

BIOGRAPHICAL SKETCH

NAME: Antonia Efstathiou

POSITION TITLE: Post-doctoral Research (in contract)

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
National and Kapodistrian University of Athens (NKUA), Athens, Greece	B.Sc.	06/2007	Chemistry
NKUA, Athens, Greece	M.Sc.	06/2009	Biochemistry
Hellenic Open University, Patra, Greece	M.Sc.	06/2015	Business Administration (MBA)
NKUA, Athens, Greece	Ph.D.	10/2014	Molecular Biology & Biochemistry
251 Hellenic military airforce's General hospital	Trainee	06-08/2003	Clinical Biochemistry
LODOPP Cost action BM0802, Alcalá de Henares, Madrid, Spain	Trainee	09/2010	Bioinformatics and flow cytometry
Fiocruz Institute, Salvador, Brazil	Trainee	02-04/2012, 04-06/2013	Electron Microscopy, <i>T. cruzi</i> culture training
Institut Pasteur of Shanghai, China	Trainee	05/2018	Infectious diseases pathogenesis in Asia/Pacific
COMULIS/COST training school organized by BIOEMTECH Laboratories	Trainee	10/2021	Preclinical Models Imaging
Annual Stavros Niarchos Foundation Bioethics Academy Intensive Course	Trainee	11/2021	Bioethics

A. Personal Statement

Following graduation from NKUA university, I continued my studies in Biochemistry (M.Sc-2009) which focused on lipid metabolism and mechanism of phagocytosis in protozoan *Tetrahymena*. During my PhD studies in Biochemistry and Molecular Biology (2014), I chose to pursue my thesis work in molecular microbiology in Hellenic Pasteur Institute (HPI) where I focused in drug discovery and in elucidating signaling pathways in parasitic protozoans *Leishmania*, *Trypanosoma cruzi* and *T. brucei*, while in parallel, I was working on a project on the resistance to antiplatelet drugs in patients with cardiovascular disease (2012-2014). Furthermore, I obtained my MSc in Business Administration (MBA-2015) where my thesis centred on Managing Bio-Research programs in a research institute. During my first two post-doctoral researches, I focused shortly on signaling pathways of TGF β for development of new therapies for inspiratory diseases and on DNA damage repair pathways in Systemic Lupus Erythematosus patients. Thereafter, I was granted an IKY-SIEMENS excellence fellowship on parasitic studies (2015-2017). Finally, since 2018 my post-doctoral research in Dr Karagouni's group, focuses on immunomodulatory role of exosomes and the use of exosomes as vaccine candidates against visceral leishmaniasis. My research focuses on microbiology and more specifically on infectious diseases where a set of skills in the areas of cell and molecular biology, immunopathology, genetics, genomics and bioinformatics is needed. Presently, my research focuses on: a) vaccine development for neglected diseases using animal models, 2) *in vivo* drug screening for fighting leishmaniasis, 3) isolation and study of exosomes from biological fluids (serum/plasma) of dogs, humans and fish.

B. Positions and Honors**Positions and Employment****09.2008-06.2009:** Instructor in Biochemistry Course 2, NKUA, Dpt of Chemistry**05.2013- 10.2013:** Technician, HPI, Dpt of Microbiology**01.2014 - 11.2014, & 01.2012-04.2013:** Technician, HPI, Dpt of Microbiology**01.2015 - 07.2015:** Postdoctoral researcher, Biomedical Research Foundation of the Academy of Athens

01.2016 - 06.2016: Postdoctoral researcher, Dpt of Propaedeutic Internal Medicine and Joint Rheumatology, NKUA, Medical school

07.2016 - 09.2017: Postdoctoral researcher, Molecular Parasitology laboratory, HPI, Dpt of Microbiology

12.2017 - 07.2018: Postdoctoral researcher, Molecular Parasitology laboratory, HPI, Dpt of Microbiology

10.2018 – present: Postdoctoral researcher, Immunology of Infectious Diseases Laboratory, HPI, Dpt of Microbiology

2022-present: Lecturer in Molecular Biology course (theoretical and laboratory– 4th semester, 2022), and in Biotechnology course (8th semester, 2022), Dpt of Biomedical sciences, University of West Attica

Honors and Awards

a) Fellowship for participation: Institute Pasteur International Network Course «Infectious diseases pathogenesis in Asia/Pacific», Institute Pasteur of Shanghai 2018, b) Fellowship for participation: WorldLeish-6 Congress, Toledo 2017, c) Fellowship for participation: EMBO-FEBS course «The New Microbiology» Spetses 2016, d) IKY-SIEMENS excellence fellowship: post-doctoral study 2015-2017, e) 1st award for poster announcement: 5th Summer School of Immunology 2015, Greece, f) IKY-SIEMENS excellence fellowship: post-doctoral study 2014-2015, g) Fellowship for participation: Training school in bioinformatics and flow cytometry, LODOPP Cost action BM0802, 2010, Spain

Other Professional Activities – Memberships

- Member: Association of Greek Chemists (2007-date), BM0802 COST action- Life/Death of Protozoan Parasites (2010-2012), Hellenic Society for Biochemistry and Molecular Biology (2019-date), Hellenic Scientific Society of Unified Health (2020-date), Greek Lipid Forum (2013-date), Hellenic Society of Immunology (2020-date)

- Peer reviewer for international journals (8 journals) (Pathogens, Microorganisms, Parasitologia, Animals, Veterinary Sciences, Tropical Medicine and Infectious Disease, etc).

Organization of Scientific Meetings/Advanced Courses – Educational activities

- a) Chair of Organizing Committee: 7th Young Scientists' Forum of HSBMB, Athens, 2019 b) Member of Organizing Committee: StaPa Retreat, 09/2019, Instituto Pasteur Italia c) Member of Organizing Committee: Joint Retreat-StaPa-YouPI, 09/2018, Athens-HPI d) Member of Organizing Committee of the Young Pasteur Institute (You.P.I.), HPI-Athens e) Member of Organizing Committee: 2nd Meeting of Master's and Postdoctoral students in HPI-2016 f) Member of Organizing Committee: 1st Meeting of Master's and Postdoctoral students in HPI, 09/2015, Athens, g) Science communication actions: Kastellorizo Puzzle Festival (2021), Researchers Night (2020, 2019), Athens Science Festival (2019), Patras Science Festival (2019), 85th Thessaloniki International Affair-HPI participant (2021).

- Lectures on: a) basic and advanced immunology courses in MSc programme in «Aquaculture - Pathological problems of farmed aquatic organisms» (UTh, 2016, 2020), b) Biochemistry Course 2 (7th semester), NKUA, Dpt of Chemistry, Biochemistry sector, Athens, Greece (2008- 2009) and c) Molecular Biology course (theoretical and laboratory– 4th semester, 2022) and on Biotechnology (8th semester, 2022), Dpt of Biomedical sciences, University of West Attica.

C. Contribution to Science

13 scientific publications (11 original papers in refereed international journals, 2 reviews), distributed as follows: 6 publications in Q1, 6 publications in Q2, 1 publication in Q4. Citations: 148 (up to 9/2/2022). H-index: 7 (up to 9/2/2022). 4 publications of abstracts in scientific journals (3 publications in Q2). 24 oral or poster presentations in national and international conferences.

Complete list of publications: <https://www.webofscience.com/wos/woscc/summary/41bb1bd1-0d5e-46b9-b14d-1b7d4dd3ace3-228ff644/relevance/1>

D. Additional Information: Research support and/or Scholastic Performance

2015-2017 IKY-SIEMENS excellence fellowship for post-doctoral study on the molecules that play important role in parasitic protozoans *Leishmania* and *Trypanosoma*, Molecular parasitology Laboratory, Hellenic Pasteur Institute (Total grant funding: 21.000 €)