

PERSONAL
INFORMATION


Antonios Michaelakis (Michailakis)
Αντώνιος Μιχαηλάκης

Benaki Phytopathological Institute
Department of Entomology and Agricultural Zoology
8, S. Delta str., 14561 Kifissia
Athens - Greece

☎ +30-210-8180215/+30-210-8180248

✉ a.michaelakis@bpi.gr

Google Scholar <https://tinyurl.com/y7rcq9q4>

R^G https://www.researchgate.net/profile/Antonios_Michaelakis

Sex Male | Date of birth 1975 | Nationality Greek

WORK EXPERIENCE

Business or sector
Research

2019 - present: **Research Director (Head Research Scientist)**
Head of Laboratory of Insects & Parasites of Medical Importance, Scientific Directorate of Entomology & Agricultural Zoology Benaki Phytopathological Institute (**BPI**)

Principal subjects:

- Surveillance in possible points of entry for invasive species for early detection and elimination of their populations
- Management plans for invasive mosquito species
- Chemical ecology of insects including pheromones and secondary plant compounds (mainly essential oils)
- Natural products (as potential insecticides or repellents)
- Integrated Pest Management (IPM)
- Entomological courses to agronomists and students' supervision

2014 - 2019: **Associate Research Scientist**
Benaki Phytopathological Institute, Department of Entomology & Agricultural Zoology

2010 - 2014: **Senior Research Scientist**
Benaki Phytopathological Institute, Department of Entomology & Agricultural Zoology

2007 - 2010: **Research Scientist**
Benaki Phytopathological Institute, Department of Entomology & Agricultural Zoology

Last updated: November 2022

EDUCATION AND TRAINING

- 2008 Postdoctoral Fellowship Program (Short-Term, 2 months)
Japan Society for the Promotion of Science. Tokyo University of Agriculture and Technology, Graduate School of Bio-Applications and Systems Engineering (BASE)
- 2001 – 2006 Ph.D. in Agricultural Sciences
Agricultural University of Athens, Department of Chemistry
- 2001 – 2005 Post-graduate scholar
National Centre for Scientific Research, “Demokritos”, Institute of Physical Chemistry. Laboratory of Natural Product Synthesis and Bioorganic Chemistry
- 2002 Post Graduate specialization program in Total Quality Management (TQM)
Technological Educational Institute of Piraeus, Department of Business Administration
- 1994 – 2000 Diploma in Agronomy- Agricultural Biotechnology (BSc)
Agricultural University of Athens, Department of Agricultural Biotechnology

PERSONAL SKILLS

Organisational / managerial skills

- Publications (Peer Reviewed Journals) (>80)
- Book chapters (4)
- Presentations in International (>50) and National conferences (>80)
- Member of congress organization committees (10)
- Invited speaker (>100)
- Expert missions (9)
- As a Head of Research in projects (>15)
- Participation in international (>15) and national projects (>10)
- Awards for innovative products/ideas/actions (4)
- Patents (8)
- Member of electoral/judgment committees for Universities/Research Institutions (>15)
- Member of staff recruitment committees (>30)
- Supervisor of students (8 PhD, 4 MSc and 22 BSc)
- Member of PhD Defence Committee (>12)

ADDITIONAL INFORMATION

Peer Reviewed Journals
(selected from the last 3
years)

- Mastronikolos, G.D.; Kapranas, A.; Balatsos, G.K.; Ioannou, C.; Papachristos, D.P.; Milonas, P.G.; Puggioli, A.; Pajović, I.; Petrić, D.; Bellini, R.; **Michaelakis, A.**; Papadopoulos, N.T. Quality Control Methods for *Aedes albopictus* Sterile Male Transportation. *Insects* **2022**, 13, 179. <https://doi.org/10.3390/insects13020179>
- Kapranas, A., Collatz, J., **Michaelakis, A.**, Milonas, P. The role of Sterile Insect Technique within biologically-based pest control – an appraisal of existing regulatory frameworks. *Entomologia Experimentalis et Applicata* **2022**, 00: 1–9. <https://doi.org/10.1111/eea.13155>.
- Kolimenakis, A., Heinz, S., Wilson, M.L., Winkler, V., Yakob, L., Michaelakis, A., Papachristos, D., Richardson, C. and Horstick, O. The role of urbanisation in the spread of *Aedes* mosquitoes and the diseases they transmit—A systematic review. *PLOS Neglected Tropical Diseases*, **2021**, 15(9), p.e0009631.
- Stefopoulou, A.; LaDeau, S.L.; Syrigou, N.; Balatsos, G.; Karras, V.; Lytra, I.; Boukouvala, E.; Papachristos, D.P.; Milonas, P.G.; Kapranas, A.; Vahamidis, P.; **Michaelakis, A.** Knowledge, Attitude and Practices Survey in Greece before the Implementation of Sterile Insect Technique against *Aedes albopictus*. *Insects, Special Issue Sterile Insect Technique (SIT) and Its Applications*, **2021**, 12, 212. <https://doi.org/10.3390/insects12030212>.
- Balatsos, G., Puggioli, A., Karras, V., Lytra, I., Mastronikolos, G., Carrieri, M., Papachristos, D.P, Malfacini, M., Stefopoulou, A., Ioannou, Ch. S., Balestrino, F., Bouyer, J., Petrić, D., Pajović, I., Kapranas, A., Papadopoulos, N.T., Milonas, P.G., Bellini, R., Michaelakis, A. Reduction of egg fertility of *Aedes albopictus* mosquitoes in Greece following releases of imported sterile males. *Insects*, **2021**, 12(2), 110; <https://doi.org/10.3390/insects12020110>.
- Oliva, C. F., Benedict, M. Q., Collins, C. M., Baldet, T., Bellini, R., Bossin, H., Bouyer, J., Corbel, V., Facchinelli, L., Fouque, F., Geier, M., **Michaelakis, A.**, Roiz, D., Tur, C., Simard, F., Gouagna, L. C. Sterile Insect Technique (SIT) against *Aedes* species mosquitoes: A roadmap and good practice framework for designing, establishing and evaluating pilot field trials. *Insects, Special Issue Sterile Insect Technique (SIT) and Its Applications*, **2021**, 12, 191, <https://doi.org/10.3390/insects12030191>.
- Michaelakis A, Balestrino F, Becker N, Bellini R, Caputo B, della Torre A, Figuerola J, L'Ambert G, Petric D, Robert V, Roiz D, Saratsis A, Sousa CA, Wint WGR, Papadopoulos NT. A Case for Systematic Quality Management in Mosquito Control Programmes in Europe. *International Journal of Environmental Research and Public Health*. **2021**, 18(7):3478. <https://doi.org/10.3390/ijerph18073478>.
- Bellini, R., **Michaelakis, A.**, Petric, D., Schaffner, F., Alten, B., Angelini, P., Aranda, C., Becker, N., Carrieri, M., Di Luca, M., Fălcută, E., Flacio, E., Klobučar, A., Lagneau, C., Merdić, E., Mikov, O., Pajovic, I., Papachristos, D., Sousa, C.A., Stroo, A., Toma, L., Vasquez, M.I., Velo, E., Venturelli, C., Zgomba, M. Practical Management Plan for Invasive Mosquito Species in Europe: I. Asian Tiger Mosquito (*Aedes albopictus*). *Travel Medicine and Infectious Disease*, **2020**, 35, 101691.

Last updated: November 2022

© European Union, 2002-2013 | <http://europass.cedefop.europa.eu>

Page 3 / 5

Presentations
(selected, only international
from the last 5 years)

- Liggri, P.G.V., Kritsi, E., Tsitsanou, K. E., Zographos, S.E., Michaelakis, A., Papachristos, D., Zoumpoulakis, P. A combined computational methodology for the discovery of hit compounds with putative insect repellency properties. 10th International Conference of the Hellenic Crystallographic Association. Congress Center, NCSR Demokritos, Athens, Greece, October 15 - 17, **2021**.
- Iatrou, K., Schulz, S., Kythreoti, G., Sdralia, N., Tsitoura, P., Michaelakis, A., and Papachristos, D. P. Identification of Allosteric Modifiers of Mosquito Odorant Receptor Function and Odor-Triggered Behaviors. Experimental Biology Meeting. San Diego, California, from 4th to the 6th of April **2020**.
- Roiz, D., Sudre, B., Bengoa, M., Dikolli, E., Drago, A., Michaelakis, A., Miranda, M.-A., Montarsi, F., Marsboom, C., Briët, O. Field studies for the development of a tool to support the decision making process for surveillance and vector control of dengue, chikungunya and Zika virus disease in Europe. Innovative Strategies for Vector Control – Progress in the Global Vector Control Response (GVCR). Wageningen International Conference Centre (WICC), Wageningen, the Netherlands, 11 - 13 June **2019**.
- Iatrou, K., Schulz, S., Kythreoti, G., Sdralia, N., Tsitoura, P., Michaelakis, A., and Papachristos, D. P. Identification of Modifiers of Odor-Triggered Mosquito Behaviors Acting through Binding to the ORco Subunit of Odorant Receptor Heteromers. Experimental Biology Meeting. Orlando, Florida, from 6th to the 9th of April **2019**.
- F. Schaffner, F. Gunay, A. Michaelakis, A. D. Mihalca, D. Petrić, J. Pinto, W. Wint and A. della Torre. The *Aedes* Invasive Mosquito COST Action: promoting innovation and synergies in the field of surveillance and control of invasive *Aedes* arbovirus vectors in Europe. IXth EMCA Conference “Mosquito control without borders”. La Rochelle (France), 10-14 March **2019**.
- F. Schaffner, F. Gunay, A. Michaelakis, A. D. Mihalca, D. Petrić, J. Pinto, W. Wint and A. della Torre. The *Aedes* Invasive Mosquito COST Action: promoting innovation and synergies in the field of surveillance and control of invasive *Aedes* arbovirus vectors in Europe. IXth EMCA Conference “Mosquito control without borders”. La Rochelle (France), 10-14 March **2019**.
- Liakakou, A., Angelis, A., Fokialakis, N., Michaelakis, A., Papachristos, D., Skaltsounis, L-A. Bio-guided isolation of volatile compounds with repellent properties against *Aedes albopictus* (Diptera: Culicidae) using CPC technology. 30th International Symposium on the Chemistry of Natural Products and the 10th International Congress on Biodiversity (ISCNP30 & ICOB10), Athens (Greece) from 25th to the 29th of November **2018**.

Projects
(selected)

2021-2024. Innovative approaches for monitoring and management of the Asian tiger mosquito with emphasis on the Sterile Insect Technique (‘moSquITo’).

Last updated: November 2022

Financed by National Recovery and Resilience Plan, “Greece 2.0” & EU Funding – NextGenerationEU.

2020-2023. Technical cooperation programme (TC Project) “Enhancing the Capacity to Integrate Sterile Insect Technique in the Effective Management of Invasive Aedes Mosquitoes” (RER5026). Financed by International Atomic Energy Agency (IAEA) (Chief Technical Counterpart).

2020-2025. Quality control bioassays for irradiated *Aedes albopictus* males. Programme of Coordinated Research Activities (CRP). Financed by International Atomic Energy Agency (IAEA) (Project Manager).

2021- 2023. Research project for the entomological surveillance of mosquitoes in Attica Region (Athens, Greece) (Project Manager).

2018- 2021. Nanoemulsions of plant oils with moisturizing and insect repellent properties. Proposal Acronym: QFytoTera (BPI is participating as external collaborator).

2013-2018. Development & demonstration of management plans against -the climate change enhanced- invasive mosquitoes in S. Europe (LIFE CONOPS-LIFE12 ENV/GR/000466) (Project Manager).

Member of Working Groups (selected)

2019-now. EU HEALTHY GATEWAYS joint action. Working group for drafting Standard Operating Procedures (SOPs) for vector surveillance and control at points of entry.

2012-now. Multi-sectorial Committee for the Prevention and Management of Tropical Diseases in Greece (Ministry of Health).

2016. EU SHIPSAN ACT Joint Action. Ad hoc working group to prepare “Interim guidance on maritime transport and Zika virus disease”.

2017. EU SHIPSAN ACT Joint Action. Preparedness of the maritime transport sector calling on plague endemic areas or areas with plague outbreaks, and options for public health measures in response to suspected plague affected ships.

Patents (selected)

2015. Development of slow release formulations of essential oils employing polyurea microcapsules. Greek Patent, 1008453

2010. Development of formulations as repellents or insecticides for cloth moth by mixing essential oils and geraniol or derivatives thereof. European Patent, No GR1006594

2005. Prolonged slow release of volatile organic molecules employing polyurea microcapsules. Greek Patent, 20050100488

Expert missions (selected)

2022. Experts Meeting to evaluate feasibility studies on establishment of pilot mass-rearing facilities. Within the framework of IAEA TC Project RER 5026. Vienna, Austria, 02-04 March.

2022. Expert mission to evaluate the feasibility studies and establishment of pilot mass-rearing facilities or importation of sterile males. Within the framework of IAEA TC Project RER 5026. Novi Sad, Serbia, 14-16 February **2022**.

2019. Expert mission on enhancing the surveillance for invasive mosquitos as a routine practice. To support to raise the awareness on the importance of surveillance for invasive mosquitos as a routine practice among the national authorities and the stakeholders within the framework of IAEA TC Project RER 5022-EVT1705378. Limassol, Cyprus, 5-7 March.