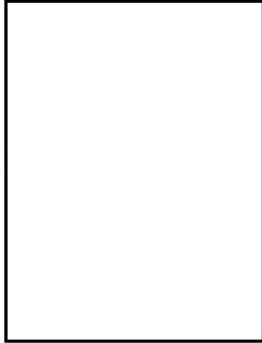


PERSONAL INFORMATION

Emmanouil Alexandros (Max) Fotakis





Sex Male | Date of birth | Nationality Greek, English

JOB/ POSITION APPLIED FOR

Cohort 2022 ECDC Fellowship Programme EPIET

WORK EXPERIENCE

07.2020 – to date

Postdoctoral Researcher

Institute of Molecular Biology and Biotechnology (IMBB)-FORTH, Crete, Greece

- Investigation of pathogen occurrences/infections, species composition and insecticide resistance status in sand fly populations from leishmaniasis endemic and other high transmission risk settings in the Mediterranean Basin
- IT tool development for supporting vector/VBD surveillance and control in the Mediterranean Basin (VectorMap-GR)
- Scientific project management of integrative entomological studies in Greece, Italy, Turkey, Kenya, Cameroon, Armenia, for generating evidence based public health actions
- Conceptualization of studies focusing on the insecticide resistance status/underlying mechanisms and monitoring of pathogens in mosquitoes and sand flies
- Networking with European and oversea partners/establishing scientific collaborations
- IT tool development for agricultural pest control in Greece
- Manuscript preparation for publication(s)
- Report and proposal writing

06.2018 – to date

Scientific manager

General Directorate of Public Health & Social Care of Region of Crete, Greece

- Scientific design of a regional (five year) mosquito surveillance and control program in Crete, Greece
- Co-evaluation of entomological and pathogen surveillance findings
- Communication between key stakeholders (i.e. public health directorates, vector control agencies, research/diagnostic laboratories)
- Data curation
- Data transformation into actionable information
- Report preparation

06.2021 - 07.2021

Visiting (field) scientist

International Centre of Insect Physiology and Ecology, Nairobi, Kenya

- Indoor and outdoor sand fly and mosquito field collections from leishmaniasis and malaria endemic regions (respectively)
- Pathogen detection, bioassay and insecticide resistance molecular analyses

06.2019 - 07.2019

Visiting (field) scientist

Ege University, Faculty of Science, Department of Biology, Turkey

- Sand fly collections from Sanliurfa (the largest and most important focus of CL in Turkey)
 - Morphological species identification
 - Sand fly rearing
 - IR molecular analyses
- 06.2015 - 08.2015 **Visiting (field) scientist**
Ifakara Health Institute, Tanzania
- Control of malaria vector mosquitoes by insecticide-treated combinations of window screens and eave baffles, in southern Tanzania
 - Managing experimental hut preparations
 - Involvement in experimental design
 - Managing 1st phase intervention trials
- 05.2014 - 10.2014 **Visiting (field) scientist**
USDA-ARS European Biological Control Laboratory, Thessaloniki, Greece
- Mosquito surveillance and control in the region of Central Macedonia
 - Systematic mosquito surveillance
 - Species identification
 - Insecticide resistance analyses

EDUCATION AND TRAINING

- 09.2020 – 07.2022 **MSc in Public Health candidate** Level 7
Department of Public Health Policy, School of Public Health, University of West Attica, Greece
- Principal subjects
- Biostatistics
 - Epidemiology
 - Health Promotion
 - Methodology of epidemiological surveillance
 - Environment and Health
 - Public Health and Public Health Policy(-ies)
 - Communication strategies
 - Strategic planning and economic evaluation of public health interventions
- Thesis:
Evaluation of VBD epidemiological surveillance efforts in Greece: A proposed framework for driving evidence based public health policies and actions
- 11.2016 - 07.2020 **PhD degree in Vector Borne Disease surveillance and control** Level 8
Department of Crop Science/ School of Plant Sciences/ Agricultural University of Athens, Greece
- PhD dissertation: Integrated management of Vector Borne Diseases in conditions of humanitarian crisis with emphasis on vector control: the Refugee example of Greece.
- Principal subjects covered/skills acquired:
- Identification and detection of insecticide resistance mechanisms in mosquitoes and sand flies (relevant publications)
 - Integrated vector surveillance in refugee camps, Greece (relevant publications)
 - Information technology tools for evidence based vector control: VectorMap-GR, a local scale operational management tool for entomological monitoring data (relevant publication)
 - Work/Conference Presentations
 - Research paper writing
 - Proposal and report writing
- 10.2013 - 01.2016 **MSc in Molecular Biology and Biomedicine** Level 7
Department of Biology, Department of Medicine/University of Crete, Greece
- Thesis: Analysis of population structure and insecticide resistance in mosquitoes of the genus *Culex*, *Anopheles* and *Aedes* from different environments in Greece.
- Principal subjects covered/skills acquired
- Extensive training in field techniques for mosquito handling, trapping and systematic surveillance
 - Extensive training in insecticide resistance bioassays
 - Extensive training in molecular analyses for pathogen detection and pathogen species identification, vector species identification, and analysis of insecticide resistance traits and underlying mechanisms

09.2009 - 07.2013

BSc in Biology

Level 6

Department of Biology, University of Crete, Greece,

Principal subjects

- Zoology
- Physiology
- Biomathematics
- Biochemistry
- Cellular biology
- Microbiology
- Ecology
- Molecular Biology
- Genetics
- Immunology
- Biotechnology
- Evolutionary biology

PERSONAL SKILLS

Mother tongue(s) Greek, English

Communication skills

- good communication skills gained through
 - my experience in different laboratory and field settings in a number of countries
 - my participation in projects and working-groups of multiple scientific backgrounds
 - presenting my scientific work in a number of conferences
 - holding/leading a series of group meetings

Organisational / managerial skills

- coordination, multi-tasking, leadership, decision-making, problem-solving, motivating, gained through
 - my heavy workload as a PhD student
 - supervision of master and PhD students
 - establishing scientific collaborations
 - planning and coordination of research studies in Europe and Africa
 - planning and coordination of a mosquito surveillance/control program in Greece

Computer skills

Command of:

- Microsoft Office tools
- Google Drive
- Presentations/slideshows
- Email
- Data handling
- Writing skills
- R and SPSS statistical software platforms

Driving licence Category B

ADDITIONAL INFORMATION

Publications (Selected entries)

- **Emmanouil A. Fotakis**, Manolis Orfanos, Thodoris Kouleris, Panagiotis Stamatelopoulou, Zisis Tsiropoulos, Anastasia Kampouraki, Ilias Kioulos, Konstantinos Mavridis, Alexandra Chaskopoulou, George Koliopoulos, John Vontas (2021). **VectorMap-GR: A local scale operational management tool for entomological monitoring, to support vector control activities in Greece and the Mediterranean Basin**. CRPVBD. In press
- Balaska S, **Fotakis EA**, Chaskopoulou A, Vontas J. **Chemical control and insecticide resistance status of sand fly vectors worldwide**. PLoS Negl Trop Dis. 2021 Aug 12;15(8):e0009586. doi: 10.1371/journal.pntd.0009586. PMID: 34383751; PMCID: PMC8360369.
- Balaska S, **Fotakis EA**, Kioulos I, Grigoraki L, Mpellou S, Chaskopoulou A, Vontas J. **Bioassay and molecular monitoring of insecticide resistance status in Aedes albopictus populations from Greece, to support evidence-based vector control**. Parasit Vectors. 2020 Jun 29;13(1):328. doi: 10.1186/s13071-020-04204-0. PMID: 32600453; PMCID: PMC7325023.
- **Fotakis EA**, Mastrantonio V, Grigoraki L, Porretta D, Puggioli A, Chaskopoulou A, Osório H, Weill M, Bellini R, Urbanelli S, Vontas J. **Identification and detection of a novel point mutation in the Chitin Synthase gene of Culex pipiens associated with diflubenzuron resistance**. PLoS Negl Trop Dis. 2020 May 1;14(5):e0008284. doi: 10.1371/journal.pntd.0008284. PMID: 32357192; PMCID: PMC7219787.
- **Fotakis EA**, Giantsis IA, Castells Sierra J, Tanti F, Balaska S, Mavridis K, Kourtidis S, Vontas J, Chaskopoulou A. **Population dynamics, pathogen detection and insecticide resistance of mosquito and sand fly in refugee camps, Greece**. Infect Dis Poverty. 2020 Mar 18;9(1):30. doi: 10.1186/s40249-020-0635-4. PMID: 32183909; PMCID: PMC7079361.
- Porretta D, **Fotakis EA**, Mastrantonio V, Chaskopoulou A, Michaelakis A, Kioulos I, Weill M, Urbanelli S, Vontas J, Bellini R. **Focal distribution of diflubenzuron resistance mutations in Culex pipiens mosquitoes from Northern Italy**. Acta Trop. 2019 May;193:106-112. doi: 10.1016/j.actatropica.2019.02.024. Epub 2019 Feb 27. PMID: 30825446.
- **Fotakis EA**, Giantsis IA, Avgerinou A, Kourtidis S, Agathaggelidou E, Kapoula C, Dadakou G, Vontas J, Chaskopoulou A. **Identification of Leishmania Species in Naturally Infected Sand Flies from Refugee Camps, Greece**. Emerg Infect Dis. 2019 Feb;25(2):361-364. doi: 10.3201/eid2502.181359. Epub 2019 Feb 17. PMID: 30346269; PMCID: PMC6346468.
- **Fotakis EA**, Giantsis IA, Demir S, Vontas JG, Chaskopoulou A. **Detection of Pyrethroid Resistance Mutations in the Major Leishmaniasis Vector Phlebotomus papatasi**. J Med Entomol. 2018 Aug 29;55(5):1225-1230. doi: 10.1093/jme/tjy066. PMID: 29912381.
- Mavridis K, **Fotakis EA**, Kioulos I, Mpellou S, Konstantas S, Varela E, Gewehr S, Diamantopoulos V, Vontas J. **Detection of West Nile Virus - Lineage 2 in Culex pipiens mosquitoes, associated with disease outbreak in Greece, 2017**. Acta Trop. 2018 Jun;182:64-68. doi: 10.1016/j.actatropica.2018.02.024. Epub 2018 Feb 21. PMID: 29474832.
- **Fotakis EA**, Chaskopoulou A, Grigoraki L, Tsiamantas A, Kounadi S, Georgiou L, Vontas J. **Analysis of population structure and insecticide resistance in mosquitoes of the genus Culex, Anopheles and Aedes from different environments of Greece with a history of mosquito borne disease transmission**. Acta Trop. 2017 Oct;174:29-37. doi: 10.1016/j.actatropica.2017.06.005. Epub 2017 Jun 9. PMID: 28606820.
- Killeen GF, Masalu JP, Chinula D, **Fotakis EA**, Kavishe DR, Malone D, Okumu F. **Control of Malaria Vector Mosquitoes by Insecticide-Treated Combinations of Window Screens and Eave Baffles**. Emerg Infect Dis. 2017 May;23(5):782-789. doi: 10.3201/eid2305.160662. PMID: 28418299; PMCID: PMC5403053.

Conferences/Presentations (selected entries)

- 18th Panhellenic Entomological Congress, 15-18 October 2019, Komotini, Greece
- First Annual Conference on Aedes Invasive Mosquito COST ACTION CA17108, 13-14 February, 2019, Athens, Greece
- European Society for Vector Ecology Conference, 22-26 October, 2018, Palermo, Italy
- 7th MIM Pan African Malaria Conference, 15-20 April 2018, Dakar, Senegal
- 7th International Congress of the Society for Vector Ecology (SOVE), 1-6 October 2017, Mallorca, Spain
- 17th Entomological Conference, 18-22 September 2017, Athens, Greece
- VIII EMCA Conference in Montenegro, 12-16 March, 2016, Montenegro
- 16th Panhellenic Entomological Congress, October 20-23, 2015, Heraklion, Crete
- 19th European Society for Vector Ecology Conference, 13-17 October 2014, Thessaloniki, Greece

Fellowships honours and awards

- Fellowship: 1st Proclamation of Scholarships from ELIDEK for PhD Candidates (scholarship code 532), Department of Crop Science/ School of Plant Sciences/ Agricultural University of Athens, Greece (2017 – 2020)
- Fellowship from the Department of Biology, University of Crete (entry rank for the MSc: 1st) (2013-2014)

Memberships

- Member of the Aedes Invasive Mosquito-COST Action (as of 2019)
- Member of the European Society for Vector Ecology (as of 2018)
- Member of the Mosquito Control Association (as of 2017)
- Reviewer for 2 international scientific journals

