

Curriculum vitae

PERSONAL INFORMATION

First name: **Eleftherios**

Last name: **Tzanis**

Date of birth: **07. 05. 1992**

Residence: **Heraklion, Crete, Greece**

E-mail: **etzanis@uoc.gr**

Phone number: **+30 6983051945, +30 2811 119388**



EDUCATION

06. 2017 – 09. 2020

PhD in Medical Physics, Department of Medical Physics, Medical School, University of Crete

Thesis Title: ‘Patient and occupational radiation exposure during transarterial chemoembolization and endovascular aneurysm repair procedures’

10. 2015 – 05. 2017

Master’s degree in Medical Physics. Medical School, National and Kapodistrian University of Athens

09. 2010 – 03. 2015

Physics degree. Physics department, University of Crete.

RESEARCH / PROFESSIONAL EXPERIENCE

11. 2020 –

Postdoctoral researcher, Department of Medical Physics, Medical School, University of Crete

10. 2020 –

Laboratory teaching assistant. Department of Medical Physics, Medical School, University of Crete

06. 2018 – 01. 2019

Research project: «European Study on Clinical Diagnostic Reference Levels for X-ray Medical Imaging (EUCLID)»

CONGRESSES

- EUROPEAN CONGRESS OF RADIOLOGY ECR (2019).
 - Eleftherios Tzani, John Damilakis, Dimitrios Tsetis. Evaluation of radioprotective drape to reduce radiation exposure of interventional radiologists. European Society of Radiology's online database for electronic scientific exhibits. <http://dx.doi.org/10.26044/ecr2019/C-0254>.
 - Eleftherios Tzani, Elias Kehagias, Dimitrios Tsetis, John Damilakis. A preliminary study on diagnostic reference levels for endovascular treatment of the iliac arteries. European Society of Radiology's online database for electronic scientific exhibits. <http://dx.doi.org/10.26044/esi2019/ESI-0008>. 27. 02. 2019 – 03. 03. 2019.
- EUROPEAN CONGRESS OF RADIOLOGY ECR (2018).
 - Eleftherios Tzani, John Damilakis, Dimitrios Tsetis. Radioprotective Caps: Do they decrease the dose to the brain of interventional radiologists? European Society of Radiology's online database for electronic scientific exhibits. <http://dx.doi.org/10.1594/ecr2018/C-0301>. 28. 02. 2018 – 04. 03. 2018.
- 1st EUROPEAN CONGRESS OF MEDICAL PHYSICS (ECMP 2016). 01. 09. 2016 – 04. 09. 2016, Athens, Greece.

PUBLICATIONS

- Eleftherios Tzani, John Damilakis (2022). A novel methodology to train and deploy a machine learning model for personalized dose assessment in head CT. Eur Radiol Online ahead of print. <https://doi.org/10.1007/s00330-022-08756-w>
- Eleftherios Tzani, Michael Mazonakis, John Damilakis (2022). A software tool for organ-specific second cancer risk assessment from exposure to therapeutic doses. Rep Pract Oncol Radiother 27(1):170-175. <https://doi.org/10.5603/RPOR.a2022.0014>
- Eleftherios Tzani, Maria Raissaki, Avgoullas Konstantinos, John Damilakis, Kostas Perisinakis (2021). Radiation exposure to infants undergoing voiding cystourethrography: The importance of the digital imaging technology. Physica Medica 85:123-128. <https://doi.org/10.1016/j.ejmp.2021.05.006>
- Eleftherios Tzani, Kostas Perisinakis, Christos V. Ioannou, Dimitrios Tsetis, John Damilakis (2021). A novel personalized dosimetry method for endovascular aneurysm repair (EVAR) procedures. Eur Radiol 31:6547–6554. <https://doi.org/10.1007/s00330-021-07789-x>

- Eleftherios Tzanis, Christos V. Ioannou, Dimitrios Tsetis, Stella Lioudaki, Nikolas Matthaiou, John Damilakis (2020). Complexity-based local diagnostic reference levels (DRLs) for standard endovascular aneurysm repair (EVAR) procedures. *Physica Medica* 73:89-94. <https://doi.org/10.1016/j.ejmp.2020.04.015>.
- Eleftherios Tzanis, Dimitrios Tsetis, Elias Kehagias, Christos V. Ioannou, John Damilakis (2019). Occupational exposure during endovascular aneurysm repair (EVAR) and aortoiliac percutaneous transluminal angioplasty (PTA) procedures. *Radiol med* 124:539–545. <https://doi.org/10.1007/s11547-018-00985-8>

EDUCATIONAL MATERIAL

- Tutorial videos on quality control (QC) for CT:
<https://humanhealth.iaea.org/HHW/MedicalPhysics/e-learning/ctqualitycontrol/index.html>

AWARDS / DISTINCTIONS

- Scholarship «MARIA MICHAEL MANASSAKI».
- «Invest in the Youth» 2018 & 2019 - European Society of Radiology (ESR)

PROGRAMMING LANGUAGES / SOFTWARE PACKAGES

- Python 3
- Tkinter python module for graphical user interface (GUI) development
- Keras application programming interface (API)
- Tensorflow, Pytorch
- ImpactMC (CT Imaging© GMBH)
- PCXMC (version 2.0, STUK)

RESEARCH INTERESTS

- Patient-specific Monte Carlo dosimetry / Evaluation of radiological risk in medical imaging examinations.

- Artificial intelligence and deep learning in patient-specific dosimetry and medical image processing.
- Diagnostic reference levels.

LANGUAGES

- Greek – Native
- English – Advanced