Stanford



David Myung, MD, PhD

Professor of Ophthalmology and, by courtesy, of Chemical Engineering

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**

  Niloufar Pirkhezri - Administrative Assistant

  Email np94@stanford.edu

Bio

BIO

Dr. Myung is a Professor of Ophthalmology at the Byers Eye Institute at Stanford and, by courtesy, of Chemical Engineering and also serves as an attending physician at the Palo Alto VA Medical Center. He is a board-certified and fellowship-trained ophthalmologist specializing in cataract and corneal surgery and external diseases of the eye, and is the Director of the Ophthalmic Innovation Program, a project-based fellowship in the development and regulatory science of new eye care technologies. Dr. Myung leads an NIH and DoD-funded translational research laboratory focused on two areas of clinical need: (1) ophthalmic regenerative medicine through tissue engineering and drug delivery, and (2) global health through mobile technologies and telemedicine. His research group takes an interdisciplinary approach toward fostering regeneration of ocular tissues, by using chemistry to not only build biomimetic cellular architectures but also to target and release bioactive molecules to promote healing. Current projects are directed toward the use of bio-orthogonal and supramolecular crosslinking chemistries for the localized delivery of growth factors and/or stem cells to wound sites, the synthesis of bioactive wound dressings and vehicles, the creation of biopolymeric tissue scaffolds, and 3D bioprintable inks for tissue engineering.

Dr. Myung is also the founding Director of the Stanford Teleophthalmology Autonomous Testing and Universal Screening (STATUS) Program, which is pushing the boundaries of telemedicine and AI to improve eye care worldwide. He and his collaborators investigate the role of mobile technologies and AI in enabling diagnostics and patient care outside of traditional health care settings. Their goal is to challenge current paradigms of eye care delivery through new digital health technologies and telemedicine to increase access to care in resource-limited settings both in the US and abroad. In collaboration with his retina, primary care, and endocrinologist colleagues at Stanford, he has organized and leads a Bay Area-wide Remote Diabetic Eye Care Program. Through this program, patients with diabetes can have their eyes photographed and analyzed by an FDA-cleared autonomous artificial intelligence algorithm at clinics throughout the Bay Area and then, if needed, referred in for further evaluation by a retina specialist. More information about the STATUS program can be found at: http://med.stanford.edu/ophthalmology/patient_care/tele-eyecare.html#remote_diabetic_eyecareprogram

CLINICAL FOCUS

- Cataract Surgery

- Corneal Transplantation
- Corneal Crosslinking
- Dry Eye
- Cornea and External Diseases Specialist
- AI and Telemedicine

ACADEMIC APPOINTMENTS

- Professor-Univ Med Line, Ophthalmology
- Professor-Univ Med Line (By courtesy), Chemical Engineering
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Director, Remote Diabetic Eye Care, Stanford Teleophthalmology Autonomous Testing and Universal Screening (STATUS) Program, (2020- present)
- Co-Director, Teleophthalmology, Byers Eye Institute at Stanford, (2020- present)
- Director, Teleophthalmology, Byers Eye Institute at Stanford, (2017-2020)
- Director, Byers Family Ophthalmic Innovation Fellowship Program, Byers Eye Institute at Stanford, (2016- present)

HONORS AND AWARDS

- High Impact Technology (HIT) Award, Stanford Office of Technology Licensing (OTL) (2024)
- Career Advancement Award, Research to Prevent Blindness (RPB) (2023)
- Vision Research Program (VRP) Award, Department of Defense (DoD) (2022)
- Harrington Scholar-Innovator Award, Harrington Discovery Institute (2022)
- SPECTRUM Innovation Accelerator Pilot Grant, Stanford University (2021)
- Small Projects in Rehabilitation Research (SPiRE) Award, Veterans Affairs Health Care System (2019)
- Career Development Award, Research to Prevent Blindness (RPB) (2018)
- E. Mathilda Ziegler Foundation Award, E. Mathilda Ziegler Foundation for the Blind (2018)
- Coulter Foundation Translational Research Seed Award, Coulter Foundation/Stanford University (2018)
- Mentored Clinical Scientist Research Career Development Award (K08), National Eye Institute / National Institutes of Health (2017)
- SPARK Translational Research Grant, Stanford University (2017)
- SPECTRUM Translational Research Grant (Co-Investigator), Stanford University (2014)
- Stanford Society of Physician Scholars Research Grant, Stanford University School of Medicine (2014)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Stanford Bio-X Scientific Leadership Council (2023 - present)
- Member, Executive Committee, Collaborative Community on Ophthalmic Innovation (CCOI) (2021 - present)
- Section Editor, Regenerative Medicine, Current Ophthalmology Reports (2016 - present)
- Member, American Academy of Ophthalmology (2012 - present)
- Member, Association for Research in Vision and Ophthalmology (2004 - present)

PROFESSIONAL EDUCATION

- Board Certification: Ophthalmology, American Board of Ophthalmology (2019)
- Fellowship: Stanford Health Care Byers Eye Institute (2019) CA
- Residency: Stanford University Ophthalmology Residency (2015) CA
- Internship: Kaiser Permanente Santa Clara Internal Medicine Residency (2012) CA
- MD, Stanford University School of Medicine , Medicine (2011)
- PhD, Stanford University , Chemical Engineering (2008)
- MS, Stanford University , Chemical Engineering (2006)
- BA, Yale University , Molecular, Cellular and Developmental Biology (2000)

COMMUNITY AND INTERNATIONAL WORK

- Stanford Belize Vision Clinic
- Samaritan House

LINKS

- Lab Website: http://myunglab.stanford.edu/
- Ophthalmic Innovation Program: https://med.stanford.edu/ophthalmology/education/ophthalmic_innovation_program.html
- FDA Ophthalmic Digital Health Workshop: http://www.cfom.info/meetings/OphthalmicDigitalHealth/index.html
- Stanford Remote Diabetic Eye Care: http://med.stanford.edu/ophthalmology/patient_care/tele-eyecare.html#remote_diabetic_eyecareprogram
- Collaborative Community on Ophthalmic Imaging: https://www.cc-oi.org

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Novel biomaterials to reconstruct the wounded cornea

Mesenchymal stem cell therapy for corneal and ocular surface regeneration

Engineered biomolecule therapies for promote corneal wound healing

Telemedicine in ophthalmology

Teaching

STANFORD ADVISEES

Med Scholar Project Advisor

Adam Nelson

Postdoctoral Faculty Sponsor

Uiyoung Han, Jilu Jaffet, Yingchang Ma, Euisun Song, Josiah To

Doctoral Dissertation Co-Advisor (NonAC)

Anthony Han

Doctoral Dissertation Reader (NonAC)

Diya Singhal, Su Zhao

Publications

PUBLICATIONS

- **RNA delivery to the corneal endothelium using charge-altering releasable transporters.** *Science advances*
  Wang, S. K., Li, Z., Shah, S. H., Edwards, Q. A., Bouffard, R., Hines, E. S., Imventarza, J. A., Korte, S., Lawrence, M. S., Song, E., Helmy, E., Amaya, L., Kang, et al
  2026; 12 (34): eady8161

- **Nanoparticle-mediated inhibition of Yes-associated protein prevents corneal scarring after traumatic injury.** *Materials today. Bio*
  Kang, N. W., Jang, K., Kim, H., Jiang, L., Seo, Y. A., Song, E., Garcia-Sanchez, J., Lin, D., Chen, F., Han, U., Liu, W. W., Myung, D.
  2026; 39: 103331

- **In situ rheological monitoring of diffusion-controlled hydrogel crosslinking for embedded 3D bioprinting.** *Biofabrication*
  Christakopoulos, F., Shih, A., Chung, S. J., Huerta-López, C., Brunel, L. G., De Paiva Narciso, N., Messin-Roizard, C., Tao, J., Myung, D., Heilshorn, S., Fuller, G. G.
  2026

- **RNA delivery to the corneal endothelium using charge-altering releasable transporters**
  Wang, S. K., Li, Z., Shah, S., Edwards, Q. A., Bouffard, R., Hines, E. S., Imventarza, J., Korte, S., Lawrence, M., Song, E., Helmy, E., Amaya, L., Kang, et al
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **Incidence of Actionable Ocular Pathology in Patients after Screening Positive or Indeterminate in Artificial Intelligence-Based Diabetic Retinopathy Screening Program**
  Chung, M., Esmaeilkhanian, H., Xiang, J., Or, C., Wai, K. M., Leng, T., Wang, S., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **Color-Free Optical Clearing of the Sclera for Enhanced Ocular Imaging using Naturally Occurring Absorbing Molecules**
  Jeon, H., Han, U., Zhao, S., Hong, G., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **Development and evaluation of a surgical approach for sheath-preserving optic nerve transection in rabbits**
  Nelson, A., Jang, K., Rajpal, S., Rutigliani, C., Han, A., Manche, A., Jeon, H., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **Corneal Stromal Stem Cell-Derived Extracellular Vesicles Promote Corneal Endothelial Cell Migration and Suppress TGF#-Induced Endothelial-to-Mesenchymal Transition**
  Ma, Y., Song, E., Jeon, H., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **Clinical and histopathological course after endothelial scraping as an experimental model of corneal endothelial dysfunction in rats.**
  Manche, A., Jeon, H., Song, E., Ma, Y., Lee, H., Ye, E., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **In vitro and in vivo evaluation of nanofiber membrane implants combined with functional iPSC derived corneal endothelial cells for corneal endothelium replacement**
  Lee, H., Park, J., Kim, C., Yoon, Y., Jeon, M., Lee, R., Kim, S., Lee, J., Ye, E., Shim, I., Hwang, C., Moon, G., Song, et al
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **A sustained ROCK inhibitor-releasing gelatin nanofiber membrane enhances engraftment of human derived corneal endothelial cells**
  Shim, I., Chi, V., Ye, E., Park, J., Song, E., Myung, D., Lee, H.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **Tunable Refillable Ocular Drug Delivery for Controlled Release**
  Kim, H., Kang, N., Myung, D., DeBoer, C.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2026

- **Response to Letter Regarding "Long-Term Outcomes of Corneal Crosslinking for Keratoconus Across Pediatric, Adolescent, and Adult Populations in a Diverse U.S. Population".** *Journal of cataract and refractive surgery*

Chen, K. M., Wungcharoen, T., Zhao, C., Myung, D., Manche, E.
2026

- **Associations of anxiety disorders, physical activity and open-angle glaucoma: a population-based analysis.** *Scientific reports*
  Lee, J. S., Lee, S. Y., Shin, S. J., Lee, J., Myung, D., Lee, H.
  2026
- **Association between retinal nerve fiber layer thickness and cardiovascular-kidney-metabolic syndrome: A UK Biobank cohort study.** *American journal of ophthalmology*
  Lee, J. S., Heo, S. J., Myung, D., Kim, C. Y., Lee, S. Y.
  2026
- **High-Purity Functional Corneal Endothelial Cells From Human Induced Pluripotent Stem Cells via a Novel Wash-Out Method.** *MedComm*
  Ye, E. A., Kim, C., Jeon, M., Yoon, Y., Park, J., Lee, R. H., Yu, C., Chung, H. S., Kim, J. Y., Myung, D., Lee, H.
  2026; 7 (4): e70650
- **High-Purity Functional Corneal Endothelial Cells From Human Induced Pluripotent Stem Cells via a Novel Wash-Out Method** *MEDCOMM*
  Ye, E., Kim, C., Jeon, M., Yoon, Y., Park, J., Lee, R., Yu, C., Chung, H., Kim, J., Myung, D., Lee, H.
  2026; 7 (4)
- **A CRISPR-Cas13d cancer therapeutic enables selective elimination of uveal melanoma.** *Molecular therapy. Oncology*
  Stauber, D., Sosnick, L., Ma, Y., Pimcharoen, S., Lawanprasert, A., Murthy, N., Myung, D., Qi, L. S.
  2026; 34 (1): 201151
- **A CRISPR-Cas13d cancer therapeutic enables selective elimination of uveal melanoma** *MOLECULAR THERAPY ONCOLOGY*
  Stauber, D., Sosnick, L., Ma, Y., Pimcharoen, S., Lawanprasert, A., Murthy, N., Myung, D., Qi, L. S.
  2026; 34 (1)
- **Long-Term Outcomes of Corneal Crosslinking for Keratoconus Across Pediatric, Adolescent, and Adult Populations in a Diverse U.S. Population.** *Journal of cataract and refractive surgery*
  Chen, K. M., Wungcharoen, T., Zhao, C., Myung, D., Manche, E.
  2026
- **Implantable ocular therapeutic systems: an insight into their clinical potential in the long-term treatment of ocular diseases.** *Biofabrication*
  Kim, H., Kang, N. W., Hong, W., Abdollahramezani, S., Ngo, G. H., Raja, D., Peters, O., Mahajan, V. B., Myung, D., Deboer, C.
  2026
- **Biomechanical Modification of the Sclera: An Ex Vivo Study on Porcine Eyes.** *Investigative ophthalmology & visual science*
  Ross, A. K., Jang, K., Nahmou, M., Kim, H., DeBoer, C., Myung, D., Goldberg, J. L., Chiang, B.
  2026; 67 (2): 51
- **Design and Development of a Suprachoroidal Spacer Implant and Injector System for Glaucoma Treatment.** *ACS applied bio materials*
  Jang, K., Ross, A. K., Onyekwere, O. G., Goldberg, J. L., Myung, D., Chiang, B.
  2026
- **Crystalline Lens Regeneration: A Review** *CURRENT OPHTHALMOLOGY REPORTS*
  Nelson, A., Logan, C., Manche, A., Myung, D.
  2026; 14 (1)
- **Autonomous Artificial Intelligence in Diabetic Retinopathy Testing-Lessons Learned on Successful Health System Adoption.** *Ophthalmology science*
  Teng, C. W., Patel, S. D., Barkmeier, A. J., Liu, T. Y., Myung, D., Henderer, J., Liu, J., Hansen, E., Al-Aswad, L. A.
  2026; 6 (1): 100935
- **Enhancing Optical Coherence Tomography Contrast of Corneal Stromal Stem Cells Using Gold Nanobipyramids.** *ACS applied nano materials*
  Jiang, L., Rashwan, M. S., Sun, W., Hu, T., Myung, D., Goldberg, J. L., Chen, F.
  2025; 8 (49): 23500-23510
- **Lubrication Mechanisms of the Ocular Surface** *CURRENT OPHTHALMOLOGY REPORTS*
  Liu, C., Cirera-Salinas, D., Fuller, G. G., Myung, D.

2025; 13 (1)

- **Enhancing Optical Coherence Tomography Contrast of Corneal Stromal Stem Cells Using Gold Nanobipyramids** *ACS APPLIED NANO MATERIALS*
  Jiang, L., Rashwan, M. S., Sun, W., Hu, T., Myung, D., Goldberg, J. L., Chen, F.
  2025
- **Independent associations of physical activity and depression with open-angle glaucoma in a population-based analysis.** *Scientific reports*
  Lee, S. Y., Shin, S. J., Lee, J., Myung, D., Lee, H.
  2025
- **Dual-orientation of collagen fibers to guide cell alignment in 3D-printed constructs.** *Acta biomaterialia*
  Singhal, D., Christakopoulos, F., Brunel, L. G., Borkar, S., Doulames, V. M., Mozipo, E. A., Myung, D., Fuller, G. G., Heilshorn, S. C.
  2025
- **CRISPR-Cas13d-Mediated Targeting of a Context-Specific Essential Gene Enables Selective Elimination of Uveal Melanoma.** *bioRxiv : the preprint server for biology*
  Stauber, D., Sosnick, L., Ma, Y., Pimcharoen, S., Lawanprasert, A., Murthy, N., Myung, D., Qi, L. S.
  2025
- **Reinforcement of Fibrillar Collagen Hydrogels with Bioorthogonal Covalent Crosslinks.** *Biomacromolecules*
  Brunel, L. G., Long, C. M., Christakopoulos, F., Cai, B., de Paiva Narciso, N., Johansson, P. K., Singhal, D., Baugh, N. J., Zhang, D., Enejder, A., Myung, D., Heilshorn, S. C.
  2025
- **Deep-learning algorithm for the diagnosis and prediction of hydroxychloroquine retinopathy: An International, multi-institutional study.** *Ophthalmology. Retina*
  Woodward-Court, P., Hogg, J., Lee, T., Taribagil, P., Zhao, C. S., Otti, V., Tucker, W. R., Allingham, M., Alekseev, O., Wagner, S. K., Myung, D., Leung, L., Lad, et al
  2025
- **Development of Regenerative Corneal Endothelial Implants Using Gelatin Nanofiber Membranes and iPSC-Derived Endothelial Cells**
  Jeon, H., Song, E., Ye, E., Lee, H., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **In situ UNIversal Orthogonal Network (UNION) bioink deposition for direct delivery of corneal stromal stem cells to corneal wounds.** *Bioactive materials*
  Brunel, L. G., Cai, B., Hull, S. M., Han, U., Wungcharoen, T., Fernandes-Cunha, G. M., Seo, Y. A., Johansson, P. K., Heilshorn, S. C., Myung, D.
  2025; 48: 414-430
- **Biomechanical modulation of ex vivo porcine sclera**
  Ross, A., Jang, K., Nahmou, M., Myung, D., Goldberg, J. L., Chiang, B.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Repurposing verteporfin and hyaluronic acid gel for ocular surface treatment to prevent corneal scarring**
  Liu, W., Chen, F., Kang, N., Wungcharoen, T., Jiang, L., Basco, C., Garcia, J., Lin, D., Seo, Y., Jang, K., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Performance and Generalizability of a Deep Learning Model for Fundus Photographs In a Diverse Northern California Population**
  Hirji, S., Chen, K., Koornwinder, A., Khanian, H., Yap, B., Li, K., Myung, D., Wang, S. Y.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Detection Rate of Diabetic Retinopathy Before and After Implementation of a Novel Autonomous AI-Based Device in a Resource-Limited Area**
  Gutierrez, K., Esmaeilkhanian, H., Myung, D., Fisher, A.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Equitable Deep Learning for Diabetic Retinopathy Screening via Fair Adaptive Scaling**
  Wang, M., Luo, Y., Li, M., Elze, T., Kim, L. A., Myung, D., Morley, M., Shi, M.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025

- **Evaluation of Refillable Drug-Eluting Intraocular Implant**
  Kim, H., Kang, N., Myung, D., Deboer, C.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025

- **Antifibrotic Nanoparticle for Corneal Regeneration Following Traumatic Injuries**
  Jang, K., Kang, N., Kim, H., Jiang, L., Seo, Y., Song, E., Chen, F., Han, U., Liu, W., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025

- **Development of SCONE, a targeted optic nerve head drug delivery system**
  Chiang, B., Onyekwere, O., Jang, K., Nahmou, M., Heng, K., Dalal, R., Liao, Y., Myung, D., Goldberg, J. L.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025

- **Brightening Ocular Cells with Nanoparticles under OCT**
  Chen, F., Jiang, L., Luo, Z., Nahmou, M., Young, B., Maya, J., Myung, D., Goldberg, J.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025

- **Multidirectional alignment of collagen fibers to guide cell orientation in 3D-printed tissue.** *bioRxiv : the preprint server for biology*
  Singhal, D., Christakopoulos, F., Brunel, L. G., Borkar, S., Doulames, V. M., Myung, D., Fuller, G. G., Heilshorn, S. C.
  2025

- **Refillable Intraocular Drug-Eluting Implant.** *ACS applied materials & interfaces*
  Kim, H., Kang, N. W., Wise, R., Feliz, A., Myung, D., DeBoer, 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

- **Foam stabilization in salt solutions: The role of capillary drainage and Marangoni stresses.** *Journal of colloid and interface science*
  Sharma, E., Borkar, S., Baumli, P., Shi, X., Wu, J. Y., Myung, D., Fuller, G. G.
  2025; 693: 137535

- **Detection Rate of Diabetic Retinopathy Before and After Implementation of Autonomous AI-based Fundus Photograph Analysis in a Resource-Limited Area in Belize.** *Clinical ophthalmology (Auckland, N.Z.)*
  Esmaeilkhanian, H., Gutierrez, K. G., Myung, D., Fisher, A. C.
  2025; 19: 993-1006

- **Repurposing verteporfin and hyaluronic acid gel for ocular surface treatment to prevent corneal scarring.** *Journal of controlled release : official journal of the Controlled Release Society*
  Chen, F., Kang, N. W., Wungcharoen, T., Jiang, L., Basco, C., Garcia-Sanchez, J., Lin, D., Seo, Y. A., Jang, K., Myung, D., Liu, W. W.
  2025

- **Bio-orthogonal crosslinking and hyaluronan facilitate transparent healing after treatment of deep corneal injuries with in situ-forming hydrogels.** *NPJ Regenerative medicine*
  Chen, F., Han, U., Wungcharoen, T., Seo, Y. A., Le, P., Jiang, L., Kang, N. W., Song, E., Jang, K., Mundy, D., Fernandes-Cunha, G. M., Heilshorn, S., Myung, et al
  2025; 10 (1): 8

- **A cornea-mimetic electrospun fiber-reinforced hydrogel platform for ocular surface applications** *MACROMOLECULAR RESEARCH*
  Chen, K., Song, E., Koh, W., Myung, D.
  2025

- **Interpenetrating networks of fibrillar and amorphous collagen promote cell spreading and hydrogel stability.** *Acta biomaterialia*
  Brunel, L. G., Long, C. M., Christakopoulos, F., Cai, B., Johansson, P. K., Singhal, D., Enejder, A., Myung, D., Heilshorn, S. C.
  2025

- **Development of a novel SupraChoroidal-to-Optic-NervE (SCONE) drug delivery system.** *Drug delivery*
  Chiang, B., Heng, K., Jang, K., Dalal, R., Liao, Y. J., Myung, D., Goldberg, J. L.
  2024; 31 (1): 2379369

- **Gelatin nanofibers coated with hyaluronic acid as a mesenchymal stromal cell scaffold for corneal regeneration.** *International journal of pharmaceutics*
  da Silva, G. R., Song, E., Chen, K. M., Chen, F., Jiang, L., Kim, H., Kang, N. W., Myung, D.
  2024: 125009
- **Use of Artificial Intelligence-Based Detection of Diabetic Retinopathy in the US.** *JAMA ophthalmology*
  Shah, S. A., Sokol, J. T., Wai, K. M., Rahimy, E., Myung, D., Mruthyunjaya, P., Parikh, R.
  2024
- **Photoactivated growth factor release from bio-orthogonally crosslinked hydrogels for the regeneration of corneal defects.** *Bioactive materials*
  Kang, N., Seo, Y. A., Jackson, K. J., Jang, K., Song, E., Han, U., Chen, F., Heilshorn, S. C., Myung, D.
  2024; 40: 417-429
- **Dexamethasone acetate loaded poly(ε-caprolactone) nanofibers for rat corneal chemical burn treatment.** *Scientific reports*
  Kim, D. R., Park, S. K., Kim, E. J., Kim, D. K., Yoon, Y. C., Myung, D., Lee, H. J., Na, K. S.
  2024; 14 (1): 21806
- **Bilateral Light-Adjustable Lens Implantation in a Patient With 50-Cut Radial Keratotomy.** *Cornea open*
  Jiang, A. C., Coulter, A., Myung, D., Schallhorn, J. M., Pasricha, N. D.
  2024; 3 (3)
- **In Situ-Forming, Bioorthogonally Cross-linked, Nanocluster-Reinforced Hydrogel for the Regeneration of Corneal Defects.** *ACS nano*
  Kang, N. W., Jang, K., Song, E., Han, U., Seo, Y. A., Chen, F., Wungcharoen, T., Heilshorn, S. C., Myung, D.
  2024
- **Elucidating the roles of electrolytes and hydrogen bonding in the dewetting dynamics of the tear film.** *Proceedings of the National Academy of Sciences of the United States of America*
  Borkar, S., Baumli, P., Vance, T., Sharma, E., Shi, X., Wu, J. Y., Yao, G., Myung, D., Fuller, G. G.
  2024; 121 (31): e2407501121
- **Development of a targeted drug delivery approach to the optic nerve head**
  Chiang, B., Heng, K., Jang, K., Dalal, R., Liao, Y., Myung, D., Goldberg, J.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **In -vivo analysis of the effect of epidermal growth factor -loaded collagen gels on corneal regeneration**
  Sco, Y., Kang, N., Jackson, K., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Dexamethasone acetate loaded poly(ε-ecaprolactone) nanofibers for the treatment of rat corneal chemical burn**
  Kim, D., Kim, D., Park, S., Kim, E., Yoon, Y., Myung, D., Lee, H., Na, K.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Verteporfin Restores Corneal Transparency after Injury**
  Liu, W. W., Chen, F., Wungcharoen, T., Kang, N., Garcia, J., Basco, C., Seo, Y., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Bio-Orthogonal Chemistry and Hyaluronan Enhance Corneal Restoration of Collagen Gel: 2-Month Response in Vivo**
  Chen, F., Han, U., Seo, Y., Heilshorn, S., Myung, D.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Quantifying particle concentration via AI-enhanced optical coherence tomography.** *Nanoscale*
  Ye, S., Xing, L., Myung, D., Chen, F.
  2024
- **Design and ex vivo development of a suprachoroidal spacer implant to treat glaucoma.** *Research square*
  Chiang, B., Jang, K., Goldberg, J., Myung, D.
  2024
- **Electrospun Nanofiber Membrane for Cultured Corneal Endothelial Cell Transplantation.** *Bioengineering (Basel, Switzerland)*

Song, E., Chen, K. M., Margolis, M. S., Wungcharoen, T., Koh, W., Myung, D.
2024; 11 (1)

- **Embedded 3d Bioprinting of Collagen Inks into Microgel Baths to control hydrogel Microstructure and Cell Spreading.** *Advanced healthcare materials*
  Brunel, L. G., Christakopoulos, F., Kilian, D., Cai, B., Hull, S. M., Myung, D., Heilshorn, S. C.
  2023: e2303325
- **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
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PRESENTATIONS

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