

Efstathios P. Efstathopoulos

Professor of Medical and Radiation Physics, School of Medicine, National and Kapodistrian University of Athens (NKUA). He is working in the 2nd Department of Radiology at "Attikon" University Hospital.

He was born in Piraeus, Greece in 1965. He studied in standard primary school of Ralleios Academy and in Ionnideios standard high school in Piraeus. He studied Physics (4-years studies) in University of Patras acquiring his diploma in 1988 and Medical Physics (M.Sc. degree) in University of Surrey in 1989. He was awarded his Ph.D. in Medical Physics in 2002 from University of Patras.

He elected Professor of Medical Radiation Physics in Medical School of National and Kapodistrian of Athens in 2016. He is head of Radiation Physics Unit, 2nd Department of Radiology. He has 27 years working experience as Medical Physicist. 1992-1993 he was Radiation Protection Supervisor at Medical Diagnostic Center of Piraeus "Hippocrates". 1993 - 1998 he was Radiation Protection Supervisor at Onassis Cardiac Surgery Center (http://www.onasseio.gr/english/default.asp). 1998 - today he is Radiation Protection Supervisor at 2nd Department of Radiology, Medical School, National and Kapodistrian University of Athens.

Teaching activities

He is teaching undergraduate students at Medical School (4th year, lectures into the course of Radiology), and Nurse School (3rd year, the course of Radiation Protection). He is also teaching at four Postgraduate Programs (Medical Physics, Interventional Radiology, Endovascular techniques in the treatment of vascular diseases), in Medical School, NKUA and in Medical Physics Postgraduate Program, University of Patras.

He is Scientific Coordinator of an e-learning program of National and Kapodistrian University offered Greek language, "Introduction Nanomedicine" in (https://elearn.elke.uoa.gr/show_programs.php?catID=all&prID=436). He Scientific Coordinator of three e-learning programs of National and Kapodistrian University of Athens offered in English language; "Basic Principles of nanotechnology applications in Health Science» (http://elearninguoa.org/course/health-nanotechnology-nanomedicine/basicprinciples-nanotechnology-applications-health), «Nanotechnology and Nanomedicine. targeted drug delivery and advanced nanotherapeutics» (http://elearninguoa.org/course/health-nanotechnology-

nanomedicine/nanotechnology-and-nanomedicine) and «Nanomedicine: Applications in Diagnostics and Surgery» http://elearninguoa.org/course/health-nanotechnology-nanomedicine/nanomedicine-applications-diagnostics-and-surgery

In 2018 he organized (together with other colleagues from the Medical School and the Pharmaceutical Department of the National and Kapodistrian University of Athens) a new

Interdisciplinary Postgraduate Program in "Nanomedicine". This program is the only one so far in Greece in the subject.

Clinical work

He is delivering clinical work into the Hospital being Radiation Protection Supervisor for all Radiological units and units of Radiotherapy and Nuclear Medicine.

Research activities

His research focuses on patient and personnel x-ray dosimetry and quantification of the risk, imaging of the heart and blood vessels and applications of nanotechnology in health sciences.

He has published 110 scientific papers in international scientific journals, which have been received about 2200 citations from international literature (google scholar profile https://scholar.google.gr/citations?user=xt9Uy7gAAAAJ&hl=en). He is author of three chapters in scientific books. He has presented more than 100 scientific congress announcements and has given more than 50 invited scientific congress lectures.

Most important Publications

(https://scholar.google.gr/citations?user=xt9Uy7gAAAAJ&hl=en)

- 1. Betsou S, Efstathopoulos EP, Katritsis D, et al, Patient radiation doses during cardiac catheterisation procedures. Br J Radiol, 71(1998), 634-639 (184)
- 2. EP Efstathopoulos, L Costaridou, O Kocsis, and G Panayiotakis. A protocol based evaluation of medical image digitizers. Br J Radiol, 74(2001), 841-6 (38)
- 3. Efstathopoulos EP, Karvouni E, Kottou S, et al. Patient dosimetry during coronary interventions: a comprehensive analysis. Am Heart J. 2004 Mar; 147(3):468-75. (55)
- 4. EP Efstathopoulos, DG Katritsis, S Kottou et al, Patient and Staff Radiation Dosimetry During Cardiac Electrophysiology Studies and Catheter Ablation Procedures: a Comprehensive Analysis. Europace. 2006 Jun;8(6):443-8. (73)
- 5. N. Fitoussi, EP Efstathopoulos, H Delis, et al. Patient and staff dosimetry in vertebroplasty. Spine. 2006 Nov 1;31(23):E884-9. (69)
- 6. Katritsis D, Kaiktsis L, Chaniotis A, et al. Wall Shear Stress: Theoretical Considerations and Methods of Measurement. Prog Cardiovasc Dis. 2007 March April;49(5):307-329. (154)
- 7. Efstathopoulos EP, Patatoukas G, Pantos I, et al. Wall shear stress calculation in ascending aorta using phase contrast magnetic resonance imaging. Investigating effective ways to calculate it in clinical practice. Phys Med. 2008 Dec;24(4):175-81. Epub 2008 Mar 4. (15)
- 8. E P Efstathopoulos, N L Kelekis, I Pantos, et al. Reduction of estimated radiation dose and associated patient risk with prospective ECG-gated 256-slice CT coronary angiography. Phys. Med. Biol. 54 (2009) 5209-5222 (72)
- 9. P Pericleous, M Gazouli, ... and EP Efstathopoulos. Quantum dots hold promise for early cancer imaging and detection. Int J Cancer. 2012 Aug 1;131(3):519-28 (30)69. (64)
- 10. Lyberopoulou A, Aravantinos G, Efstathopoulos EP, Nikiteas N, Bouziotis P, Isaakidou A, Papalois A, Marinos E, Gazouli M. Mutational analysis of circulating tumor cells from colorectal cancer patients and correlation with primary tumor tissue. 2015 PLoS One; 10 (4): Article

number e0123902 (25)

Being at the head of "Cooperation of University Professors" ballot, he was elected President of the Hellenic Federation of University Professors the years 2013-2014. He is now a member of 11-members' Executive Committee of the Federation.

He is a founding member and President of the Hellenic Society of Nanotechnology in Health Sciences (HSnanoHS, www.hsnanohs.eu). He is member in the following Scientific Societies: Cardiovascular and Interventional Radiological Society of Europe (CIRSE, www.cirse.org), Hellenic Association of Physicists (eef.gr), Hellenic Association of Medical Physicists (www.efie.gr).