



Satinder Kaur

Postdoctoral Scholar, Ophthalmology

Bio

STANFORD ADVISORS

- Benyam Kinde, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Benyam Kinde, Kinde Lab (10/1/2024)

Publications

PUBLICATIONS

- **Apicobasal Polarity Protein PARD3 Plays an Essential Role in Human Corneal Epithelial Cells.** *Investigative ophthalmology & visual science*
Kumar, S., Sohnen, P., Kaur, S., Vohra, M., Robertson, D. M., Swamynathan, S., Swamynathan, S. K.
2026; 67 (1): 3
- **Apicobasal polarity is essential to retinal pigmented epithelium structure and is controlled by Pard3**
Sohnen, P., Shang, P., Kaur, S., Vohra, M., Kumar, S., Swamynathan, S., Garces, A., Adams, S., Hirose, T., Sinha, D., Swamynathan, S. K.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Apical-basal polarity determinant Pard3 plays an essential role in corneal epithelial homeostasis and permeability barrier function**
Kumar, S., Vohra, M., Kaur, S., Sohnen, P., Swamynathan, S., Hirose, T., Kozmik, Z., Robertson, D. M., Swamynathan, S. K.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **The Secreted Ly6/uPAR-Related Protein-1 (SLURP1) Protects the Cornea from UV-B induced Oxidative Stress**
Kaur, S., Sohnen, P., Swamynathan, S., Kumar, S., Vohra, M., Swamynathan, S. K.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **Pard3 promotes corneal epithelial stratification and homeostasis by regulating apical-basal polarity, cytoskeletal organization and tight junction-mediated barrier function.** *The ocular surface*
Vohra, M., Kumar, S., Sohnen, P., Kaur, S., Swamynathan, S., Hirose, T., Kozmik, Z., Swamynathan, S. K.
2025
- **The Secreted Ly6/uPAR-Related Protein-1 (SLURP1) Protects the Cornea From Oxidative Stress.** *Investigative ophthalmology & visual science*
Kaur, S., Sohnen, P., Kumar, S., Vohra, M., Swamynathan, S., Swamynathan, S.
2025; 66 (3): 30
- **In vitro activity of cefepime-tazobactam against oxyimino cephalosporin-resistant clinical isolates of E. coli: exploring a potential carbapenem-sparing strategy.** *European journal of clinical microbiology & infectious diseases : official publication of the European Society of Clinical Microbiology*
Kanaujia, R., Kaur, S., Biswal, M., Ray, P., Sharma, N., Angrup, A.

2025; 44 (3): 753-757

- **SLURP1 mitigates the corneal epithelial oxidative damage by suppressing the production of reactive oxygen species**
Kaur, S., Sohnen, P., Swamynathan, S., Kumar, S., Swamynathan, S. K.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Pard3 controls the retinal pigmented epithelial apical -basal polarity, structure, and function**
Sohnen, P., Shang, P., Kaur, S., Swamynathan, S., Kumar, S., Hirose, T., Sinha, D., Swamynathan, S. K.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **The Secreted Ly6/uPAR-Related Protein 1 (Slurp1) Modulates Corneal Angiogenic Inflammation Via NF- κ B Signaling.** *Investigative ophthalmology & visual science*
Swamynathan, S., Campbell, G., Sohnen, P., Kaur, S., St Leger, A. J., Swamynathan, S. K.
2024; 65 (1): 37
- **Molecular nature of ocular surface barrier function, diseases that affect it, and its relevance for ocular drug delivery.** *The ocular surface*
Kaur, S., Sohnen, P., Swamynathan, S., Du, Y., Espana, E. M., Swamynathan, S. K.
2023; 30: 3-13
- **KLF4 promotes genomic stability and suppresses ferroptosis in corneal epithelial cells exposed to genotoxic conditions**
Kaur, S., Vohra, M., Mondal, M., Sohnen, P., Swamynathan, S., Tiwari, A., Swamynathan, S.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Role of apicobasal polarity in retinal pigmented epithelial cells evaluated by ablation of Pard3**
Sohnen, P., Shang, P., Kaur, S., Swamynathan, S., Hirose, T., Sinha, D., Swamynathan, S.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Secreted Ly-6/uPAR Related Protein-1 (SLURP1) Suppresses TGF- β Induced Epithelial to Mesenchymal Transition in Corneal Epithelial Cells**
Swamynathan, S., Sohnen, P., Kaur, S., Swamynathan, S.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **In-vitro susceptibility testing methods for the combination of ceftazidime-avibactam with aztreonam in metallo-beta-lactamase producing organisms: Role of combination drugs in antibiotic resistance era.** *The Journal of antibiotics*
Sreenivasan, P., Sharma, B., Kaur, S., Rana, S., Biswal, M., Ray, P., Angrup, A.
2022; 75 (8): 454-462
- **Potential Synergistic Antibiotic Combinations against Fluoroquinolone-Resistant Pseudomonas aeruginosa.** *Pharmaceuticals (Basel, Switzerland)*
Kothari, A., Jain, N., Kishor Kumar, S., Kumar, A., Kaushal, K., Kaur, S., Pandey, A., Gaurav, A., Omar, B. J.
2022; 15 (2)
- **Genomic insights into evolution of extensive drug resistance in Stenotrophomonas maltophilia complex.** *Genomics*
Kumar, S., Bansal, K., Patil, P. P., Kaur, A., Kaur, S., Jaswal, V., Gautam, V., Patil, P. B.
2020; 112 (6): 4171-4178
- **Pharmacokinetics of colistin in patients with multidrug-resistant Gram-negative infections: A pilot study.** *The Indian journal of medical research*
Gautam, V., Shafiq, N., Mouton, J. W., Malhotra, S., Kaur, S., Ray, P.
2018; 147 (4): 407-412

PRESENTATIONS

- The Secreted Ly6/uPAR-Related Protein-1 (SLURP1) Protects the Cornea from UV-B induced Oxidative Stress - Investigative Ophthalmology & Visual Science (ARVO) 2025
- SLURP1 mitigates the corneal epithelial oxidative damage by suppressing the production of reactive oxygen species - Investigative Ophthalmology & Visual Science (ARVO) 2024
- KLF4 promotes genomic stability and suppresses ferroptosis in corneal epithelial cells exposed to genotoxic conditions - Investigative Ophthalmology & Visual Science (ARVO) 2023