnosis in the IRIS® Registry: a comparison between images and ICD-10 codes**  
Chu, Z., Le, K., Leng, T., Borkar, D., Candano, C., Ramakrishnan, A., Khapare, K., Mbagwu, M., Torres, A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **FARETINA-DME- Early Treatment Patterns and Outcomes in Patients with Diabetic Macular Edema Treated with Faricimab: an IRIS Registry™ Analysis**  
Tabano, D., Borkar, D. S., Garmo, V., Shaia, J. K., Kuo, B., Myers, R., LaPrise, A., Leng, T., Singh, R. P.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **FARETINA-AMD- Early Treatment Patterns and Outcomes in Patients with Neovascular Age-Related Macular Degeneration Initiating Faricimab: an IRIS Registry™ Analysis**  
Borkar, D. S., Tabano, D., Garmo, V., Shaia, J. K., Kuo, B., Myers, R., LaPrise, A., Leng, T., Singh, R. P.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Generalizability of Convolutional Neural Network and Vision Transformer-Based OCT Segmentation Models**  
Pely, A., Wu, Z., Leng, T., Gao, S. S., Chen, H., Hejrati, M., Zhang, M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Clinical and Ophthalmic Biomarkers of Diabetes Mellitus: A Longitudinal Study of Visual Outcome**  
Huang, F., Yu, M., Huang, L., Zhou, X., Wang, R. K., Leng, T., Wang, S., Liao, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Quantification of retinal neuroprotection achieved by two different human neural stem cell formulations in the RCS rat**  
Arrizabalaga, S., Uchida, N., Curtis, A., Navarro, I., Stoddard, J., Tsukamoto, A., Leng, T., Ryals, R.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **MicroRNA-494 augments fibrotic transformation of human retinal pigment epithelial cells and targets p27 with cell-type specificity.** *Frontiers in ophthalmology*  
Leng, T., Kamboj, G., Sun, X., Chang, H., Davda, P., Greer, M., Stary, C. M.  
2023; 3: 1168650
- **Contrastive learning-based pretraining improves representation and transferability of diabetic retinopathy classification models.** *Scientific reports*  
Alam, M. N., Yamashita, R., Ramesh, V., Prabhune, T., Lim, J. I., Chan, R. V., Hallak, J., Leng, T., Rubin, D.  
2023; 13 (1): 6047
- **Identifying the mechanism of missingness for unspecified diabetic retinopathy disease severity in the electronic health record: an IRIS® Registry analysis.** *Journal of the American Medical Informatics Association : JAMIA*  
Hatfield, M., Nguyen, T. H., Chapman, R., Myrick, A. C., Leng, T., Mbagwu, M., Baxi, S., Torres, A. Z., Borkar, D. S.  
2023
- **Vitreoretinal Specialist Use of Ancillary Testing: An IRIS® Registry Analysis** *CLINICAL OPHTHALMOLOGY*  
Vishwakarma, S., Borkar, D. S., Laprise, A., Mbagwu, M., Leng, T.  
2023; 17: 3085
- **Emulating VIEW 1 and VIEW 2 Clinical Trial Outcome Data Using the American Academy of Ophthalmology IRIS Registry** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*

- Gallivan, M. D., Garcia, K. M., Torres, A. Z., Lum, F., Li, C., Mbagwu, M., Leng, T.  
2023; 54 (1): 6-+
- **Dry Age-Related Macular Degeneration: Distribution of Visual Acuity and Progression Risk in a Large Registry.** *Ophthalmology and therapy*  
Leng, T., Schwartz, J., Nimke, D., Gallivan, M., Fevrier, H., Rozario, N., Schultz, N. M.  
2022
  - **Depth-resolved extraction of optical attenuation for glaucoma assessment in clinical settings: a pilot study** *BIOMEDICAL OPTICS EXPRESS*  
Chang, S., Murff, C., Leng, T., Groth, S. L., Bowden, A. K.  
2022; 13 (8): 4326-4337
  - **Predicting Systemic Health Features from Retinal Fundus Images Using Transfer-Learning-Based Artificial Intelligence Models.** *Diagnostics (Basel, Switzerland)*  
Khan, N. C., Perera, C., Dow, E. R., Chen, K. M., Mahajan, V. B., Mruthyunjaya, P., Do, D. V., Leng, T., Myung, D.  
2022; 12 (7)
  - **Optimal Selection of Longitudinally Measured Imaging Biomarkers Affecting Conversion Time to Neovascular AMD Using a Regularized Multivariate Bayesian Joint Model**  
Sahu, S., De Sisternes, L., Alam, M., Leng, T., Rubin, D., Sun, J., Basu, S., Hallak, J.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **Predicting systemic health features from retinal fundus images using transfer-learning based AI models**  
Khan, N. C., Perera, C., Dow, E. R., Leng, T., Mahajan, V. B., Mruthyunjaya, P., Do, D. V., Myung, D.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **Automated machine learning for diagnosis of geographic atrophy and subfoveal involvement using real-world fundus autofluorescence and infrared reflectance images**  
Chu, Z., Mbagwu, M., Borka, D., Ramakrishnan, A., Khapare, K., Candano, C., Torres, A. Z., Kalvaria, H., Roe, M. T., Leng, T.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **Characterizing real-world functional outcomes in patients with geographic atrophy: An IRIS Registry Analysis**  
Leng, T., Borkar, D. S., Hatfield, M., Li, S., Gallivan, M., Joshi, P., McKeown, A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **A hierarchical optical coherence tomography annotation workflow with crowds and medical experts**  
Zhang, M., Gao, S. S., Steffen, V., Wu, Z., Leng, T., Tehrani, M., Mirsharif, S., Movva, N., Hejrati, M., Chen, H.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **Retrospective cohort analysis of patients with geographic atrophy (GA) secondary to age-related macular degeneration followed for 3 years in clinical practice**  
Khan, M., Rahimy, E., Ho, A. C., Corley, R., Gallivan, M., Jones, D., Ribeiro, R., Leng, T., Holekamp, N. M.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **Investigating hyalocyte-like cells in epiretinal membranes using serially acquired optical coherence tomography**  
Soetikno, B., Miller, D., Zhang, H., Goldberg, J. L., Leng, T., Dubra, A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **Integration of Artificial Intelligence into a Telemedicine-Based Diabetic Retinopathy Screening Program**  
Chen, K., Dow, E. R., Khan, N. C., Levine, M., Perera, C., Phadke, A., Dang, J., Weng, K., Do, D. V., Mahajan, V. B., Mruthyunjaya, P., Mishra, K., Leng, et al  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **Contrastive learning improves representation and transferability of diabetic retinopathy classification models**  
Alam, M., Leng, T., Hallak, J., Rubin, D.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
  - **A buoyant mass in the brain: Intraventricular migration of silicone oil.** *American journal of ophthalmology case reports*  
Guo, L. Y., Jamiolkowski, R. M., Hassan, M., Leng, T.  
2022; 25: 101399

- **Ophthalmology and COVID-19: The Impact of the Pandemic on Patient Care and Outcomes: An IRIS (R) Registry Study** *OPHTHALMOLOGY*  
Leng, T., Gallivan, M. D., Kras, A., Lum, F., Roe, M. T., Li, C., Parke II, D. W., Schwartz, S. D.  
2021; 128 (12): 1782-1784
- **Ocular adverse events following intravitreal brolocizumab for neovascular age-related macular degeneration at a single tertiary care center.** *European journal of ophthalmology*  
Nguyen, H. V., Li, A. S., Silva, A. R., Leng, T.  
2021: 11206721211059332
- **Artificial intelligence and ophthalmic surgery** *CURRENT OPINION IN OPHTHALMOLOGY*  
Mishra, K., Leng, T.  
2021; 32 (5): 425-430
- **Artificial intelligence and ophthalmic surgery.** *Current opinion in ophthalmology*  
Mishra, K., Leng, T.  
2021; 32 (5): 425-430
- **Foundational Considerations for Artificial Intelligence Utilizing Ophthalmic Images.** *Ophthalmology*  
Abramoff, M. D., Cunningham, B., Patel, B., Eydelman, M. B., Leng, T., Sakamoto, T., Blodi, B., Grenon, S. M., Wolf, R. M., Manrai, A. K., Ko, J. M., Chiang, M. F., Char, et al  
2021
- **Imaging and artificial intelligence for progression of age-related macular degeneration.** *Experimental biology and medicine (Maywood, N.J.)*  
Romond, K., Alam, M., Kravets, S., Sisternes, L. d., Leng, T., Lim, J. I., Rubin, D., Hallak, J. A.  
2021: 15353702211031547
- **A Multitask Deep-Learning System to Classify Diabetic Macular Edema for Different Optical Coherence Tomography Devices: A Multicenter Analysis.** *Diabetes care*  
Tang, F., Wang, X., Ran, A., Chan, C. K., Ho, M., Yip, W., Young, A. L., Lok, J., Szeto, S., Chan, J., Yip, F., Wong, R., Tang, et al  
2021
- **Ophthalmology and COVID-19: The Impact of the Pandemic on Patient Care and Outcomes-an IRIS Registry Study.** *Ophthalmology*  
Leng, T., Gallivan, M. D., Kras, A., Lum, F., Roe, M. T., Li, C., Parke, D. W., Schwartz, S. D.  
2021
- **Probabilistic Forecasting of Anti-VEGF Treatment Frequency in Neovascular Age-Related Macular Degeneration.** *Translational vision science & technology*  
Pfau, M., Sahu, S., Rupnow, R. A., Romond, K., Millet, D., Holz, F. G., Schmitz-Valckenberg, S., Fleckenstein, M., Lim, J. I., de Sisternes, L., Leng, T., Rubin, D. L., Hallak, et al  
2021; 10 (7): 30
- **AAO IRIS Registry data replicates VIEW 1 and VIEW 2 clinical trial outcome data**  
Leng, T., Xu, J., Kras, A., Wood, K., Doriswami, R., Shadra, C., Torres, A., Li, C., Lum, F.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2021
- **A Multi-Task Deep-Learning System to Classify Diabetic Macular Edema for Different Optical Coherence Tomography Devices: A Multi-Center Analysis**  
Cheung, C., Tang, F., Ran, A., Tan, G., Ting, D. S. W., Chen, H., Ma, H., Tang, S., Leng, T., Kakavand, S., Mannil, S. S., Chang, R., Liew, et al  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2021
- **Extending interoperability in ophthalmology through Fast Healthcare Interoperability Resource (FHIR)**  
Kras, A., Oliver, W., Gillies, M. C., Mair, M., Chu, S., Morlet, N., Mbagwu, M., Hwang, T. S., Roe, M., Leng, T.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2021
- **Large Scale Cross-Vendor Linkage of Ophthalmic Imaging and American Academy of Ophthalmology IRIS (R) Registry Clinical Data**  
Mbagwu, M., Leng, T., Luthra, A., Borkar, D., Kras, A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2021
- **Visual acuity and progression of macular atrophy in patients receiving intravitreal anti-VEGF for age-related macular degeneration.** *European journal of ophthalmology*  
Ji, M. H., Callaway, N. F., Ludwig, C. A., Vail, D., Al-Moujahed, A., Rosenblatt, T. R., Leng, T., Sanislo, S. R., Moshfeghi, D. M.

2021: 11206721211001708

- **Management of repository corticotropin injection therapy for non-infectious uveitis: a Delphi study** *ACTA OPHTHALMOLOGICA*  
Nguyen, Q., Anesi, S. D., Chexal, S., Chu, D. S., Dayani, P. N., Leng, T., Meleth, A. D., Sallam, A. A., Sheppard, J. D., Silverstein, S. M., Toyos, M., Wang, R. C., Foster, et al  
2021
- **Frequency of Urgent or Emergent Vitreoretinal Surgical Procedures in the United States During the COVID-19 Pandemic.** *JAMA ophthalmology*  
Breazzano, M. P., Nair, A. A., Arevalo, J. F., Barakat, M. R., Berrocal, A. M., Chang, J. S., Chen, A. n., Elliott, D. n., Garg, S. J., Ghadiali, Q. n., Gong, D. n., Grewal, D. S., Handa, et al  
2021
- **Automatic Identification of Referral-Warranted Diabetic Retinopathy Using Deep Learning on Mobile Phone Images.** *Translational vision science & technology*  
Ludwig, C. A., Perera, C., Myung, D., Greven, M. A., Smith, S. J., Chang, R. T., Leng, T.  
2020; 9 (2): 60
- **MS-CAM: Multi-Scale Class Activation Maps for Weakly-Supervised Segmentation of Geographic Atrophy Lesions in SD-OCT Images** *IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS*  
Ma, X., Ji, Z., Niu, S., Leng, T., Rubin, D. L., Chen, Q.  
2020; 24 (12): 3443–55
- **An integrated time adaptive geographic atrophy prediction model for SD-OCT images.** *Medical image analysis*  
Zhang, Y., Zhang, X., Ji, Z., Niu, S., Leng, T., Rubin, D. L., Yuan, S., Chen, Q.  
2020; 68: 101893
- **Rationale for American Society of Retina Specialists Best Practice Recommendations for Conducting Vitreoretinal Surgery during the COVID-19 Era.** *Journal of vitreoretinal diseases*  
Chao, D. L., Sridhar, J., Kuriyan, A. E., Leng, T., Barnett, B. P., Carlin, A. F., Wykoff, C. C., Gayer, S., Mruthyunjaya, P., Yonekawa, Y., Fawzi, A. A., Berrocal, A. M., Yeh, et al  
2020; 4 (5): 420-429
- **Prediction of age-related macular degeneration disease using a sequential deep learning approach on longitudinal SD-OCT imaging biomarkers.** *Scientific reports*  
Banerjee, I., de Sisternes, L., Hallak, J. A., Leng, T., Osborne, A., Rosenfeld, P. J., Gregori, G., Durbin, M., Rubin, D.  
2020; 10 (1): 15434
- **Multilayer atrophy progression in eyes with geographic atrophy secondary to age-related macular degeneration**  
Pfau, M., von der Emde, L., De Sisternes, L., Hallak, J., Leng, T., Schmitz-Valckenberg, S., Holz, F. G., Fleckenstein, M., Rubin, D. L.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2020
- **The Machines Are Coming: Implications for Image Reading Centers of the Future** *OPHTHALMOLOGY*  
Leng, T.  
2020; 127 (6): 802–3
- **Two-year outcomes of patients receiving anti-VEGF treatment for neovascular age-related macular degeneration on a treat-and-extend regimen**  
Eng, V., Leng, T.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2020
- **Fully-automated prediction of anti-VEGF treatment using imaging biomarkers in neovascular age-related macular degeneration**  
Hallak, J., Pfau, M., De Sisternes, L., Rupnow, R., Baker, J., Leng, T., Rubin, D. L.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2020
- **Automated and Computer-Assisted Detection, Classification, and Diagnosis of Diabetic Retinopathy.** *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*  
Abramoff, M. D., Leng, T., Ting, D. S., Rhee, K., Horton, M. B., Brady, C. J., Chiang, M. F.  
2020
- **Subthreshold laser therapy for macular oedema from branch retinal vein occlusion: focused review.** *The British journal of ophthalmology*  
Eng, V. A., Leng, T. n.

2020

- **Progression of Photoreceptor Degeneration in Geographic Atrophy Secondary to Age-related Macular Degeneration.** *JAMA ophthalmology*  
Pfau, M. n., von der Emde, L. n., de Sisternes, L. n., Hallak, J. A., Leng, T. n., Schmitz-Valckenberg, S. n., Holz, F. G., Fleckenstein, M. n., Rubin, D. L.  
2020
- **Complete RPE and outer retinal atrophy in patients receiving anti-VEGF treatment for neovascular age-related macular degeneration.** *PLoS one*  
Eng, V. A., Rayess, N., Nguyen, H. V., Leng, T.  
2020; 15 (5): e0232353
- **Rapid Fluctuation of Subretinal Fluid on Encorafenib and Binimetinib.** *Retina (Philadelphia, Pa.)*  
Li, A. S., Leng, T. n., Nagpal, S. n., Liao, Y. J.  
2020
- **Effect of Human Central Nervous System Stem Cell Subretinal Transplantation on Progression of Geographic Atrophy Secondary to Non Neovascular Age-Related Macular Degeneration.** *Ophthalmology. Retina*  
Nittala, M. G., Uji, A. n., Velaga, S. B., Hariri, A. H., Naor, J. n., Birch, D. G., Spencer, R. n., Leng, T. n., Capela, A. n., Tsukamoto, A. n., Ip, M. n., Sadda, S. R.  
2020
- **Reductions in final visual acuity occur even within the first 3 days after a macula-off retinal detachment** *BRITISH JOURNAL OF OPHTHALMOLOGY*  
Greven, M. A., Leng, T., Silva, R., Leung, L., Karth, P. A., Moshfeghi, D. M., Sanislo, S. R., Schachar, I. H.  
2019; 103 (10): 161–64
- **Reply to Letter to the Editor: Preventing Progression in Nonexudative Age-Related Macular Degeneration With Subthreshold Laser Therapy: A Systematic Review** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Eng, V. A., Leng, T.  
2019; 50 (9): 602–3
- **Imaging, Genetic, and Demographic Factors Associated With Conversion to Neovascular Age-Related Macular Degeneration: Secondary Analysis of a Randomized Clinical Trial** *JAMA OPHTHALMOLOGY*  
Hallak, J. A., de Sisternes, L., Osborne, A., Yaspan, B., Rubin, D. L., Leng, T.  
2019; 137 (7): 738–44
- **Reflectance adaptive optics scanning light ophthalmoscopy of epiretinal membranes**  
Razeen, M. M., Leng, T., Dubra, A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **A Comparison: Structural optical coherence tomography and angiography in diabetic retinopathy and diabetic macular edema**  
Huang, L. C., Shariati, A., Oh, A., Leng, T., Liao, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Regression patterns of Retinopathy of Prematurity after intravitreal injection of Ranibizumab**  
Ji, M. H., Moshfeghi, D., Shields, R. A., Bodnar, Z., Ludwig, C. A., Callaway, N. F., Leng, T., Sanislo, S., Orazi, L., Amorelli, G., Lepore, D.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Preventing Progression in Nonexudative Age-Related Macular Degeneration With Subthreshold Laser Therapy: A Systematic Review** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Eng, V. A., Wood, E. H., Boddu, S., Karth, P. A., Leng, T.  
2019; 50 (3): E61–E70
- **Geographic atrophy segmentation in SD-OCT images using synthesized fundus autofluorescence imaging.** *Computer methods and programs in biomedicine*  
Wu, M. n., Cai, X. n., Chen, Q. n., Ji, Z. n., Niu, S. n., Leng, T. n., Rubin, D. L., Park, H. n.  
2019; 182: 105101
- **A MULTI-SCALE DEEP CONVOLUTIONAL NEURAL NETWORK FOR JOINT SEGMENTATION AND PREDICTION OF GEOGRAPHIC ATROPHY IN SD-OCT IMAGES**  
Zhang, Y., Ji, Z., Niu, S., Leng, T., Rubin, D. L., Chen, Q., IEEE

IEEE.2019: 565–68

- **Automatically Determining the Confocal Parameters From OCT B-Scans for Quantification of the Attenuation Coefficients** *IEEE TRANSACTIONS ON MEDICAL IMAGING*  
Dwork, N., Smith, G. T., Leng, T., Pauly, J. M., Bowden, A. K.  
2019; 38 (1): 261–68
- **Thomas A. Swift's Electric Rifle Injuries to the Eye and Ocular Adnexa: The Management of Complex Trauma.** *Ophthalmology. Retina*  
Moysidis, S. N., Koullis, N. n., Rodger, D. C., Chao, J. R., Leng, T. n., de Carlo, T. n., Burkemper, B. n., Ediriwickrema, L. S., George, M. S., Jiang, Y. n., Bohm, K. J., Gulati, S. n., Torres, et al  
2019; 3 (3): 258–69
- **Reductions in final visual acuity occur even within the first 3 days after a macula-off retinal detachment.** *The British journal of ophthalmology*  
Greven, M. A., Leng, T., Silva, R. A., Leung, L. B., Karth, P. A., Moshfeghi, D. M., Sanislo, S. R., Schachar, I. H.  
2018
- **Progressive Reductions in Acuity Occur even within the First Three Days After a Macula-Off Retinal Detachment**  
Greven, M., Leng, T., Leung, L., Moshfeghi, D. M., Sanislo, S., Silva, R., Schachar, I.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Micro-RNAs in the pathogenesis of epiretinal membrane (ERM) formation**  
Kaidonis, G., Stary, C. M., Leng, T.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Automatic identification of referral-warranted diabetic retinopathy using deep learning on mobile phone images**  
Leng, T., Greven, M., Smith, S., Ludwig, C., Chang, R., Gargeya, R.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Beyond Retinal Layers: A Deep Voting Model for Automated Geographic Atrophy Segmentation in SD-OCT Images** *TRANSLATIONAL VISION SCIENCE & TECHNOLOGY*  
Ji, Z., Chen, Q., Niu, S., Leng, T., Rubin, D. L.  
2018; 7 (1): 1
- **Automated detection of foveal center in SD-OCT images using the saliency of retinal thickness maps** *MEDICAL PHYSICS*  
Niu, S., Chen, Q., de Sisternes, L., Leng, T., Rubin, D. L.  
2017; 44 (12): 6390–6403
- **Automated detection of foveal center in SD-OCT images using the saliency of retinal thickness maps.** *Medical physics*  
Niu, S., Chen, Q., de Sisternes, L., Leng, T., Rubin, D. L.  
2017; 44 (12): 6390-6403
- **Valved 25-Gauge Cannula for Vitreous Tap and Injection** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Leng, T., Moshfeghi, D. M.  
2017; 48 (11): 916–17
- **En Face Optical Coherence Tomography Angiography Imaging Versus Fundus Photography in the Measurement of Choroidal Nevi** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Lee, M. D., Kaidonis, G., Kim, A. Y., Shields, R. A., Leng, T.  
2017; 48 (9): 741–47
- **The superficial and deep retinal capillary plexus in cases of fovea plana imaged by spectral-domain optical coherence tomography angiography.** *American journal of ophthalmology case reports*  
Kaidonis, G., Silva, R. A., Sanislo, S. R., Leng, T.  
2017; 6: 41–44
- **Manual Removal of Intraocular Lens Silicone Oil Droplets and Dystrophic Calcifications Using a Nitinol Loop: A Case Series.** *Ophthalmic surgery, lasers & imaging retina*  
Moussa, K., Leng, T., Oatts, J. T., Bhisitkul, R. B., Hwang, D. G., Stewart, J. M.  
2017; 48 (5): 422-426
- **Automated Identification of Diabetic Retinopathy Using Deep Learning.** *Ophthalmology*

Gargeya, R., Leng, T.  
2017

- **Automated intraretinal segmentation of SD-OCT images in normal and age-related macular degeneration eyes** *BIOMEDICAL OPTICS EXPRESS*  
de Sisternes, L., Jonna, G., Moss, J., Marmor, M. F., Leng, T., Rubin, D. L.  
2017; 8 (3): 1926-1949
- **Automated intraretinal segmentation of SD-OCT images in normal and age-related macular degeneration eyes.** *Biomedical optics express*  
de Sisternes, L., Jonna, G., Moss, J., Marmor, M. F., Leng, T., Rubin, D. L.  
2017; 8 (3): 1926-1949
- **Spectral Domain Optical Coherence Tomography Angiography in Stargardt's Macular Dystrophy.** *Ophthalmology. Retina*  
Lee, M., Kaidonis, G., Leng, T.  
2017; 1 (5): 452-454
- **Individual Drusen Segmentation and Repeatability and Reproducibility of Their Automated Quantification in Optical Coherence Tomography Images.** *Translational vision science & technology*  
de Sisternes, L., Jonna, G., Greven, M. A., Chen, Q., Leng, T., Rubin, D. L.  
2017; 6 (1): 12-?
- **Significant Bilateral Response in Diabetic Macular Edema After Single Unilateral Intravitreal Aflibercept Injection.** *Ophthalmic surgery, lasers & imaging retina*  
Rahimy, E., Nyong'o, O., Leng, T.  
2017; 48 (2): 167-169
- **Retinotomy Closure Following Subretinal Stem Cell Transplant With a 30-Gauge Needle.** *Ophthalmic surgery, lasers & imaging retina*  
Ludwig, C. A., Leng, T.  
2016; 47 (9): 869-873
- **Fully Automated Prediction of Geographic Atrophy Growth Using Quantitative Spectral-Domain Optical Coherence Tomography Biomarkers.** *Ophthalmology*  
Niu, S., de Sisternes, L., Chen, Q., Rubin, D. L., Leng, T.  
2016; 123 (8): 1737-1750
- **En Face Imaging of Epiretinal Membranes and the Retinal Nerve Fiber Layer Using Swept-Source Optical Coherence Tomography.** *Ophthalmic surgery, lasers & imaging retina*  
Greven, M. A., Elkin, Z., Nelson, R. W., Leng, T.  
2016; 47 (8): 730-734
- **8 Questions with Dr. Moshfeghi.** *Ophthalmic surgery, lasers & imaging retina*  
Leng, T., Moshfeghi, D. M.  
2016; 47 (8): 786-788
- **PROSPECTIVE TRIAL OF ENDOGENOUS FUNGAL ENDOPHTHALMITIS AND CHORIORETINITIS RATES, CLINICAL COURSE, AND OUTCOMES IN PATIENTS WITH FUNGEMIA** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Paulus, Y. M., Cheng, S., Karth, P. A., Leng, T.  
2016; 36 (7): 1357-1363
- **Factors Associated With Poor Response to Aflibercept After Switching From Ranibizumab or Bevacizumab in Neovascular Age-related Macular Degeneration** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Cheng, S., Leng, T.  
2016; 47 (5): 458-465
- **Spectral-Domain Optical Coherence Tomography Angiography of Central Retinal Artery Occlusion** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Damento, G., Chen, M. H., Leng, T.  
2016; 47 (5): 467-470
- **Multi-Modal Longitudinal Evaluation of Subthreshold Laser Lesions in Human Retina, Including Scanning Laser Ophthalmoscope-Adaptive Optics Imaging.** *Ophthalmic surgery, lasers & imaging retina*

- Wood, E. H., Leng, T., Schachar, I. H., Karth, P. A.  
2016; 47 (3): 268-275
- **Mobile Health in the Retinal Clinic Population: Access to and Interest in Self-Tracking.** *Ophthalmic surgery, lasers & imaging retina*  
Ludwig, C. A., Callaway, N. F., Park, J. H., Leng, T.  
2016; 47 (3): 252-257
  - **AFLIBERCEPT FOR THE TREATMENT OF RETINAL PIGMENT EPITHELIAL DETACHMENTS.** *Retina (Philadelphia, Pa.)*  
He, L., Silva, R. A., Moshfeghi, D. M., Blumenkranz, M. S., Leng, T.  
2016; 36 (3): 492-498
  - **THINKING LEAN: Improving Vitreoretinal Clinic Efficiency by Decentralizing Optical Coherence Tomography.** *Retina (Philadelphia, Pa.)*  
Callaway, N. F., Park, J. H., Maya-Silva, J., Leng, T.  
2016; 36 (2): 335-341
  - **Automated geographic atrophy segmentation for SD-OCT images using region-based C-V model via local similarity factor.** *Biomedical optics express*  
Niu, S., de Sisternes, L., Chen, Q., Leng, T., Rubin, D. L.  
2016; 7 (2): 581-600
  - **Improving Vitreoretinal Clinic Efficiency by Decentralizing Optical Coherence Tomography** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Callaway, N. F., Park, J. H., Maya-Silva, J., Leng, T.  
2016; 36 (2): 335-341
  - **Automated geographic atrophy segmentation for SD-OCT images using region-based C-V model via local similarity factor** *BIOMEDICAL OPTICS EXPRESS*  
Niu, S., de Sisternes, L., Chen, Q., Leng, T., Rubin, D. L.  
2016; 7 (2): 581-600
  - **Noninvasive detection of microaneurysms in diabetic retinopathy by swept-source optical coherence tomography.** *Clinical ophthalmology (Auckland, N.Z.)*  
Cheng, S., Leng, T.  
2016; 10: 1791-1795
  - **Optical Coherence Tomography-Guided Short-Duration Positioning after Macular Hole Surgery.** *Ophthalmology. Retina*  
Grevn, M. A., Cheng, S. n., Leng, T. n.  
2016; 1 (2): 176-78.e1
  - **Manual Removal of Dystrophic Calcifications From Silicone Intraocular Lenses Using a 27-Gauge Nitinol Loop With Concave Tines.** *Retina (Philadelphia, Pa.)*  
Schachar, I., Leng, T.  
2015; 35 (12): 2650-1
  - **Automated segmentation of optic disc in SD-OCT images and cup-to-disc ratios quantification by patch searching-based neural canal opening detection** *OPTICS EXPRESS*  
Wu, M., Leng, T., de Sisternes, L., Rubin, D. L., Chen, Q.  
2015; 23 (24): 31216-31229
  - **Intraocular Nematode Affixed to Posterior Lens Capsule.** *Ophthalmic surgery, lasers & imaging retina*  
Karth, P. A., Swinney, C. C., Moshfeghi, D. M., Yannuzzi, L. A., Pang, C. E., Leng, T.  
2015; 46 (10): 1066-1067
  - **Short-Term Outcomes of Aflibercept Therapy for Diabetic Macular Edema in Patients With Incomplete Response to Ranibizumab and/or Bevacizumab.** *Ophthalmic surgery, lasers & imaging retina*  
Wood, E. H., Karth, P. A., Moshfeghi, D. M., Leng, T.  
2015; 46 (9): 950-954
  - **Restricted Summed-Area Projection for Geographic Atrophy Visualization in SD-OCT Images** *TRANSLATIONAL VISION SCIENCE & TECHNOLOGY*  
Chen, Q., Niu, S., Shen, H., Leng, T., de Sisternes, L., Rubin, D. L.

2015; 4 (5)

- **Fabrication of healthy and disease-mimicking retinal phantoms with tapered foveal pits for optical coherence tomography.** *Journal of biomedical optics*  
Lee, G. C., Smith, G. T., Agrawal, M., Leng, T., Ellerbee, A. K.  
2015; 20 (8): 85004-?
- **Fabrication of healthy and disease-mimicking retinal phantoms with tapered foveal pits for optical coherence tomography.** *Journal of biomedical optics*  
Lee, G. C., Smith, G. T., Agrawal, M., Leng, T., Ellerbee, A. K.  
2015; 20 (8): 85004-?
- **Visual Prognosis of Eyes Recovering From Macular Hole Surgery Through Automated Quantitative Analysis of Spectral-Domain Optical Coherence Tomography (SD-OCT) Scans.** *Investigative ophthalmology & visual science*  
de Sisternes, L., Hu, J., Rubin, D. L., Leng, T.  
2015; 56 (8): 4631-4643
- **Application of Improved Homogeneity Similarity-Based Denoising in Optical Coherence Tomography Retinal Images** *JOURNAL OF DIGITAL IMAGING*  
Chen, Q., de Sisternes, L., Leng, T., Rubin, D. L.  
2015; 28 (3): 346-361
- **Experience With Aflibercept for the Treatment of Neovascular Age-Related Macular Degeneration.** *Ophthalmic surgery, lasers & imaging retina*  
He, L., Silva, R. A., Ayoub, N., Moshfeghi, D. M., Leng, T.  
2015; 46 (5): 542-549
- **SUNDROP: six years of screening for retinopathy of prematurity with telemedicine.** *Canadian journal of ophthalmology. Journal canadien d'ophtalmologie*  
Wang, S. K., Callaway, N. F., Wallenstein, M. B., Henderson, M. T., Leng, T., Moshfeghi, D. M.  
2015; 50 (2): 101-106
- **Acute Retinal Necrosis Secondary to Herpes Simplex Virus Type 2 in Neonates** *OPHTHALMIC SURGERY LASERS & IMAGING RETINA*  
Venincasa, V. D., Emanuelli, A., Leng, T., Perlini, E., Villegas, V., Diaz-Barbosa, M., Gutierrez, M., Miller, D., Berrocal, A. M.  
2015; 46 (4): 499-501
- **Risk factors for respiratory depression in patients undergoing retrobulbar block for vitreoretinal surgery.** *Ophthalmic surgery, lasers & imaging retina*  
Silva, R. A., Leng, J. C., He, L., Brock-Utne, J. G., Drover, D. R., Leng, T.  
2015; 46 (2): 243-247
- **Stem cell treatments: What's happening in 2015** *Retinal Physician*  
Leng, T.  
2015: 48-50
- **West African Crystalline Maculopathy in Sickle Cell Retinopathy.** *Case reports in ophthalmological medicine*  
Kung, J. S., Leng, T.  
2015; 2015: 910713-?
- **Idiopathic pigmented vitreous cyst.** *Acta ophthalmologica*  
Ludwig, C. A., Leng, T. n.  
2015
- **A FALSE COLOR FUSION STRATEGY FOR DRUSEN AND GEOGRAPHIC ATROPHY VISUALIZATION IN OPTICAL COHERENCE TOMOGRAPHY IMAGES** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Chen, Q., Leng, T., Niu, S., Shi, J., de Sisternes, L., Rubin, D. L.  
2014; 34 (12): 2346-2358
- **Quantitative SD-OCT imaging biomarkers as indicators of age-related macular degeneration progression.** *Investigative ophthalmology & visual science*  
de Sisternes, L., Simon, N., Tibshirani, R., Leng, T., Rubin, D. L.

2014; 55 (11): 7093-7103

- **Optic nerve pit-associated choroidal cleft.** *JAMA ophthalmology*  
Silva, R. A., Chang, R. T., Moshfeghi, D. M., Leng, T.  
2014; 132 (9): 1142-?
- **Multimodal imaging and multifocal electroretinography demonstrate autosomal recessive Stargardt disease may present like occult macular dystrophy.** *Retina (Philadelphia, Pa.)*  
Sisk, R. A., Leng, T.  
2014; 34 (8): 1567-75
- **An improved optical coherence tomography-derived fundus projection image for drusen visualization.** *Retina (Philadelphia, Pa.)*  
Chen, Q., Leng, T., Zheng, L. L., Kutzscher, L., de Sisternes, L., Rubin, D. L.  
2014; 34 (5): 996-1005
- **Stanford University Network for Diagnosis of Retinopathy of Prematurity (SUNDRP): five years of screening with telemedicine.** *Ophthalmic surgery, lasers & imaging retina*  
Fijalkowski, N., Zheng, L. L., Henderson, M. T., Wang, S. K., Wallenstein, M. B., Leng, T., Moshfeghi, D. M.  
2014; 45 (2): 106-113
- **Stanford University Network for Diagnosis of Retinopathy of Prematurity (SUNDRP): Five Years of Screening With Telemedicine.** *Ophthalmic surgery, lasers & imaging retina*  
Fijalkowski, N., Zheng, L. L., Henderson, M. T., Wang, S. K., Wallenstein, M. B., Leng, T., Moshfeghi, D. M.  
2014; 45 (2): 106-113
- **Retinal breaks due to intravitreal ocriplasmin.** *Clinical ophthalmology (Auckland, N.Z.)*  
Silva, R. A., Moshfeghi, D. M., Leng, T.  
2014; 8: 1591-1594
- **Automated drusen segmentation and quantification in SD-OCT images.** *Medical image analysis*  
Chen, Q., Leng, T., Zheng, L., Kutzscher, L., Ma, J., de Sisternes, L., Rubin, D. L.  
2013; 17 (8): 1058-1072
- **Semi-automatic geographic atrophy segmentation for SD-OCT images** *BIOMEDICAL OPTICS EXPRESS*  
Chen, Q., de Sisternes, L., Leng, T., Zheng, L., Kutzscher, L., Rubin, D. L.  
2013; 4 (12): 2729-2750
- **Traumatic airbag maculopathy.** *JAMA ophthalmology*  
Kung, J., Leung, L. B., Leng, T., Liao, Y. J.  
2013; 131 (5): 685-687
- **Quantitative evaluation of drusen on photographs.** *Ophthalmology*  
Rubin, D. L., de Sisternes, L., Kutzscher, L., Chen, Q., Leng, T., Zheng, L. L.  
2013; 120 (3): 644-644 e2
- **Stanford University Network for Diagnosis of Retinopathy of Prematurity (SUNDRP): Four-years of Screening with Telemedicine** *CURRENT EYE RESEARCH*  
Fijalkowski, N., Zheng, L. L., Henderson, M. T., Wallenstein, M. B., Leng, T., Moshfeghi, D. M.  
2013; 38 (2): 283-291
- **Abundance of myelinated nerve fibers.** *JAMA ophthalmology*  
Leng, T., Nyong'o, O. L.  
2013; 131 (2): 245-?
- **Carbon nanotube bucky paper as an artificial support membrane for retinal cell transplantation.** *Ophthalmic surgery, lasers & imaging retina*  
Leng, T., Fishman, H. A.  
2013; 44 (1): 73-76
- **Management of suspected endogenous endophthalmitis** *Retina Today*  
Leng, T.  
2013; 8 (6): 32-33

- **Antibiotic controversies in vitreoretinal practice** *Retinal Physician*  
Karth, P. A., Leng, T.  
2013; 22-25
- **FOVEAL CAVITATION AS AN OPTICAL COHERENCE TOMOGRAPHY FINDING IN CENTRAL CONE DYSFUNCTION** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Leng, T., Marmor, M. F., Kellner, U., Thompson, D. A., Renner, A. B., Moore, W., Sowden, J. C.  
2012; 32 (7): 1411-1419
- **Cannula-Based 25-Gauge Vitreous Tap And Injection: A New Surgical Technique** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Chan, A., Leng, T., Moshfeghi, D. M.  
2012; 32 (5): 1021-1022
- **Effect of Lidocaine Gel Anesthesia on Endophthalmitis Rates Following Intravitreal Injection** *OPHTHALMIC SURGERY LASERS & IMAGING*  
Lad, E. M., Maltenfort, M. G., Leng, T.  
2012; 43 (2): 115-120
- **REDUCING ORAL FLORA CONTAMINATION OF INTRAVITREAL INJECTIONS WITH FACE MASK OR SILENCE** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Doshi, R. R., Leng, T., Fung, A. E.  
2012; 32 (3): 473-476
- **The influence of medical school and residency training program upon choice of an academic career and academic productivity among otolaryngology faculty in the United States of America: Our experience of 1433 academic otolaryngologists** *CLINICAL OTOLARYNGOLOGY*  
Leng, T., Jaben, K. A., Zheng, L., Yang, J., Paulus, Y. M., Moshfeghi, A. A., Maltenfort, M. G., Campbell, P. G., Ratliff, J. K., Moshfeghi, D. M.  
2012; 37 (1): 58-62
- **Two cases of X-linked retinoschisis with different spectral domain optical coherence tomography findings.** *Clinical ophthalmology (Auckland, N.Z.)*  
Leng, T.  
2012; 6: 1563-1565
- **Intravitreal dexamethasone in the management of delayed-onset bleb-associated endophthalmitis.** *International journal of inflammation*  
Jacobs, D. J., Pathengay, A., Flynn, H. W., Leng, T., Miller, D., Shi, W.  
2012; 2012: 503912-?
- **Medical School and Residency Influence on Choice of an Academic Career and Academic Productivity Among US Neurology Faculty** *ARCHIVES OF NEUROLOGY*  
Campbell, P. G., Lee, Y. H., Bell, R. D., Maltenfort, M. G., Moshfeghi, D. M., Leng, T., Moshfeghi, A. A., Ratliff, J. K.  
2011; 68 (8): 999-1004
- **Medical school and residency influence on choice of an academic career and academic productivity among neurosurgery faculty in the United States** *Clinical article JOURNAL OF NEUROSURGERY*  
Campbell, P. G., Awe, O. O., Maltenfort, M. G., Moshfeghi, D. M., Leng, T., Moshfeghi, A. A., Ratliff, J. K.  
2011; 115 (2): 380-386
- **Povidone-Iodine Before Lidocaine Gel Anesthesia Achieves Surface Antisepsis** *Annual Meeting of the Retina-Society*  
Doshi, R. R., Leng, T., Fung, A. E.  
SLACK INC.2011: 346-49
- **SELECTIVE RETINAL THERAPY WITH MICROSECOND EXPOSURES USING A CONTINUOUS LINE SCANNING LASER** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Paulus, Y. M., Jain, A., Nomoto, H., Sramek, C., Gariano, R. F., Andersen, D., Schuele, G., Leung, L., Leng, T., Palanker, D.  
2011; 31 (2): 380-388
- **DELAYED-ONSET BLEB-ASSOCIATED ENDOPHTHALMITIS (1996-2008) Causative Organisms and Visual Acuity Outcomes** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Leng, T., Miller, D., Flynn, H. W., Jacobs, D. J., Gedde, S. J.  
2011; 31 (2): 344-352

- **The vitreous trap: a simple, surgeon-controlled technique for obtaining undiluted vitreous and subretinal specimens during pars plana vitrectomy.** *Retina (Philadelphia, Pa.)*  
Moshfeghi, A. A., Albin, T. A., Kitchens, J. W., Leng, T., Moshfeghi, D. M.  
2011; 31 (2): 426-427
- **Improving the therapeutic window of retinal photocoagulation by spatial and temporal modulation of the laser beam** *JOURNAL OF BIOMEDICAL OPTICS*  
Sramek, C., Leung, L., Leng, T., Brown, J., Paulus, Y. M., Schuele, G., Palanker, D.  
2011; 16 (2)
- **Retinopathy of prematurity in an infant with Aicardi's syndrome** *EYE*  
Leng, T., Moshfeghi, D. M.  
2011; 25 (2): 257-258
- **Delayed-onset bleb-associated endophthalmitis: presentation and outcome by culture result.** *Clinical ophthalmology (Auckland, N.Z.)*  
Jacobs, D. J., Leng, T., Flynn, H. W., Shi, W., Miller, D., Gedde, S. J.  
2011; 5: 739-744
- **Endogenous Candida albicans endophthalmitis following spontaneous abortion and IUD removal.** *Ophthalmic surgery, lasers & imaging : the official journal of the International Society for Imaging in the Eye*  
Doshi, R. R., Wender, J. D., Jumper, J. M., Sanislo, S. R., Leng, T.  
2011; 42 Online: e132-4
- **Neovascularization in Purtscher's retinopathy.** *Clinical ophthalmology (Auckland, N.Z.)*  
Chan, A., Fredrick, D. R., Leng, T.  
2011; 5: 1585-1587
- **Photodynamic therapy rescue for subretinal fluid exacerbation after focal laser treatment in idiopathic central serous chorioretinopathy.** *The open ophthalmology journal*  
Leng, T., Sanislo, S. R., Jack, R. L.  
2011; 5: 6-9
- **Kinetics of central macular thickness reduction in patients with macular edema after intravitreal drug therapy.** *Clinical ophthalmology (Auckland, N.Z.)*  
He, L., Chan, A., Leng, T., Blumenkranz, M. S.  
2011; 5: 1751-1758
- **Focal periocular carboplatin chemotherapy avoids systemic chemotherapy for unilateral, progressive retinoblastoma.** *Retina (Philadelphia, Pa.)*  
Leng, T., Cebulla, C. M., Scheffler, A. C., Murray, T. G.  
2010; 30 (4): S66-8
- **Intraoperative Use of Three-Dimensional Spectral-Domain Optical Coherence Tomography** *OPHTHALMIC SURGERY LASERS & IMAGING*  
Ide, T., Wang, J., Tao, A., Leng, T., Kymionis, G. D., O'Brien, T. P., Yoo, S. H.  
2010; 41 (2): 250-254
- **Retinal capillary hemangioma in von Hippel-Lindau disease** *Arch Ophthalmol*  
Leng T, Murray TG  
2010; 128 (4): 425
- **Branch retinal artery occlusion after septoplasty.** *Ophthalmic surgery, lasers & imaging : the official journal of the International Society for Imaging in the Eye*  
Leng, T., Moshfeghi, D. M.  
2010; 41 Online: e1-2
- **Descemet Stripping Automated Endothelial Keratoplasty Tissue Preparation With Femtosecond Laser and Contact Lens** *CORNEA*  
Ide, T., Yoo, S. H., Kymionis, G. D., Leng, T., Marini, C., Stanciu, N. A., O'Brien, T. P.  
2010; 29 (1): 93-98
- **Branch retinal artery occlusion after septoplasty.** *Ophthalmic surgery, lasers & imaging : the official journal of the International Society for Imaging in the Eye*

- Leng, T., Moshfeghi, D. M.  
2010; 41 Online: e1-2
- **ENDOPHTHALMITIS CAUSED BY PROTEUS SPECIES Antibiotic Sensitivities and Visual Acuity Outcomes** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Leng, T., Flynn, H. W., Miller, D., Murray, T. G., Smiddy, W. E.  
2009; 29 (7): 1019-1024
  - **SPECTRAL DOMAIN OPTICAL COHERENCE TOMOGRAPHY CHARACTERISTICS OF CUTICULAR DRUSEN** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Leng, T., Rosenfeld, P. J., Gregori, G., Puliafito, C. A., Punjabi, O. S.  
2009; 29 (7): 988-993
  - **Retinal Vascular Tumor and Peripheral Retinal Vasculitis in the Setting of Systemic Tuberculosis** *OPHTHALMIC SURGERY LASERS & IMAGING*  
Leng, T., Scheffler, A. C., Murray, T. G.  
2009; 40 (4): 409-412
  - **Eyelid and orbital implant injury after enucleation** *OphthalmologyWeb*  
Leng T  
2009
  - **Subconjunctival Air Leakage After Descemet's Stripping Automated Endothelial Keratoplasty(DSAEK) in a Post-Trabeculectomy Eye.** *The open ophthalmology journal*  
Ide, T., Yoo, S. H., Leng, T., O'Brien, T. P.  
2009; 3: 1-2
  - **Three-dimensional spectral domain optical coherence tomography of a clear corneal cataract incision** *OPHTHALMIC SURGERY LASERS & IMAGING*  
Leng, T., Lujan, B. J., Yoo, S. H., Wang, J.  
2008; 39 (4): S132-S134
  - **Glaucoma valves and shunts** *OphthalmologyWeb*  
Leng T  
2008
  - **A model retinal interface based on directed neuronal growth for single cell stimulation** *BIOMEDICAL MICRODEVICES*  
Mehenti, N. Z., Tsien, G. S., Leng, T., Fishman, H. A., Bent, S. F.  
2006; 8 (2): 141-150
  - **Full thickness retinal pigment epithelium explants proliferate into epithelial monolayers on synthetic Bruch's membrane substitutes** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*  
Lombardi, L., Leng, T., Yeh, E., Molnar, F., Noolandi, J., Marmor, M. F., Fishman, H. A., Blumenkranz, M. S.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2005
  - **Synthetic Bruch's membrane substitutes: Comparisons after subretinal transplantation with cultured iris pigment epithelium** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*  
Molnar, F. E., Lombardi, L., Berker, N., Yeh, E., Yellachich, D., Leng, T., Dalal, R., Marmor, M. F., Fishman, H. A., Blumenkranz, M. S.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2005
  - **Directed retinal nerve cell growth for use in a retinal prosthesis interface** *INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE*  
Leng, T., Wu, P., Mehenti, N. Z., Bent, S. F., Marmor, M. F., Blumenkranz, M. S., Fishman, H. A.  
2004; 45 (11): 4132-4137
  - **The chick chorioallantoic membrane as a model tissue for surgical retinal research and simulation** *RETINA-THE JOURNAL OF RETINAL AND VITREOUS DISEASES*  
Leng, T., MILLER, J. M., Bilbao, K. V., Palanker, D. V., Huie, P., Blumenkranz, M. S.  
2004; 24 (3): 427-434
  - **Fabrication and characterization of a carbon nanotube microelectrode array for retinal prostheses** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*

- Wang, K., Dai, H., Leng, T., Mehenti, N. Z., Harris, J. S., Fishman, H. A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2004: U379–U379
- **Retinal light processing using carbon nanotubes** *Official Gazette of the USPTO Patents*  
Loftus D, Leng T, Fishman HA  
2004; 1283 (5)
  - **The artificial synapse chip: A flexible retinal interface based on directed retinal cell growth and neurotransmitter stimulation** *ARTIFICIAL ORGANS*  
Peterman, M. C., Mehenti, N. Z., Bilbao, K. V., Lee, C. J., Leng, T., Noolandi, J., Bent, S. F., Blumenkranz, M. S., Fishman, H. A.  
2003; 27 (11): 975-985
  - **Wiggling subcutaneous lumps - Furuncular myiasis due to Dermatobia hominis larvae** *CLINICAL INFECTIOUS DISEASES*  
Leng, T., Smith, D. S.  
2003; 37 (4): 542-?
  - **Wiggling subcutaneous lumps.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*  
Leng, T., Smith, D. S.  
2003; 37 (4): 542, 591-2
  - **Cell demographics from full thickness retinal explant growth on micropatterned surfaces** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*  
Wu, P., Mehenti, N. Z., Leng, T., Marmor, M. F., Blumenkranz, M. S., Fishman, H. A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2003: U692–U692
  - **A retinal interface based on neurite micropatterning for single cell stimulation** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*  
Mehenti, N. Z., Peterman, M. C., Leng, T., Marmor, M. F., Blumenkranz, M. S., Bent, S. F.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2003: U704–U704
  - **Microcontact printing on human tissue for retinal cell transplantation** *ARCHIVES OF OPHTHALMOLOGY*  
Lee, C. J., Huie, P., Leng, T., Peterman, M. C., Marmor, M. F., Blumenkranz, M. S., Bent, S. F., Fishman, H. A.  
2002; 120 (12): 1714-1718
  - **A biodegradable matrix facilitates the use of lens capsule as a substrate for subretinal cell transplantation** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*  
Bilbao, K. V., Leng, T., Fung, A. E., Huie, P., Sanislo, S. R., Marmor, M. F., Blumenkranz, M. S., Fishman, H. A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2002: U972–U972
  - **Directed ganglion cell growth and stimulation with microcontact printing as a prototype visual prosthesis interface** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*  
Leng, T., Huie, P., Mehenti, N. Z., Peterman, M. C., Lee, C. J., Marmor, M. F., Sanislo, S. R., Beni, S. F., Blumenkranz, M. S., Fishman, H. A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2002: U1279–U1279
  - **The artificial synapse chip: A novel interface for a retinal prosthesis based on neurotransmitter stimulation and nerve regeneration** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*  
Fishman, H. A., Peterman, M. C., Leng, T., Huie, P., Lee, C. J., Bloom, D. M., Sanislo, S. R., Marmor, M. F., Bent, S. F., Blumenkranz, M. S.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2002: U803–U803
  - **Tissue engineered lens capsule as a substrate for IPE and RPE transplantation** *Annual Meeting of the Association-for-Research-in-Vision-and-Ophthalmology*  
Fung, A. E., Lee, C. J., Leng, T., Bilbao, L. V., Peterman, M. C., Blumenkranz, M. S., Bent, S. F., Fishman, H. A.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2002: U973–U973
  - **Novel interface to biological systems for retinal prosthetics** *Symposium on MEMS and BioMEMS held at the 2002 MRS Spring Meeting*  
Peterman, M. C., Lee, C., Leng, T., Huie, P., Fishman, H. A.  
MATERIALS RESEARCH SOCIETY.2002: 149–154
  - **A real world lesson** *The Bulletin of the Santa Clara County Medical Association*  
Leng T  
2001; 7 (6): 6-7

- **Capillary electrophoresis coupled with RBL-2H3 cells as a single-cell biosensor** *Stanford University Department of Biological Sciences Honors Thesis*  
Leng T, Zare RN  
1999

## PRESENTATIONS

- 06/2023 - 4th Stephen Fichman Lecturer at McGill University Ophthalmology Day - McGill University
- 10/2020 - University of Illinois Chicago Ophthalmology Symposium - University of Illinois Chicago
- 09/2020 - University of California Irvine CIRM Meeting - University of California Irvine
- 03/2019 - Emory University Translational Science Symposium - Emory University
- 03/2019 - Visiting Professor at Emory University - Emory University
- 01/2019 - Visiting Professor at Baylor University - Baylor University
- 01/2019 - Houston Ophthalmological Society - Houston Ophthalmological Society
- 01/2019 - Visiting Professor at University of Texas Houston - University of Texas Houston
- 01/2019 - Visiting Professor at University of Texas Medical Branch - University of Texas Medical Branch
- 12/2018 - Visiting Professor at Duke University - Duke University
- 07/2016 - Japan Ocular Circulation Society - Japan Ocular Circulation Society
- 06/2016 - Stanford University Entrepreneurship in Medicine and Engineering: Envisioning Future Technologies in Health and Engineering - Stanford University
- 05/2016 - Peninsula Eye Society - Peninsula Eye Society
- 06/2011 - 5th Annual Stanford Ophthalmology Day - Stanford University
- 06/2011 - 47th Annual Residents' Days at Bascom Palmer Eye Institute - University of Miami Bascom Palmer Eye Institute
- 11/2008 - Siriraj Hospital Department of Ophthalmology Grand Rounds - Siriraj Hospital