

Stanford



Ethan Schonfeld

MD Student, expected graduation Spring 2028

Bio

HONORS AND AWARDS

- The J.E. Wallace Sterling Award for Scholastic Achievement, School of Humanities and Sciences, Stanford University (June 2022)

EDUCATION AND CERTIFICATIONS

- MS, Stanford University School of Medicine , Biomedical Informatics (2023)
- BSH, Stanford University, School of Humanities and Sciences , Biology (Biochemistry & Biophysics) (2022)

Publications

PUBLICATIONS

- **Sigma-1 receptor expression in a subpopulation of lumbar spinal cord microglia in response to peripheral nerve injury.** *Scientific reports*
Schonfeld, E., Johnstone, T. M., Haider, G., Shah, A., Marianayagam, N. J., Biswal, S., Veeravagu, A.
2023; 13 (1): 14762
- **Demonstrating the successful application of synthetic learning in spine surgery for training multi-center models with increased patient privacy.** *Scientific reports*
Schonfeld, E., Veeravagu, A.
2023; 13 (1): 12481
- **Deep Learning Prediction of Cervical Spine Surgery Revision Outcomes Using Standard Laboratory and Operative Variables.** *World neurosurgery*
Schonfeld, E., Shah, A., Johnstone, T. M., Rodrigues, A., Morris, G. K., Stienen, M. N., Veeravagu, A.
2024
- **Evaluating Computer Vision, Large Language, and Genome-Wide Association Models in a Limited Sized Patient Cohort for Pre-Operative Risk Stratification in Adult Spinal Deformity Surgery.** *Journal of clinical medicine*
Schonfeld, E., Pant, A., Shah, A., Sadeghzadeh, S., Pangal, D., Rodrigues, A., Yoo, K., Marianayagam, N., Haider, G., Veeravagu, A.
2024; 13 (3)
- **Machine Learning in Neurosurgery: Toward Complex Inputs, Actionable Predictions, and Generalizable Translations.** *Cureus*
Schonfeld, E., Mordekai, N., Berg, A., Johnstone, T., Shah, A., Shah, V., Haider, G., Marianayagam, N. J., Veeravagu, A.
2024; 16 (1): e51963
- **Type II Odontoid Fractures in the Elderly Presenting to the Emergency Department: An Assessment of Factors Affecting In-Hospital Mortality and Discharge to Skilled Nursing Facilities.** *The spine journal : official journal of the North American Spine Society*
Johnstone, T., Shah, V., Schonfeld, E., Sadeghzadeh, S., Haider, G., Stienen, M., Marianayagam, N. J., Veeravagu, A.
2023
- **Artificial Intelligence in Neurosurgery: A State-of-the-Art Review from Past to Future.** *Diagnostics (Basel, Switzerland)*
Tangsrivimol, J. A., Schonfeld, E., Zhang, M., Veeravagu, A., Smith, T. R., Härtl, R., Lawton, M. T., El-Sherbini, A. H., Prevedello, D. M., Glicksberg, B. S., Krittawong, C.

2023; 13 (14)

- **Understanding transfer learning for chest radiograph clinical report generation with modified transformer architectures.** *Helicon*
Vendrow, E., Schonfeld, E.
2023; 9 (7): e17968
- **Clinical Outcomes and Cost Profiles for Cage and Allograft Anterior Cervical Discectomy and Fusion Procedures in the Adult Population: A Propensity Score-Matched Study.** *Asian spine journal*
Rodrigues, A. J., Varshneya, K., Stienen, M. N., Schonfeld, E., Than, K. D., Veeravagu, A.
2023
- **The Impact of Preoperative Myelopathy on Postoperative Outcomes among Anterior Cervical Discectomy and Fusion Procedures in the Nonelderly Adult Population: A Propensity-Score Matched Study.** *Asian spine journal*
Rodrigues, A. J., Schonfeld, E., Varshneya, K., Stienen, M. N., Veeravagu, A.
2023
- **Comparison of Deep Learning and Classical Machine Learning Algorithms to Predict Post-operative Outcomes for Anterior Cervical Discectomy and Fusion Procedures with State-of-the-art Performance.** *Spine*
Rodrigues, A. J., Schonfeld, E., Varshneya, K., Stienen, M. N., Staartjes, V. E., Jin, M. C., Veeravagu, A.
2022
- **Chronic opioid use prior to ACDF surgery is associated with inferior post-operative outcomes: a propensity-matched study of 17,443 chronic opioid users.** *World neurosurgery*
Rodrigues, A. J., Varshneya, K., Schonfeld, E., Malhotra, S., Stienen, M. N., Veeravagu, A.
2022
- **Vertebrae segmentation in reduced radiation CT imaging for augmented reality applications.** *International journal of computer assisted radiology and surgery*
Schonfeld, E., de Lotbiniere-Bassett, M., Jansen, T., Anthony, D., Veeravagu, A.
1800
- **Autocatalytic-protection for an unknown locus CRISPR-Cas countermeasure for undesired mutagenic chain reactions.** *Journal of theoretical biology*
Schonfeld, E., Schonfeld, E., Schonfeld, D.
2021; 528: 110831
- **On the relation of gene essentiality to intron structure: a computational and deep learning approach** *LIFE SCIENCE ALLIANCE*
Schonfeld, E., Vendrow, E., Vendrow, J., Schonfeld, E.
2021; 4 (6)
- **Lateralized Deficits in Motor, Sensory, and Olfactory Domains in Dementia** *JOURNAL OF ALZHEIMERS DISEASE*
Schonfeld, E., Schonfeld, E., Aman, C., Gill, N., Kim, D., Rabin, S., Shamshuddin, B., Sealey, L., Senno, R.
2021; 79 (3): 1033-1040
- **OnabotulinumtoxinA injections: treatment of reversible cerebral vasoconstriction syndrome chronic daily headaches** *BMJ CASE REPORTS*
Senno, R., Schonfeld, E., Nagar, C.
2019; 12 (5)