Stanford

Stylianos Serghiou

Assistant Professor of Epidemiology and Population Health and of Medicine (Computational Medicine)

Bio

BIO

Stylianos (Stelios) Serghiou joined the PhD program in Epidemiology and Clinical Research in 2016. After spending two years as a second lieutenant for the National Guard of Cyprus, he attended the University of Edinburgh, where he obtained a BSc with Honors in Neuroscience in 2012 and received his medical degree (MBChB) with Honors in 2015. He was then awarded a post and worked for a year as an Academic Foundation Doctor for NHS Lothian and as an Honorary Clinical Fellow of the University of Edinburgh. Over his time in Edinburgh, he obtained multiple awards, including scholarships by the Royal College of Physicians of UK and Ireland, Royal College of Ophthalmologists and being an AMGEN scholar. He is moving to Stanford to work on his interests in improving the quality of medical research and exploring the application of novel computational techniques to analyzing big data in medicine. Alongside medicine, he is especially interested in music and had served as the leader of the National Youth Orchestra of Cyprus and a first violin of the University of Edinburgh Symphony Orchestra.

ACADEMIC APPOINTMENTS

- Assistant Professor, Epidemiology and Population Health
- Assistant Professor, Division of Computational Medicine

HONORS AND AWARDS

- Stanford Data Science Scholar, Stanford University (2020)
- David Sackett Young Investigator of the Year, Journal of Clinical Epidemiology (2017)
- Honorary Clinical Fellow, University of Edinburgh (2016)
- Patric-Trevor Award, Royal College of Ophthalmology (2014)
- Intercalated BSc Scholarship, Royal College of Physicians of UK and Ireland (2011)
- AMGEN Scholar, University of Cambridge, AMGEN (2009)

PROFESSIONAL EDUCATION

- Academic Foundation Doctor, NHS Lothian and University of Edinburgh , Medicine (2016)
- MBChB (Honors), University of Edinburgh , Medicine (2015)
- BSc (Hons) Neuroscience, University of Edinburgh , Neuroscience (2012)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research attempts to improve health and healthcare by bridging the gap between methods available in medicine and epidemiology with those in computer science, statistics and econometrics. Current projects aim to evaluate scientific research, promote rigorous scientific practice and advance evidence-based medicine using methods of data mining and machine learning. Such projects include understanding allocation of social attention across fields of science, evaluating the predictive ability of prenatal screening for post-natal outcomes and building a deep learning system to predict the probability of heart disease. I am also actively working towards establishing a network of scientists interested in working together towards advancing rigorous scientific research and evidence-based practice.

Publications

PUBLICATIONS

- **Random-Effects Meta-analysis: Summarizing Evidence With Caveats.** *JAMA*
  Serghiou, S., Goodman, S. N.
  2018
- **New clinical trial designs in the era of precision medicine: An overview of definitions, strengths, weaknesses, and current use in oncology.** *Cancer treatment reviews*
  Janiaud, P., Serghiou, S., Ioannidis, J. P.
  2018; 73: 20–30
- **THE INTERLEUKIN-6 RECEPTOR AS A DRUG TARGET IN INFLAMMATORY BOWEL DISEASE; A MENDELIAN RANDOMISATION STUDY**
  Parisinos, C., Serghiou, S., Patel, R., Hemingway, H., Hingorani, A.
  BMJ PUBLISHING GROUP.2018: A55
- **Altmetric Scores, Citations, and Publication of Studies Posted as Preprints** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*
  Serghiou, S., Ioannidis, J. P. A.
  2018; 319 (4): 402–3
- **Variation in Interleukin 6 Receptor Gene Associates with Risk of Crohn's Disease and Ulcerative Colitis.** *Gastroenterology*
  Parisinos, C. A., Serghiou, S. n., Katsoulis, M. n., George, M. J., Patel, R. S., Hemingway, H. n., Hingorani, A. D.
  2018
- **Curing World Blindness: The Lifeline Express Train**
  Molera, R., Wren, S. M., Serghiou, S., Lee, S., Shields, R. A., Cho, H.
  ELSEVIER SCIENCE INC.2017: S100
- **Long noncoding RNAs as novel predictors of survival in human cancer: a systematic review and meta-analysis** *MOLECULAR CANCER*
  Serghiou, S., Kyriakopoulou, A., Ioannidis, J. P.
  2016; 15
- **Comparative assessment of phototherapy protocols for reduction of oxidative stress in partially transected spinal cord slices undergoing secondary degeneration.** *BMC neuroscience*
  Ashworth, B. E., Stephens, E., Bartlett, C. A., Serghiou, S., Giacci, M. K., Williams, A., Hart, N. S., Fitzgerald, M.
  2016; 17 (1): 21
- **Field-wide meta-analyses of observational associations can map selective availability of risk factors and the impact of model specifications** *JOURNAL OF CLINICAL EPIDEMIOLOGY*
  Serghiou, S., Patel, C. J., Tan, Y. Y., Koay, P., Ioannidis, J. P.
  2016; 71: 58-67
- **Risk of Bias in Reports of In Vivo Research: A Focus for Improvement** *PLOS BIOLOGY*
  Macleod, M. R., McLean, A. L., Kyriakopoulou, A., Serghiou, S., de Wilde, A., Sherratt, N., Hirst, T., Hemblade, R., Bahor, Z., Nunes-Fonseca, C., Potluru, A., Thomson, A., Baginskitae, et al

2015; 13 (10)