

Research Interests/Personal Statement

My work is focused on patient dose estimation from medical radiation exposure and detector development for diagnostic radiology and radiotherapy imaging. I am actively involved in application and development of computerized methods for personalized dose estimation and detector design optimization. I have introduced the multi-layer spectral Mega-Voltage imaging technique in the field of radiation therapy and own two patents on Monte Carlo method optimization and detector design.

Current Research Positions

Research Associate	University of Crete, Faculty of Medicine, Department of Medical Physics, Heraklion, Crete, Greece	June 2018 To date
External Research Consultant	Brigham and Women's Hospital (BWH), Radiation Oncology, HMS Affiliated/Training Hospital, Boston, USA	March 2020 To date

Recent Peer-Reviewed Publications

Myronakis M., Huber P, Lehmann M, Fueglistaller R, Jacobson M, Hu YH, Baturin P, Wang A, Shi M, Harris T, Morf D, Berbeco R, “Low-dose megavoltage cone-beam computed tomography using a novel multi-layer imager (MLI)”, *Med. Phys.* 2020;47(4):1827-1835, doi:10.1002/mp.14017

Shi M, **Myronakis M.**, Jacobson M, Ferguson D, Williams C, Lehmann M, Baturin P, Huber P, Fueglistaller R, Lozano IV, Harris T, Morf D, Berbeco RI. “GPU-accelerated Monte Carlo simulation of MV-CBCT.” *Phys. Med. Biol.* 2020;65(23):235042. doi: 10.1088/1361-6560/abaeb

Perisinakis K., Ntoufas N., Velivassaki M., Tzedakis A., **Myronakis M.**, Hatzidakis A. and Damilakis J. “Effect of scan projection radiography coverage on tube current modulation in pediatric and adult chest CT” *Z. Med. Phys.* 2020;30:259–70

Education

Ph.D.	The Institute of Cancer Research, University of London, London, UK	Oct. 2009 - Sept. 2013
M.Sc.	Medical Physics with Distinction, University of Surrey, Guildford, UK	Oct. 2004 - Sept. 2005
B.Sc.	Physics, Aristotle University of Thessaloniki, Greece	Oct. 1998 - Jun. 2004

Awards

- **AAPM Annual Meeting 2017 Best in Physics:** “Optimizing a Layered Detector Design for Megavoltage Spectral Imaging”, Denver, Colorado
- Detector development project (2016-2020) co-funded by Varian Medical Systems
- Postdoctoral project funded by EPSRC Platform Grant & CRUK
- Ph.D. Scholarship by The Institute of Cancer Research

Affiliations & Other experience

- American Association of Physicists in Medicine (AAPM) Member
- Ad hoc reviewer for AAPM Medical Physics, European Journal of Nuclear Medicine and Molecular Imaging (EJNMMI), BMC Radiation Oncology and IEEE Transactions on Medical Imaging (TMI)