Panagiotis SKALTSOUNIS, Postgraduate Student

Date of Birth: 24/11/1989

Education

Primary school / High school and Lyceum: Ecole Greco-Suisse / Lycee Francohellenique
Graduate studies: Mechanical Engineering, National Technical University of Athens (NTUA), Greece –
– M.Eng. (2016)
Postgraduate studies: "Microsystems and Nanodevices", School of Applied Mathematical and Physical Sciences, NTUA – M.Sc. (2020)

Academic / Research Experience

***2015-2016** (1 year)* – Participation in Research Projects in Perinatal Pathology – *"Morphological, histopathological and hemodynamic study of the human fetoplacental vasculature."*, Dept. Pathology, Pediatric and Perinatal Pathology Unit, National Kapodistrian University of Athens, Greece. *Topic: Computational Fluid Dynamics (CFD) of hemodynamic disorders in the umbilical vessels of the human fetus*

***2017** (3 months)* – Erasmus Plus, Department of Fluid Mechanics, Faculty of Engineering, Vitoria-Gasteiz, University of the Basque Country, Spain. *Topic: Computational Fluid Dynamics in alternative spray treatment methods in Respiratory Distress Syndrome (RDS) of premature neonates*

***2018** (3 months)* – Erasmus Plus, Department of Electronic Engineering, Higher Technical School of Engineering, University of Seville, Spain: *Topic:* Construction of a novel Microfluidic-based Oscillatory PCR microdevice

2018-to date – Working on the design, simulation, and manufacturing of a novel PCR microdevice on Printed Circuit Board (PCB), at the Institute of Nanoscience & Nanotechnology, National Center of Science and Research – IMEL-NCSR "Demokritos", Greece

Working Experience

2008-2010 – Research Assistant in Global Link. Co., Athens, Greece
2013-2016 – Teaching chess at the 9th Primary School of Chalandri, Athens
2021-to date – Teaching chess at the Platon Primary School Glyka Nera, Athens

Skills

- Computer and basic programing skills
- Knowledge of Printed Circuit Board (PCB) design software: KiCad and L-edit
- Knowledge of Computer-aided Design (CAD) application for 3D-mechanical design: 3-D Autodesk Inventor Professional 2019
- Knowledge of Finite Element Method (FEM) software: Comsol Multiphysics, Ansys Fluent, and Star CCM+
- Experience with Surface reaction processes (Plasma/Teflon etching and coating)
- Experience with Photolithography methods and CNC milling
- Experience with laboratory work in a Cleanroom
- Experience with motor programming
- Experience with magnetic fields and ferrofluids
- Basic experience with cell/bacterial - culturing methods
- Basic experience with light microscopy and Scanning Electron Microscopy
- Basic knowledge of Image analysis program: Image Pro Plus

Publications

- Skaltsounis P. 3-D computational simulation study of the hemodynamic flow in the human umbilical arteries. Dissertation for M.Eng, NTUA, DSpace-NTUA, 2016
- Skaltsounis P, Kaprou G, Tserepi A, Kokkoris G. Low-cost, mass-manufacturable, DNA amplification microdevices for diagnostics. Conference Proceedings, 45th International Conference on Micro & Nano Engineering, Rhodes, Greece, September 23-26, 2019
- Velonis S, Skaltsounis P and Konstantinidou AE. Skeletal Ciliopathies: The Fetal Phenotype and Genetic Correlates. SM J Clin Med 2019; 5(1):1039s

Languages

1. Greek (native) **2.** English: ECCE (B2) **3.** French: DELF A5, A6 (B2) **4.** Spanish: DELE nivel Avanzado (B2)