Stanford

Sangeethabalasri Pugazhendhi

Postdoctoral Scholar, Ophthalmology

Bio

BIO

Dr. Pugazhendhi is currently working as a Postdoctoral Medical Fellow at the Department of Ophthalmology, Stanford University School of Medicine. She received her Doctor of Medicine at PSG Institute of Medical Sciences & Research, India. Her primary research interest is on studying optic disc drusen, optic neuropathies and related neuro-ophthalmic diseases. Current research areas include: 1) Analyzing Optical Coherence Tomography (OCT) and Optical Coherence Tomography Angiography (OCTA) imaging in the understanding and management of optic disc drusen and optic neuropathies, in order to identify biomarkers that can help in prediction and treatment of disease; 2) 3D visualization and OCT reconstruction of the optic nerve head to understand the structure-function relationship of the optic nerve head disorders; 3) Whole Exome Sequencing in Autosomal Dominant Hereditary Optic Disc Drusen patients to identify predictors of disease inheritance; 4) Investigating cellular function analysis of optic disc drusen and optic neuropathy patients using human skin fibroblasts. Her future goal is to be a physician-scientist and to deliver evidence-based medicine through interdisciplinary research and clinical expertise to address the needs of patients.

PROFESSIONAL EDUCATION

- Postdoctoral Research Fellow, Byers Eye Institute, Stanford University School of Medicine
- Research Fellowship (Cornea), Pacific ClearVision Institute, Eugene, Oregon
- MD, PSG Institute of Medical Sciences & Research, India (2019)

STANFORD ADVISORS

- Yaping Liao, Postdoctoral Faculty Sponsor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

-Optical Coherence Tomography (OCT) and Optical Coherence Tomography Angiography (OCTA) imaging and image analysis of neuro-ophthalmic diseases.

-3D visualization and OCT reconstruction of the optic nerve head disorders

-Whole Exome Sequencing in Autosomal Dominant Optic Disc Drusen patients

-Human skin fibroblasts study to investigate cellular function in neuro-ophthalmic diseases

LAB AFFILIATIONS

- Yaping Liao, Stanford Center for Optic Disc Drusen (3/1/2020)
- Yaping Liao, Liao Eye-Brain Lab (3/1/2020)

Publications

PUBLICATIONS

- **Multicolor Imaging of Optic Disc Drusen.** *Journal of neuro-ophthalmology : the official journal of the North American Neuro-Ophthalmology Society*
  Yan, Y., Pugazhendhi, S., Beres, S. J., Liao, Y. J.
  2022

- **Multimodal Ophthalmic Imaging of Nonarteritic Anterior Ischemic Optic Neuropathy With and Without Optic Disc Drusen.** *Journal of neuro-ophthalmology : the official journal of the North American Neuro-Ophthalmology Society*
  Pugazhendhi, S., Yan, Y., Liao, Y. J.
  2021

- **Comparison of outcomes of 25-gauge vs 27-gauge micro-incision vitrectomy surgery for visually significant macular membranes and full-thickness macular holes**
  Brown, G. T., Pugazhendhi, S., Beardsley, R. M., Karth, J. W., Karth, P. A., Hunter, A. A.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2020

- **Sixth Nerve Palsy due to Metastasis of Thyroid Carcinoma in a patient on Alternative Medicine** *Acta Scientific Clinical Case Reports*
  Pugazhendhi, S., C, S., Jadhav, A., Shah, V. M.
  2020; 1 (6): 08-10

- **Pathogenesis and Prevention of Worsening Axial Elongation in Pathological Myopia** *CLINICAL OPHTHALMOLOGY*
  Pugazhendhi, S., Ambati, B., Hunter, A. A.
  2020; 14: 853-873

- **25 vs. 27-gauge micro-incision vitrectomy surgery for visually significant macular membranes and full-thickness macular holes: a retrospective study.** *International journal of retina and vitreous*
  Brown, G. T., Pugazhendhi, S., Beardsley, R. M., Karth, J. W., Karth, P. A., Hunter, A. A.
  2020; 6 (1): 56

- **Double-Needle Yamane Repositioning of a Previous Yamane Fixation** *CASE REPORTS IN OPHTHALMOLOGY*
  Pugazhendhi, S., Ambati, B., Hunter, A. A.
  2019; 10 (3): 431-437

- **Maxillary Zoster and Neurotrophic Keratitis following Trigeminal Block** *CASE REPORTS IN OPHTHALMOLOGY*
  Cho, Y., Kwon, J., Pugazhendhi, S., Ambati, B. K.
  2019; 10 (1): 61-66

- **Is the main lacrimal gland indispensable? Contributions of the corneal and conjunctival epithelia** *SURVEY OF OPHTHALMOLOGY*
  Stevenson, W., Pugazhendhi, S., Wang, M.
  2016; 61 (5): 616-627

PRESENTATIONS

- Choroidal neovascularization in optic disc drusen and treatment with anti-VEGF therapy - Women in Ophthalmology 2021 Summer Symposium (8/28/2021)
- Outcomes of Pulsed, Accelerated, Epithelial-on Cross-Linking for Keratoconus: An Update - ASCRS 2020 Conference (5/16/2020 - 5/17/2020)
- One Year Outcomes of Pulsed, Accelerated, Epithelial-on Crosslinking for Keratoconus - ARVO 2019 Conference (4/28/2019 - 5/2/2019)