Maria Dafni (Daphne) Bazopoulou – CV

Email: daphne.bazopoulou@uoc.gr
Phone: +302810 394363 (Office), +306948665120 (Mobile)
Present Affiliation: Assistant Professor, Department of Biology, University of Crete & Collaborating Faculty Member, IMBB – FORTH, Greece.
Lab Address: Biology of Stress and Aging Lab, Room E.132, Dept. of Biology, University of Crete, Voutes University Campus, GR 700 13, Heraklion-Crete GREECE
URL for web site: https://bazopouloulab.com/
ORCID: 0000-0002-1898-8155

EDUCATION AND KEY QUALIFICATIONS

2009: Ph.D., Dept of Biology, University of Crete & IMBB-FORTH, Greece. PI: Nektarios Tavernarakis.
2004: M.Sc., Department of Biology, University of Crete & IMBB-FORTH, Greece.

Current positions

Since 2025: Collaborating Faculty Member, IMBB – FORTH, Greece.
Since 2021: Assistant Professor, Dept of Biology, University of Crete, Greece.
2014 - Co-Founder of *Microkosmos LLC* https://www.ukosmos.com/

Previous positions

2020 - 2021: Assistant Professor, Department of Biosciences, Durham University, UK.
2014 - 2021: Research Fellow, College of Literature, Science and the Arts, Department of Molecular, Cellular and Developmental Biology Department, University of Michigan, USA. PI: Ursula Jakob.
2009 - 2014: Postdoctoral Fellow, College of Engineering, Department of Mechanical Engineering, University of Michigan, USA. PI: Nikos Chronis.

PUBLICATIONS

Scopus ID: 24314633400, PubMed: https://pubmed.ncbi.nlm.nih.gov/?term=Bazopoulou+D&sort=date
**Corresponding author*

- *Redox regulation in lifespan determination,* Karagianni C., Bazopoulou D.*, **Journal of Biological Chemistry**, 300(3):105761 (2024). DOI: 10.1016/j.jbc.2024.105761.
- *Early life changes in histone landscape protect against age-associated amyloid toxicities through HSF-1 dependent regulation of lipid metabolism,* Oleson B.J., Bhattrai J., Sarah Zalubas S., Kravchenko T., Ji Y., Jiang E., Lu C., Madden C., Coffman J., Bazopoulou D., Jones J., Jakob U., **Nature Aging**, 4(1):48-61 (2023). DOI: 10.1038/s43587-023-00537-4
- *Shaping longevity early in life: developmental ROS and H3K4me3 set the clock*, Oleson B. J., Bazopoulou D., Jakob U., **Cell Cycle**, 20: 2337-2347 (2021). DOI: 10.1080/15384101.2021.1986317
- *An alternative food source for metabolism, drug, and longevity studies in C. elegans,* Beydoun S., Choi H.S., Dela-Cruz G., Kruempel J., Huang S., Bazopoulou D., Miller H., Evans C., Leiser S.F., **Communications Biology**, 4(1):258 (2021). DOI: 10.1038/s42003-021-01764-4
- *Automated phenotyping and lifespan assessment of a C. elegans model of Parkinson's disease*, Kim M., Knoefler D., Quarles E., Jakob U., Bazopoulou D.*, **Translational Medicine of Aging**, 4:38-44 (2020). DOI: 10.1016/j.tma.2020.04.001
- *Developmental ROS individualizes stress resistance and lifespan*, Bazopoulou D., Knoefler D., Zheng Y., Ulrich K., Oleson B., Xie L., Kim M., Kaufmann A., Lee Y.T., Dou Y., Chen Y., Quan S., Jakob U. **Nature**, 576(7786):301-305 (2019). DOI: 10.1038/s41586-019-1814-y
- *An automated compound screening for anti-aging effects on the function of C. elegans sensory neurons*, Bazopoulou D., Chaudhury A.R., A, Pantazis A., Chronis N., **Scientific Reports**, 7:9403 (2017). DOI: 10.1038/s41598-017-09651-x
- *The anti-inflammatory drug mesalamine targets bacterial polyphosphate accumulation*, Dahl J.U., Gray

M.J., Bazopoulou D., Beaufay F., Lempart J., Koenigsknecht M.J., Wang Y., Baker J.R., Hasler W.L., Young V.B., Sun D., Jakob U., **Nature Microbiology**, 2:16267 (2017). DOI: 10.1038/nmicrobiol.2016.267

- *On-demand isolation and manipulation of C. elegans by in vitro maskless photopatterning*, Oliver C.R., Gourgou E., Bazopoulou D., Chronis N., Hart A.J., **PLoS One**, 11(1):e0145935 (2016). DOI: https://doi.org/10.1371%2Fjournal.pone.0145935
- *Circuit mechanisms encoding odors and driving aging-associated behavioral declines in C. elegans*, Leinwand S.H., Yang C.J., Bazopoulou D., Srinivasan J., Chronis N., and Chalasani S. H., **eLife**, 4: e10181 (2015). DOI: https://doi.org/10.7554/elife.10181
- *Probing the physiology of ASH neuron in C. elegans using electric current stimulation*, Chokshi T.V., Bazopoulou D., Chronis N., **Applied Physics Letters**, 99(5):53702-5370232011 (2011). DOI: https://doi.org/10.1063%2F1.3615821
- *An automated microfluidic platform for calcium imaging of chemosensory neurons in C. elegans*, Chokshi T.V., Bazopoulou D., Chronis N., **Lab Chip**, 10(20):2758-63 (2010). DOI: https://doi.org/10.1039/c004658b
- *The NemaGENETAG initiative: large scale transposon insertion gene-tagging in C. elegans*, Bazopoulou D., Tavernarakis N., **Genetica**, 137(1):39-46 (2009). DOI: https://doi.org/10.1007/s10709-009-9361-3
- *Genome-wide investigation reveals pathogen-specific and shared signatures in the response of C. elegans to infection,* Wong D., Bazopoulou D., Pujol N., Tavernarakis N., Ewbank J. J., **Genome Biology**, 8(9):R194 (2007). DOI: https://doi.org/10.1186/gb-2007-8-9-r194

Conference proceedings (Peer reviewed)

- *Platform for in vitro photo-patterning of whole animal C. elegans assays and behavior control,* Oliver C.R., Gourgou E., Bazopoulou D., Chronis N., Hart A.J., The 15th International Conference on Miniaturized Systems for Chemistry and Life Sciences - **MicroTAS** (2014).
- *An automated microfluidic platform for electrical stimulation of the nervous system of C. elegans*, Chokshi T.V., Bazopoulou D., Chronis N., The 12th International Conference on Miniaturized Systems for Chemistry and Life Sciences - **MicroTAS** (2011).

Book Chapters

- *Microfluidics for Neuronal Imaging*, Bazopoulou D., Chronis N., **Neural Computation, Neural Devices, and Neural Prosthesis,** 243-259 (2014) Springer NY, USA.
- *Mechanosensitive Ion Channels in C. elegans*, Bazopoulou D. and Tavernarakis N. **Current Topics in Membranes: Mechanosensitive Ion Channels**, 59:49-79 (2007) Elsevier Inc., Academic Press, San Diego, USA.
- *The role of DEG/ENaC ion channels in sensory mechanotransduction*, Bazopoulou M. D., Voglis G., Tavernarakis N., **Molecular Sensors for Cardiovascular Homeostasis,** 3-31 (2005) Springer NY, USA.
- *Protein Turnover and ageing*, Bazopoulou M. D., Troulinaki K., Tavernarakis N., **Focus on Protein Research** (2004) Nova Science Inc. New York, USA.

INVITED SEMINARS as a PI (enterprises or advanced schools)

- Molecular Medicine Seminar Series, University Medical Center Groningen, Netherlands (2025).
- SFRR-E (Society for Free Radical Research – Europe) Webinar Series "Emerging Leaders in Redox Biology" (2024).
- Symposium on Market & Innovation: Challenges for Researchers and Entrepreneurs (2023), Heraklion Chamber of Commerce and Industry, Greece.

CONFERENCES/WORKSHOPS (Invited speaker)

- 4th Panhellenic Biological Students Conference, Ioannina, Greece (2026).
- EMBO Workshop: Bridging Thiol Chemistry and Biology: Exploring structure, function, and metabolic regulation of redox systems across species (2025), Girona, Spain.
- 42nd Scientific Conference of the Hellenic Society for Biological Sciences (2023), Thessaloniki, Greece.
- Society for Experimental Biology Annual Conference (2021), *Online.*
- Union Biometrica, Inc (2020), Boston MA, US (*https://www.unionbio.com/media/webinar.aspx?id=315*)
- 22nd International *C. elegans* Meeting (2019), Los Angeles CA, USA (Workshop).
- Geriatrics Center Research Symposium (2019), Ann Arbor MI, USA.
- Customer Discovery - Center of Entrepreneurship of University of Purdue (2016), IN, USA.

MEMBERSHIPS & REVIEWING ACTIVITIES

- Appointed Member of the Scientific Committee of Tech Transfer Office of University of Crete, Greece (2023-present).
- *Ad hoc* Evaluator of Spanish State Research Agency (AEI) (2024-present).
- *Ad hoc* Evaluator of NIEHS (National Institute of Environmental Health Sciences) Study Section – NIH (National Institute of Health), USA (2023-present).
- *Ad hoc* Evaluator of UKRI (UK Research and Innovation) & MRC (Medical Research Council) Grants, UK (2023-present).
- Member of the American Society for Biochemistry and Molecular Biology (ASBMB) (2023-present).
- Member of the Society for Neuroscience (SfN) (2011).
- Guest Associate Editor in *Frontiers in Aging* (2023-present).
- *Ad hoc* Reviewer: *eLife* (eLife Sciences Publications), *FEBS Letters* (FEBS PRESS), *Nature Communications*, *Communications Biology*, *Scientific Reports, Cell Discovery* (Springer Nature), Aging Cell (Wiley & Sons), *Methods in Cell Biology*, *Pesticide Biochemistry and Physiology, Advanced Drug Delivery Reviews*, (Elsevier), *Metabolites*, *Antioxidants*, *Cells*, *Sensors* (MDPI), *Lab on a Chip* (Royal Society of Chemistry), *American Institute of Physics* (AIP Publishing).

FELLOWSHIPS & AWARDS

- Society for Experimental Biology President's Medal - Cell Biology Section (2021).
- Nomination for MRC Confidence in Concept (CiC), Durham University Award (UK) (renounced due to move in Greece) (2021).
- Marie Sklodowska-Curie Individual Fellowship (Reintegration panel) - Seal of Excellence (2020).
- Michigan Innovation Corps (I-Corps) Team Award (USA) (2016).
- SLAS (Society for Lab Automation and Screening) Tony B. Academic Travel Award (2014).
- Certificate of Recognition in "*College Teaching in Science and Engineering*", Center for Research on Learning and Teaching, University of Michigan (USA) (2013).
- State Scholarships Foundation (IKY) award (Greece) (2003-2004).
- IMBB-FORTH Fellowship for Graduate Studies (Greece) (2002- 2003).

DISSEMINATION, PUBLIC OUTREACH & IMPACT TO EARLY CAREER RESEARCHERS

- University of Crete Podcast Series: *Society Talks*
- *Science Me* Podcast: *Είναι αναπόφευκτη η γήρανση?*
- 'Scientists with Impact' Invited Interview with the Society for Experimental Biology (2023).
- Coordinator of Dissemination & Outreach activities in the Dept of Biology, University of Crete, Greece (since 2022).
- Career talk in the PhD Program in Biomedical Sciences (PIBS) University of Michigan, USA (2020).
- Volunteer and Member of the University of Michigan Postdoctoral Association, USA (2017-2019).
- Co-founder of the University of Michigan Postdoctoral Family Association, USA (2018).