Stanford

Meysam Dadgar

Postdoctoral Scholar, Molecular Imaging Program at Stanford

Bio

BIO

Meysam Dadgar is a Postdoctoral Research Fellow at the Molecular Imaging Program at Stanford University, School of Medicine. He obtained his Ph.D. in Biophysics from Jagiellonian University in Kraków, Poland, as part of the J-PET collaboration, and previously held a Postdoctoral Fellowship at Ghent University, Belgium.

Dr. Dadgar's research focuses on the development and optimization of next-generation positron emission tomography (PET) systems for cancer detection and precision medicine. His expertise spans PET instrumentation, Monte Carlo and GATE simulations, advanced image reconstruction, and AI-based image enhancement. He has made significant contributions to the design and evaluation of novel PET geometries, including dual-panel and total-body PET, as well as positronium imaging approaches that extend beyond conventional PET capabilities.

In addition to his PET-focused research, Dr. Dadgar gained unique experience at CERN, where he worked on advanced detector development, including trigger electronics, PET coincidence measurements, and composite material production under controlled conditions. These experiences provided him with a strong foundation in detector design, fabrication, and calibration that complements his biomedical imaging research.

He has authored more than 20 peer-reviewed publications, including papers in Science Advances, Nature Communications, IEEE Transactions on Radiation and Plasma Medical Sciences, and EJNMMI Physics. He has been recognized with multiple international fellowships and awards, including IEEE NSS/MIC Trainee Grants and national research grants in Europe.

At Stanford, Dr. Dadgar's work integrates state-of-the-art medical imaging technologies, particle physics methods, and AI-driven modeling to improve sensitivity, resolution, and diagnostic accuracy in PET, with the ultimate goal of advancing early cancer detection and patient care.

HONORS AND AWARDS

- Principal Investigator, PRELUDIUM 19 Grant (Ranked 3rd overall, first foreign PI in Poland), National Science Centre, Poland (2021)
- TEAM Project Grant – Positronium Imaging, National Science Centre, Poland (2019-2022)
- SCI-MAT Grant, Sensitivity study of 24-module J-PET prototype (2020)
- DSC Grant, research project with XCAT anthropomorphic phantoms, Jagiellonian University in Krakow (2021)
- IEEE NSS/MIC Trainee Grant, IEEE Nuclear Science Symposium & Medical Imaging Conference (2023)
- FWO T-Grant, Research Foundation - Flanders (2023)
- Fellowship – Synchrotron-based X-Ray Absorption for medical applications School, Institute for Research and Fundamental Science, Tehran, Iran (2016)
- Talented Student Award, Ministry of Science, Research and Technology, Iran (2013)
- Best Ph.D. Student in Biophysics, Head of Biophysics Group, Jagiellonian University (2021)
- Best Ph.D. Student in Biophysics, Rector of Jagiellonian University (2021 & 2022)

- Candidate for Best International Ph.D. Student in Poland, Jagiellonian University (2021)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Society of Nuclear Medicine and Molecular Imaging (2022 - present)

STANFORD ADVISORS

- Craig Levin, Postdoctoral Faculty Sponsor

LINKS

- LinkedIn: https://www.linkedin.com/in/meysam-dadgar-48171499/
- Publications: https://scholar.google.com/citations?user=BDWSzugAAAAJ&hl=en

Teaching

COURSES

2025-26

- Physics and Engineering of Radionuclide-based Medical Imaging: BIOE 221, BMP 221, RAD 221 (Win)