Stanford

Vasiliki (Vicky) Bikia

Postdoctoral Scholar, Biomedical Data Sciences

Bio

BIO

Dr. Vasiliki Bikia is a Postdoctoral Researcher at Stanford University, jointly affiliated with the Institute for Human-Centered Artificial Intelligence (HAI) and the Department of Biomedical Data Science, where she works under the mentorship of Prof. Roxana Daneshjou. She holds an Advanced Diploma in Electrical and Computer Engineering from the Aristotle University of Thessaloniki (AUTH), Greece (2017), and a Ph.D. in Biomedical Engineering from the Swiss Federal Institute of Technology of Lausanne (EPFL), Switzerland (2021). Her doctoral work focused on addressing the clinical need for non-invasive cardiovascular monitoring by combining machine learning with physics-based numerical modeling.

Dr. Bikia's research centers on the development of large multimodal models to improve patient outcome prediction. She is also passionate about building patient-facing chatbots that help individuals better understand complex medical information, ultimately aiming to enhance communication and empower patients in their care journey. Moreover, she has contributed to the Stanford Spezi framework, designing and prototyping the Spezi Data Pipeline tool for enhanced digital health data accessibility and analysis workflows.

INSTITUTE AFFILIATIONS

- Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)

HONORS AND AWARDS

- MIT Rising Stars in EECS, Massachusetts Institute of Technology, Cambridge, US (2024)
- Best PhD Thesis (Nominee), Ecole Polytechnique Fédérale de Lausanne, VD, Switzerland (2021)
- Aristotle University of Thessaloniki Excellency Award, Aristotle University of Thessaloniki, Thessaloniki, Greece (2016)
- Seeds Innovation and Technology Competition, National Bank of Greece, Athens, Greece (2016)
- Microsoft ImagineCup Innovation, World Citizenship and Ability Award, Microsoft, MSR, WA, US (2015)

Research & Scholarship

LAB AFFILIATIONS

- Roxana Daneshjou (9/3/2024)

Publications

PUBLICATIONS

- **Spezi Data Pipeline: Streamlining FHIR-based interoperable digital dealth data workflows.** *NPJ digital medicine*
  Bikia, V., Schmiedmayer, P., Zahedivash, A., Aalami, L., Rao, A., Ravi, V., Turk, M., Ceresnak, S. R., Aalami, O.

2026

- **Artificial Intelligence in Dermatology Research and Drug Discovery.** *Dermatologic clinics*
  Utti, V., Bikias, T., Agarwal, A. A., Bikia, V., Zhou, A. Y., Shah, M. M., Daneshjou, R.
  2025; 43 (4): 573-583

- **Integrating Artificial Intelligence in Dermatological Cancer Screening and Diagnosis: Efficacy, Challenges, and Future Directions.** *Annual review of biomedical data science*
  Utti, V., Bikia, V., Agarwal, A. A., Daneshjou, R.
  2025

- **Developing technologies to assess vascular ageing: a roadmap from VascAgeNet.** *Physiological measurement*
  Zanelli, S., Agnoletti, D., Alastruey, J., Allen, J., Bianchini, E., Bikia, V., Boutouyrie, P., Bruno, R. M., Climie, R., Djeldjli, D., Gkaliagkousi, E., Giudici, A., Gopcevic, et al
  2024; 45 (12)

- **Impact of arterial system alterations due to amputation on arterial stiffness and hemodynamics: a numerical study.** *Scientific reports*
  Obeid, H., Bikia, V., Segers, P., Pare, M., Boutouyrie, P., Stergiopulos, N., Agharazii, M.
  2024; 14 (1): 24852

- **Utility of smart watches for identifying arrhythmias in children.** *Communications medicine*
  Zahedivash, A., Chubb, H., Giacone, H., Boramanand, N. K., Dubin, A. M., Trela, A., Lencioni, E., Motonaga, K. S., Goodyer, W., Navarre, B., Ravi, V., Schmiedmayer, P., Bikia, et al
  2023; 3 (1): 167

- **Arterial pulse wave modeling and analysis for vascular-age studies: a review from VascAgeNet** *AMERICAN JOURNAL OF PHYSIOLOGY-HEART AND CIRCULATORY PHYSIOLOGY*
  Alastruey, J., Charlton, P. H., Bikia, V., Paliakaite, B., Hametner, B., Bruno, R., Mulder, M. P., Vennin, S., Piskin, S., Khir, A. W., Guala, A., Mayer, C. C., Mynard, et al
  2023; 325 (1): H1-H29