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CLINICAL OFFICE (PRIMARY)

- **Neurosurgery**

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Bio

CLINICAL FOCUS

- Neurological Surgery

ACADEMIC APPOINTMENTS

- Clinical Instructor, Neurosurgery

PROFESSIONAL EDUCATION

- FEBNS, European Association of Neurosurgical Societies and European Board of Neurosurgery , Board Certification in Neurosurgery (2024)
- Fellowship: Stanford University Dept of Neurosurgery (2023) CA
- Fellowship, Yale-New Haven Hospital , Neurosurgical Oncology (2022)
- Residency: Shaare Zedek Medical Center (2020) Israel
- Residency: Rabin Medical Center (2017) Israel
- Internship: Duke University School of Medicine (2014) NC
- Medical Education: Tel Aviv University Sackler School of Medicine (2013) Israel

Publications

PUBLICATIONS

- **Misplaced intraspinal venous stent causing cauda equina syndrome: illustrative case.** *Journal of neurosurgery. Case lessons*
Shah, V., Johnstone, T., Haider, G., Marianayagam, N. J., Stienen, M. N., Chandra, V., Veeravagu, A.
2024; 7 (7)
- **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 JOURNAL OF MEDICAL SCIENCE*
Schonfeld, E., Mordekai, N., Berg, A., Johnstone, T., Shah, A., Shah, V., Haider, G., Marianayagam, N. J., Veeravagu, A.
2024; 16 (1)
- **Treatment of Trigeminal Neuralgia Secondary to Petroclival Meningioma Using Microsurgical Resection, Microvascular Decompression, and Stereotactic Radiosurgery: 2-Dimensional Operative Video.** *Operative neurosurgery (Hagerstown, Md.)*
Park, D. J., Kumar, K. K., Marianayagam, N. J., Yener, U., Rahimy, E., Hancock, S., Meola, A., Chang, S. D.
2024; 26 (1): 107-108
- **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
- **Surgery and stereotactic radiosurgery for spinal leiomyosarcoma: a single-institution retrospective series and systematic review.** *Journal of neurosurgery. Spine*
Zamarud, A., Marianayagam, N. J., Sekar, V., Testa, S., Park, D. J., Yener, U., McCleary, T. L., Yoo, K. H., Emrich, S., Tayag, A., Ustrzynski, L., Pollom, E., Soltys, et al
2023: 1-13
- **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
- **Spinal metastases of pineal region glioblastoma with primitive neuroectodermal features highlighting the importance of molecular diagnoses: illustrative case.** *Journal of neurosurgery. Case lessons*
Shah, A., Marianayagam, N. J., Zamarud, A., Park, D. J., Persad, A. R., Soltys, S. G., Chang, S. D., Veeravagu, A.
2023; 6 (20)
- **The outcome of central nervous system hemangioblastomas in Von Hippel-Lindau (VHL) disease treated with belzutifan: a single-institution retrospective experience.** *Journal of neuro-oncology*
Zamarud, A., Marianayagam, N. J., Park, D. J., Yener, U., Yoo, K. H., Meola, A., Chang, S. D.
2023
- **STEREOTACTIC RADIOSURGERY FOR RESIDUAL, RECURRENT, AND METASTATIC HEMANGIOPERICYTOMAS: A SINGLE INSTITUTION EXPERIENCE**
Yoo, K., Park, D., Veeravagu, A., Lee, M., Marianayagam, N., Zamarud, A., Gu, X., Pollom, E., Soltys, S., Chang, S., Meola, A.
OXFORD UNIV PRESS INC.2023
- **STEREOTACTIC RADIOSURGERY FOR CYSTIC AND SOLID INTRACRANIAL HEMANGIOBLASTOMAS: A SINGLE-INSTITUTION RETROSPECTIVE SERIES**
Yoo, K., Park, D., Marianayagam, N., Pollom, E., Soltys, S., Meola, A., Chang, S.
OXFORD UNIV PRESS INC.2023
- **Stereotactic Radiosurgery for Cranial and Spinal Hemangioblastomas: A Single-Institution Retrospective Series.** *Neurosurgery*
Yoo, K. H., Park, D. J., Marianayagam, N. J., Gu, X., Pollom, E. L., Soltys, S. G., Chang, S. D., Meola, A.
2023
- **Practical Guideline for Prevention of Patchy Hair Loss following CyberKnife Stereotactic Radiosurgery for Calvarial or Scalp Tumors: Retrospective Analysis of a Single Institution Experience.** *Stereotactic and functional neurosurgery*
Park, D. J., Marianayagam, N. J., Yener, U., Tayag, A., Ustrzynski, L., Emrich, S. C., Pollom, E., Soltys, S., Meola, A., Chang, S. D.
2023: 1-7
- **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
- **Optimizing the synergy between stereotactic radiosurgery and immunotherapy for brain metastases.** *Frontiers in oncology*
Yoo, K. H., Park, D. J., Choi, J. H., Marianayagam, N. J., Lim, M., Meola, A., Chang, S. D.
2023; 13: 1223599

- **Stereotactic Radiosurgery for Contrast-Enhancing Satellite Nodules in Recurrent Glioblastoma: A Rare Case Series From a Single Institution.** *Cureus*
Park, D. J., Persad, A. R., Yoo, K. H., Marianayagam, N. J., Yener, U., Tayag, A., Ustrzynski, L., Emrich, S. C., Chuang, C., Pollom, E., Soltys, S. G., Meola, A., Chang, et al
2023; 15 (8): e44455
- **Stereotactic radiosurgery for distant brain metastases secondary to esthesioneuroblastoma: a single-institution series.** *Neurosurgical focus*
Zamarud, A., Yener, U., Yoo, K. H., Park, D. J., Marianayagam, N. J., Ho, Q. A., Pollom, E., Soltys, S., Wang, L., Chang, S. D., Meola, A.
2023; 55 (2): E6
- **Stereotactic radiosurgery for sarcoma metastases to the brain: a single-institution experience.** *Neurosurgical focus*
Zamarud, A., Park, D. J., Dadey, D. Y., Yoo, K. H., Marianayagam, N. J., Yener, U., Szalkowski, G. A., Pollom, E., Soltys, S., Chang, S. D., Meola, A.
2023; 55 (2): E7
- **Progression to fusion after lumbar laminectomy for degenerative lumbar spondylolisthesis: Rate and risk-factors. A national database study.** *Clinical neurology and neurosurgery*
Haider, G., Varshneya, K., Rodrigues, A., Marianayagam, N., Stienen, M. N., Veeravagu, A.
2023; 233: 107919
- **CyberKnife radiosurgery for treatment of residual or recurrent Grade 1 choroid plexus papilloma: A single institution experience.** *World neurosurgery*
Zhang, M., Park, D. J., Marianayagam, N. J., Yener, U., Soltys, S. G., Pollom, E., Chang, S. D., Meola, A.
2023
- **Treatment Outcomes of Leiomyosarcoma Metastasis Affecting the Brachial Plexus: A Comparative Case Report Using Chat Generative Pre-trained Transformer (ChatGPT).** *Cureus*
Zamarud, A., Marianayagam, N., Sekar, V., Chang, S. D., Meola, A.
2023; 15 (3): e36715
- **Stereotactic radiosurgery for localized cranial Langerhans cell histiocytosis: A single institution experience and review of literature.** *World neurosurgery*
Park, D. J., Marianayagam, N. J., Yener, U., Wang, L., Soltys, S. G., Pollom, E., Chang, S. D., Meola, A.
2023