

## Maria Dafni (Daphne) Bazopoulou – CV

**Email:** [daphne.bazopoulou@uoc.gr](mailto:daphne.bazopoulou@uoc.gr), **Phone:** +302810 394363 (Office), +306948665120 (Mobile)

**Present Affiliation:** Assistant Professor, Department of Biology, University of Crete, 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 **ORCID:** [0000-0002-1898-8155](https://orcid.org/0000-0002-1898-8155),

**Website:** [www.bazopouloulab.com](http://www.bazopouloulab.com), **Social media:** [LinkedIn](#), [Twitter](#)

### EDUCATION

---

---

**Ph.D.** - Neurogenetics and Ageing laboratory (Advisor, Dr. Tavernarakis) / *Dept. of Biology, University of Crete & Institute of Molecular Biology and Biotechnology, FORTH, Greece*.....2009

**M.Sc. in Molecular Biology & Biomedicine** / *Dept. of Biology, University of Crete & Institute of Molecular Biology and Biotechnology, FORTH, Greece*.....2004

**B.Sc. in Biology** / (Thesis Advisor, Dr Moschonas) *Dept. of Biology, University of Crete* .....2002

### RESEARCH/PROFESSIONAL AFFILIATIONS

---

---

**Assistant Professor** / *Dept. of Biology, University of Crete, Greece*.....2021-present

**Assistant Professor** / *Dept of Biosciences., Durham University, UK*.....2020-2021

**Research Fellow** – Redox Biology laboratory (PI, Dr. Ursula Jakob) / *Dept. of Molecular, Cellular, and Dev. Biology, University of Michigan*.....2014 - 2021

**Co-founder** / *Microkosmos LLC, <https://www.ukosmos.com/>*.....2014

**Postdoctoral Fellow** - BioMEMS in Neuroscience and Medicine laboratory (PI, Dr. Nikos Chronis) / *Dept. of Mechanical Engineering, University of Michigan*.....2009 - 2014

### PUBLICATIONS

---

---

*Scopus Author ID:* [24314633400](https://orcid.org/24314633400), *PubMed:* <https://pubmed.ncbi.nlm.nih.gov/?term=Bazopoulou+D&sort=date>

#### Research Articles & Reviews (Peer-Reviewed):

- Oleson B.J. **Bazopoulou D.** Jakob U. *Shaping Longevity Early in Life: Developmental ROS and H3K4me3 Set the Clock.* *Cell Cycle* 2021 Oct 17;1-11. Review. DOI: [10.1080/15384101.2021.1986317](https://doi.org/10.1080/15384101.2021.1986317)
- Beydoun S., Choi H. - S., Dela-Cruz G., Kruempel J., Huang S., **Bazopoulou D.**, Miller H., Evans C., Leiser S.-F. *An alternative food source for metabolism, drug, and longevity studies in C. elegans.* *Communications Biology* 2021 Feb 26;4(1):258. DOI: [10.1038/s42003-021-01764-4](https://doi.org/10.1038/s42003-021-01764-4)
- Kim M., Knoefler D., Quarles E., Jakob U\*., **Bazopoulou D\***. *Automated phenotyping and lifespan assessment of a C. elegans model of Parkinson's disease.* *Translational Medicine of Aging* 2020 Volume 4: 38-44. DOI: [10.1016/j.tma.2020.04.001](https://doi.org/10.1016/j.tma.2020.04.001) \*corresponding

- **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. *Developmental ROS individualizes stress resistance and lifespan*. Nature 2019 Dec 576(7786):301-305. DOI: [10.1038/s41586-019-1814-y](https://doi.org/10.1038/s41586-019-1814-y)
- **Bazopoulou D.**, Chaudhury A.R., A, Pantazis A., Chronis N. *An automated compound screening for anti-aging effects on the function of C. elegans sensory neurons*. Scientific Reports 2017 Aug 24; 7:9403. DOI: [10.1038/s41598-017-09651-x](https://doi.org/10.1038/s41598-017-09651-x)
- Dahl J.U., Gray M.J., **Bazopoulou D.**, Beaufay F., Lempart J., Koenigsnecht M.J., Wang Y., Baker J.R., Hasler W.L., Young V.B., Sun D., Jakob U. *The anti-inflammatory drug mesalamine targets bacterial polyposphate accumulation*. Nature Microbiology 2017 Jan 23;2: 16267. DOI: [10.1038/nmicrobiol.2016.267](https://doi.org/10.1038/nmicrobiol.2016.267)
- Oliver C.R., Gourgou E., **Bazopoulou D.**, Chronis N., Hart A.J. *On-demand isolation and manipulation of C. elegans by in vitro maskless photopatterning*. PLoS One. 2016 Jan 5; 11(1). DOI: <https://doi.org/10.1371/journal.pone.0145935>
- Leinwand S.H., Yang C.J., **Bazopoulou D.**, Srinivasan J., Chronis N., and Chalasani S. H. *Circuit mechanisms encoding odors and driving aging-associated behavioral declines in C. elegans*. Elife. 2015 Sep 22; 4. DOI: <https://doi.org/10.7554/elife.10181>
- Chokshi T.V., **Bazopoulou D.**, Chronis N. *Probing the physiology of ASH neuron in C. elegans using electric current stimulation*. Applied Physics Letters 2011 Aug 1; 99(5):53702-537023. DOI: <https://doi.org/10.1063/1.3615821>
- Chokshi T.V., **Bazopoulou D.**, Chronis N. *An automated microfluidic platform for calcium imaging of chemosensory neurons in C. elegans*. Lab Chip. 2010 Oct 21; 10(20): 2758-63. DOI: <https://doi.org/10.1039/c004658b>
- **Bazopoulou D.** and Tavernarakis N. *The NemaGENETAG initiative: large scale transposon insertion gene-tagging in C. elegans*. Genetica. 2009 Sep; 137(1):39-46. Review. DOI: <https://doi.org/10.1007/s10709-009-9361-3>
- Wong D., **Bazopoulou D.**, Pujol N., Tavernarakis N. Ewbank J. J. *Genome-wide investigation reveals pathogen-specific and shared signatures in the response of C. elegans to infection*. Genome Biology 2007; 8(9): R194. DOI: <https://doi.org/10.1186/gb-2007-8-9-r194>

#### Conference proceedings (Peer-Reviewed):

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

#### Book Chapters:

- **Bazopoulou D.**, Chronis N. *Microfluidics for Neuronal Imaging*. Neural Computation, Neural Devices, and Neural Prosthesis, 2014; Springer New York. 243-259

- **Bazopoulou D.** and Tavernarakis N. *Mechanosensitive Ion Channels in C. elegans*. Current Topics in Membranes: Mechanosensitive Ion Channels 2007; Elsevier Inc., Academic Press, San Diego, USA
- **Bazopoulou M. D.**, Voglis G. and Tavernarakis N. *The role of DEG/ENaC ion channels in sensory mechanotransduction*. Sensors for Cardiovascular Homeostasis 2005; Springer Science Academic Publishers, New York, USA
- **Bazopoulou M. D.**, Troulinaki K. and Tavernarakis N. *Protein Turnover and ageing*, Focus on Protein Research 2004; Nova Science Publishers, Inc. New York, USA

## CONFERENCES/SEMINARS

---

### Invited Speaker:

42nd Scientific Conference of the Hellenic Society for Biological Sciences (2023), Thessaloniki, Greece  
 Society for Experimental Biology Annual Conference (2021). *Online Conference*  
 Epigenetics Working Group (2021), University of North Dakota, ND, USA. *Online Seminar*  
 Institute for Systems Biology (2021), Seattle WA, USA. *Online seminar*  
 Union Biometrica, USA (2020). *Online Seminar: <https://www.youtube.com/watch?v=M83vbrY-Jk0>*  
 Case Western Reserve (2020), Cleveland, OH, USA.  
 Oakland University (2020), MI, USA.  
 Washington University (2020) St Louis, MO, USA.  
 22<sup>nd</sup> International *C. elegans* Meeting (2019), Los Angeles, CA, USA. Workshop on microfluidics.  
 Geriatrics Center Research Symposium (2019), University of Michigan, MI, USA.  
 Purdue University (2016), IN, USA. Customer Discovery/Center of Entrepreneurship/I-Corps.

### Selected Speaker:

22<sup>nd</sup> International *C. elegans* Meeting (2019), Los Angeles, CA, USA. Plenary Session  
 Midwest *C. elegans* Meeting (2019), University of Michigan, MI, USA.  
 15<sup>th</sup> Intl. Conference on Miniaturized Systems for Chemistry and Life Sciences, (2011), Seattle, WA, USA.  
 European *C. elegans* Meeting (2008), Seville, Spain.  
 Network of European Neuroscience Institutes PhD Symposium (2008), Berlin, Germany.  
 Hellenic Society of Neuroscience (2008), Athens, Greece.

## HONORS & AWARDS

---

Society for Experimental Biology President's Medal (Cell Biology Section) .....2021  
 Marie Skłodowska-Curie Seal of Excellence (H2020-MSCA-IF-2020).....2020

SLAS (Society for Lab Automation and Screening) Tony B. Academic Award (USA).....2014

## FELLOWSHIPS & FUNDING

---

Special Account for Research Grants (SARG), University of Crete, Greece (PI).....2023-2025

Fondation Santé, Greece (PI).....2022-2024

Royal Society Research Grant, UK (PI, renounced).....2021

National Research Service Award (T32)/Career Training in the Biology of Aging (NIH), USA (PI)...2016-2018

Translational Research Fund, Center for Entrepreneurship, University of Michigan, USA (PI).....2016

National Fellowship Foundation Award for Graduate Studies, Greece.....2003-2004

Institute of Molecular Biology and Biotechnology Fellowship for Graduate Studies, Greece.....2002-2003

## TEACHING

---

**Instructor**, *Introduction to neuroscience and neural engineering* offered to MSc students in the “Translational Engineering in Health & Medicine” Graduate Program, National Technical University Athens, Greece....2023

**Instructor**, *Genetics II* offered to Sophomore students in the Undergraduate Program in Biology, University of Crete, Greece.....2023

**Instructor**, *Multicellular organization of life* offered to MSc students in the “Molecular Biology & Biomedicine” Graduate Program, University of Crete & FORTH, Greece..... 2022-present

**Instructor**, *Biosensors and Lab on-a-chip* offered to MSc students in the “Biomedical Engineering” Graduate Program, University of Crete, Technical University of Crete & FORTH, Greece.....2022-present

**Instructor**, *Proteins in the intra- and extracellular environment* offered to MSc students in the “Protein Biotechnology” Graduate Program, University of Crete, Greece.....2022-present

**Instructor**, *Enzyme Biotechnology* offered to Junior students in the Undergraduate Program in Biology, University of Crete, Greece.....2021-2022

## PROFESSIONAL MEMBERSHIP & SERVICE

---

**Member**, Scientific Committee of UoC’s Tech Transfer Office.....2023-2025

**Volunteer**, PI duties in iGEM Crete for participation in the 2023 Grand Jamboree.....2023

**Volunteer**, participation in educational outreach activities of UoC in middle schools.....2023

**Reviewer in grants applications:** NIH/NIEHS (panel reviewer).....2023

**Volunteer**, Scientific Consultant in *Project Management and Consulting*, Graduate Course offered by Center of Entrepreneurship, University of Michigan, USA.....2018

**Reviewer in scientific journals:** Nature Communications, Nature Scientific Reports, JoVE, Lab-on-a-Chip, MDPI (Metabolites, Antioxidants, Cells, Sensors).....2017-present

**Member**, University of Michigan Post Doctoral Association, MI, USA.....2017-2019

**Professional memberships:** Society for Neuroscience, Genetics Society of America, American Society for Biochemistry and Molecular Biology.....2009-present