

Maria Dafni (Daphne) Bazopoulou – CV

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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

EDUCATION

Ph.D. in Biology - 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 / *Dept. of Biology, University of Crete*2002

RESEARCH/PROFESSIONAL AFFILIATIONS

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

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 (Advisor, Dr. Nikos Chronis) / *Dept. of Mechanical Engineering, University of Michigan*.....2009 - 2014

PUBLICATIONS

Scopus Author ID: [24314633400](https://scopus.com/authid/detail.uri?authorId=24314633400)

PubMed: <https://pubmed.ncbi.nlm.nih.gov/?term=Bazopoulou+D&sort=date>

*Corresponding author

Research Articles & Reviews (Peer-Reviewed):

1. 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)

2. 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)

3. 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)

4. **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)
5. **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)
6. 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 pol yphosphate accumulation*. Nature Microbiology 2017 Jan 23;2: 16267. DOI: [10.1038/nmicrobiol.2016.267](https://doi.org/10.1038/nmicrobiol.2016.267)
7. 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>
8. 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>
9. 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>
10. 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>
11. **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>
12. 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):

1. 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
2. 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:

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

2. **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
3. **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
4. **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:

1. Society for Experimental Biology Annual Conference (2021). *Online Conference*
2. Epigenetics Working Group (2021), University of North Dakota, ND, USA. *Online Seminar*
3. Institute for Systems Biology (2021), Seattle WA, USA. *Online seminar*
4. Union Biometrica, USA (2020). *Online Seminar*: <https://www.youtube.com/watch?v=M83vbrY-Jk0>
5. Case Western Reserve (2020), Cleveland, OH, USA.
6. Oakland University (2020), MI, USA.
7. Washington University (2020) St Louis, MO, USA.
8. 22nd International *C. elegans* Meeting (2019), Los Angeles, CA, USA. Workshop on microfluidics.
9. Geriatrics Center Research Symposium (2019), University of Michigan, MI, USA.
10. Purdue University (2016), IN, USA. Customer Discovery/Center of Entrepreneurship/I-Corps.

Selected Speaker:

1. 22nd International *C. elegans* Meeting (2019), Los Angeles, CA, USA. Plenary Session
2. Midwest *C. elegans* Meeting (2019), University of Michigan, MI, USA.
3. 15th International Conference on Miniaturized Systems for Chemistry and Life Sciences, MicroTAS (2011), Seattle, WA, USA.
4. European *C. elegans* Meeting (2008), Seville, Spain.
5. Network of European Neuroscience Institutes PhD Symposium (2008), Berlin, Germany.
6. Hellenic Society of Neuroscience (2008), Athens, Greece.

AWARDS/FELLOWSHIPS

Society for Experimental Biology President's Medal (Cell Biology Section).....2021
 National Research Service Award (T32)/Career Training in the Biology of Aging (NIH, USA).....2016-2018

SLAS (Society for Lab Automation and Screening) Tony B. Academic Award (USA)2014
Translational Research Fund, Center for Entrepreneurship, University of Michigan (USA).....2016
National Fellowship Foundation (Greece) Award for Graduate Studies.2003-2004
Institute of Molecular Biology and Biotechnology Fellowship for Graduate Studies.....2002-2003

FUNDING

Special Account for Research Grants (SARG), University of Crete, Greece.....2023-2025
Fondation Santé, Greece.....2022-2024

AD HOC REVIEWER

Cells
Antioxidants
Sensors
Lab on a chip