Stanford

Eugene Shkolyar, MD

Clinical Assistant Professor, Urology

CLINICAL OFFICE (PRIMARY)

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Bio

BIO

Eugene Shkolyar, MD is a urologic oncologist who specializes in treating patients with bladder, prostate, kidney, and testis cancers. He is a clinical assistant professor in the Department of Urology at the Stanford School of Medicine.

Dr. Shkolyar has expertise in open, endoscopic, and robotic surgery and in caring for patients with complex urologic oncology needs. Dr. Shkolyar is actively engaged in translational research, with a particular interest in integrating artificial intelligence into bladder cancer treatment and the development of novel biomarkers for cancer detection. His commitment to continual innovation ensures that his patients have access to the latest and most effective treatment options.

Dr. Shkolyar was born in Kyiv, Ukraine, and raised in New York. He attended Cornell University for his undergraduate education and went on to UCLA for medical school. Following medical school, Dr. Shkolyar completed a residency in urology at Stanford, where he developed his interest in urologic oncology, translational bladder cancer research and teaching. He went on to complete a two-year fellowship in urologic oncology at Stanford School of Medicine gaining additional skills in management of complex urologic cancers. Dr. Shkolyar is the recipient of numerous honors and awards, including membership in the Alpha Omega Alpha medical honors society and a research scholar award from the Urology Care Foundation. In addition, he has authored and co-authored numerous publications in urology, artificial intelligence, and device development.

Dr. Shkolyar is a member of the Society of Urologic Oncology, the American Society of Clinical Oncology, the American Urological Association, and the European Association of Urology.

CLINICAL FOCUS

- Urology
- Urologic Oncology

ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Urology

HONORS AND AWARDS

- Research Scholar Award, Urology Care Foundation (07/2022-07/2023)
- Resident Teaching Award, Stanford University Department of Urology (07/2021)
- Member, Alpha Omega Alpha (07/2011)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Associate Member, Society of Urologic Oncology (2023 - present)
- Member, American Society of Clinical Oncology (2021 - present)
- Member, American Urological Association (2015 - present)

PROFESSIONAL EDUCATION

- Fellowship, Stanford School of Medicine , Urologic Oncology (2023)
- Residency: Stanford University Dept of Urology (2021) CA
- Internship: Stanford University Dept of General Surgery (2016) CA
- Medical Education: UCLA David Geffen School Of Medicine Registrar (2015) CA

PATENTS

- Joseph Liao, Lei Xing, Eugene Shkolyar, Xiao Jia. "United States Methods and systems for cystoscopic imaging incorporating machine learning", Leland Stanford Junior University

Publications

PUBLICATIONS

- **Laying the Groundwork for Optimized Surgical Feedback.** *JAMA network open*
  Shkolyar, E., Pugh, C., Liao, J. C.
  2023; 6 (6): e2320465
- **Bladder cancer risk stratification using a urinary mRNA biomarker panel - A path towards cystoscopy triaging.** *Urologic oncology*
  Shkolyar, E., Zhao, Q., Mach, K. E., Teslovich, N. C., Lee, T. J., Cox, S., Skinner, E. C., Lu, Y., Liao, J. C.
  2021
- **Robotic-Assisted Radical Prostatectomy Associated With Decreased Persistent Postoperative Opioid Use.** *Journal of endourology*
  Shkolyar, E. n., Shih, I. F., Li, Y. n., Wong, J. n., Liao, J. C.
  2020
- **Optical biopsy of penile cancer with in vivo confocal laser endomicroscopy.** *Urologic oncology*
  Shkolyar, E. n., Laurie, M. A., Mach, K. E., Trivedi, D. R., Zlatev, D. V., Chang, T. C., Metzner, T. J., Leppert, J. T., Kao, C. S., Liao, J. C.
  2019
- **Augmented Bladder Tumor Detection Using Deep Learning.** *European urology*
  Shkolyar, E. n., Jia, X. n., Chang, T. C., Trivedi, D. n., Mach, K. E., Meng, M. Q., Xing, L. n., Liao, J. C.
  2019
- **Multifocality and Prostate Cancer Detection by Multiparametric Magnetic Resonance Imaging: Correlation with Whole-mount Histopathology** *EUROPEAN UROLOGY*
  Le, J. D., Tan, N., Shkolyar, E., Lu, D. Y., Kwan, L., Marks, L. S., Huang, J., Margolis, D. A., Raman, S. S., Reiter, R. E.
  2015; 67 (3): 569-576
- **Efficient Augmented Intelligence Framework for Bladder Lesion Detection.** *JCO clinical cancer informatics*
  Eminaga, O., Lee, T. J., Laurie, M., Ge, T. J., La, V., Long, J., Semjonow, A., Bogemann, M., Lau, H., Shkolyar, E., Xing, L., Liao, J. C.
  2023; 7: e2300031

- **Tumor detection under cystoscopy with transformer-augmented deep learning algorithm.** *Physics in medicine and biology*
  Jia, X., Shkolyar, E., Laurie, M. A., Eminaga, O., Liao, J. C., Xing, L.
  2023; 68 (16)
- **Real-time Detection of Bladder Cancer Using Augmented Cystoscopy with Deep Learning: a Pilot Study.** *Journal of endourology*
  Chang, T. C., Shkolyar, E., Del Giudice, F., Eminaga, O., Lee, T., Laurie, M., Seufert, C., Jia, X., Mach, K. E., Xing, L., Liao, J. C.
  2023
- **Conceptual Framework and Documentation Standards of Cystoscopic Media Content for Artificial Intelligence.** *Journal of biomedical informatics*
  Eminaga, O., Jiyong Lee, T., Ge, J., Shkolyar, E., Laurie, M., Long, J., Graham Hockman, L., Liao, J. C.
  2023: 104369
- **Conceptual Framework and Documentation Standards of Cystoscopic Media Content for Artificial Intelligence.** *ArXiv*
  Eminaga, O., Lee, T. J., Ge, J., Shkolyar, E., Laurie, M., Long, J., Hockman, L. G., Liao, J. C.
  2023
- **Bladder Cancer and Artificial Intelligence: Emerging Applications** *Urologic Clinics North America*
  Laurie, M., Zhou, S. R., Islam, M., Shkolyar, E., Xing, L., Liao, J. C.
  2023
- **Flat lesion detection of white light cystoscopy with deep learning**
  Jia, X., Shkolyar, E., Eminaga, O., Laurie, M., Zhou, Z., Lee, T., Islam, M., Meng, M. Q., Liao, J. C., Xing, L.
  2023
- **Sequential modeling for cystoscopic image classification**
  Laurie, M., Eminaga, O., Shkolyar, E., Jia, X., Lee, T., Long, J., Islam, M., Lau, H., Xing, L., Liao, J. C.
  2023
- **An Efficient Framework for Video Documentation of Bladder Lesions for Cystoscopy: A Proof-of-Concept Study.** *Journal of medical systems*
  Eminaga, O., Ge, T. J., Shkolyar, E., Laurie, M. A., Lee, T. J., Hockman, L., Jia, X., Xing, L., Liao, J. C.
  2022; 46 (11): 73
- **Artificial Intelligence-Based Prognostic Model for Urologic Cancers: A SEER-Based Study.** *Cancers*
  Eminaga, O., Shkolyar, E., Breil, B., Semjonow, A., Boegemann, M., Xing, L., Tinay, I., Liao, J. C.
  2022; 14 (13)
- **Current Trends in Artificial Intelligence Application for Endourology and Robotic Surgery.** *The Urologic clinics of North America*
  Chang, T. C., Seufert, C., Eminaga, O., Shkolyar, E., Hu, J. C., Liao, J. C.
  2021; 48 (1): 151–60
- **Modeling the contribution of the obesity epidemic to the temporal decline in sperm counts.** *Archivio italiano di urologia, andrologia : organo ufficiale [di] Societa italiana di ecografia urologica e nefrologica*
  Kasman, A., Del Giudice, F., Shkolyar, E., Porreca, A., Busetto, G. M., Lu, Y., Eisenberg, M. L.
  2020; 92 (4)
- **Critical Appraisal of Quality Improvement Publications in the Urological Literature** *UROLOGY PRACTICE*
  Greenberg, D. R., Sohlberg, E. M., Shkolyar, E., Shah, J. B.
  2020; 7 (5): 413–17
- **Critical Appraisal of Quality Improvement Publications in the Urological Literature.** *Urology practice*
  Greenberg, D. R., Sohlberg, E. M., Shkolyar, E., Shah, J. B.
  2020; 7 (5): 413-418
- **Development of robust artificial neural networks for prediction of 5-year survival in bladder cancer.** *Urologic oncology*
  Bhambhvani, H. P., Zamora, A., Shkolyar, E., Prado, K., Greenberg, D. R., Kasman, A. M., Liao, J., Shah, S., Srinivas, S., Skinner, E. C., Shah, J. B.
  2020
- **SLIPS-LAB-A bioinspired bioanalysis system for metabolic evaluation of urinary stone disease.** *Science advances*
  Li, H., Shkolyar, E., Wang, J., Conti, S., Pao, A. C., Liao, J. C., Wong, T. S., Wong, P. K.
  2020; 6 (21)

- **Editorial Comment.** *The Journal of urology*
  Shkolyar, E., Mach, K. E., Liao, J. C.
  2020: 101097JU000000000000078601

- **REAL-TIME AUGMENTED BLADDER TUMOR DETECTION WITH DEEP LEARNING**
  Chang, T., Shkolyar, E., Jia, X., Lee, T., Mach, K., Conti, S., Xing, L., Liao, J.
  LIPPINCOTT WILLIAMS & WILKINS.2020: E1110

- **SLIPS-LAB-A bioinspired bioanalysis system for metabolic evaluation of urinary stone disease.** *Science advances*
  Li, H. n., Shkolyar, E. n., Wang, J. n., Conti, S. n., Pao, A. C., Liao, J. C., Wong, T. S., Wong, P. K.
  2020; 6 (21): eaba8535

- **Ultra-low-dose CT: An Effective Follow-up Imaging Modality for Ureterolithiasis.** *Journal of endourology*
  Cheng, R. Z., Shkolyar, E., Chang, T. C., Spradling, K., Ganesan, C., Song, S., Pao, A. C., Leppert, J. T., Elliott, C. S., To'o, K., Conti, S. L.
  2019

- **Risk of Melanoma With Phosphodiesterase Type 5 Inhibitor Use Among Patients With Erectile Dysfunction, Pulmonary Hypertension, and Lower Urinary Tract Symptoms** *JOURNAL OF SEXUAL MEDICINE*
  Shkolyar, E., Li, S., Tang, J., Eisenberg, M. L.
  2018; 15 (7): 982–89

- **Risk of Melanoma With Phosphodiesterase Type 5 Inhibitor Use Among Patients With Erectile Dysfunction, Pulmonary Hypertension, and Lower Urinary Tract Symptoms.** *The journal of sexual medicine*
  Shkolyar, E., Li, S., Tang, J., Eisenberg, M. L.
  2018

- **Teaching mid-urethral sling surgery to residents: Impact on operative time and postoperative outcomes** *NEUROUROLOGY AND URODYNAMICS*
  Sharif-Afshar, A., Wood, L. N., Bresee, C., Souders, C. P., Gross, B. S., Shkolyar, E., Anger, J. T., Eilber, K. S.
  2017; 36 (8): 2148-2152

- **Nontraumatic Clostridium septicum Myonecrosis in Adults Case Report and a 15-Year Systematic Literature Review** *INFECTIOUS DISEASES IN CLINICAL PRACTICE*
  Forrester, J. D., Shkolyar, E., Gregg, D., Spain, D. A., Weiser, T. G.
  2016; 24 (6): 318–23

- **Impact of post prostate biopsy hemorrhage on multiparametric magnetic resonance imaging** *Canadian Journal of Urology*
  Sharif-Afshar, A., Fen, T., Koopman, S., Christopher Nguyen, Li, Q., Shkolyar, E., Saouaf, R., Kim, H. L.
  2015; 22 (2): 7698-7702

- **In Vitro Evaluation of an External Compression Device for Fontan Mechanical Assistance** *ARTIFICIAL ORGANS*
  Valdovinos, J., Shkolyar, E., Carman, G. P., Levi, D. S.
  2014; 38 (3): 199-207