PERSONAL INFORMATION

Name: Nektarios TAVERNARAKIS
Position: Professor of Molecular Systems Biology
Institutions: University of Crete & Foundation for Research and Technology-Hellas (FORTH)
Address: N. Plastira 100, Heraklion 70013, Crete, Greece
Nationality: Greek
Date/Place of birth: May 2nd, 1967, Heraklion, Crete, Greece
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EDUCATION

B.Sc. Aristotle University, Department of Biology, Thessaloniki, Greece, 20/7/1989 (Biology)
Ph.D. University of Crete, Department of Biology, Heraklion, Greece, 18/5/1995 (Molecular Genetics)

POSITIONS

Current positions

2010 *Professor*, Medical School, University of Crete, Heraklion, Greece
2025 *Affiliated Researcher*, Institute of Molecular Biology and Biotechnology (IMBB), FORTH, Heraklion, Greece
2012 *Director*, Neurogenetics and Ageing Laboratory, Medical School, University of Crete and IMBB-FORTH, Heraklion, Greece

Previous positions

2016-2025 *President* of FORTH's Board of Directors, Heraklion, Greece
2016-2021 *Director*, BioInformatics Graduate Program, Medical School, University of Crete
2013-2016 *Director*, IMBB-FORTH, Heraklion, Greece
2008-2025 *Research Director* (*Professor*), IMBB-FORTH, Heraklion, Greece
2004-2008 *Principal Researcher* (*Associate Professor*), IMBB-FORTH, Heraklion, Greece
2001-2004 *Assistant Researcher* (*Assistant Professor*), IMBB-FORTH, Heraklion, Greece
1999-2001 *Research Associate*, Rutgers University, New Jersey, USA
1995-1997 *Postdoctoral Fellow*, Rutgers University, New Jersey, USA
1991 *Visiting Scientist*, National Cancer Institute, Maryland, USA

SELECTED DISTINCTIONS & AWARDS

2026 Elected Member of the Scientific Advisory Board, *Open Research Europe*, Geneva, Switzerland
2026 Founding Member, *Federation of European Biochemical Societies* (*FEBS*) Research Academy
2026 President's International Fellowship Initiative Award, *Chinese Academy of Sciences*, China
2026 Elected Corresponding Member of the *Cyprus Academy of Sciences, Letters and Arts*, Nicosia, Cyprus
2026 Honorary Doctorate Award (*Doctor Honoris Causa*), Department of Biological Sciences, *University of Cyprus*, Nicosia, Cyprus
2026 Elected Member of the *Academy of Geroscience*
2026 Datta Medal and Lecture Award, *Federation of European Biochemical Societies* (FEBS)
2025 Honorary Doctorate Award (*Doctor Honoris Causa*), Department of Informatics, *Ionian University*, Corfu, Greece
2025 Elected Distinguished Member of the *Foundation for Research and Technology-Hellas*, Greece
2024 Elected President of the *European Molecular Biology Conference* (EMBC)
2024 Excellence in Biomedical Sciences Award, *Bodossaki Foundation*, Greece

2023 Elected Member, *European Academy of Sciences* (Member of the Scientific Committee, Medicine and Life Sciences Division)
2023 Elected Fellow of the *Royal Society of Biology* (RSB), London, UK
2022 Elected President of the *European Institute of Innovation and Technology* (EIT) Governing Board
2020 Elected Fellow of the *American Association for the Advancement of Science* (AAAS), USA
2020 Elected Vice President, *Scientific Council* of the *European Research Council* (ERC)
2020 Elected Member of the *European Institute of Innovation and Technology* (EIT) Governing Board
2019 Elected Member, *German National Academy of Sciences* (*Leopoldina*), Germany
2019 Elected Corresponding Member of the *Academy of Athens*, Greece
2018 Elected Member, *European Academy of Sciences and Arts*
2017 Helmholtz International Fellow Award, *Helmholtz Association*, Germany
2017 Galien Scientific Research Award, *Prix Galien* Greece
2016 Elected Member, *Scientific Council of the European Research Council* (ERC)
2016 *European Research Council* (ERC) Proof of Concept Grant award
2016 *European Research Council* (ERC) Advanced Investigator Grant award
2014 BioMedical Research Excellence Award, *Academy of Athens*, Greece
2014 Elected Member, *Academia Europaea* (Section: Physiology & Medicine)
2012 Academic Excellence Prize, *Empeirikeion Foundation*, Greece
2012 Science Excellence (*Aristeia*) Award, Ministry of Education, Greece
2010 Elected Distinguished Professor, *Medical School*, University of Crete
2009 Elected Member, *European Molecular Biology Organization* (EMBO)
2009 *European Research Council* (ERC) Advanced Investigator Grant award
2007 Research Excellence award, *Foundation for Research and Technology-Hellas*, Greece
2007 Friedrich Wilhelm Bessel research award, *Alexander von Humboldt Foundation*, Germany
2005 Academic Prize in Medicine and Biology, *Bodossaki Foundation*, Greece
2002 *European Molecular Biology Organization* (EMBO) Young Investigator award
1996 Postdoctoral fellowship, *International Human Frontier in Science Program Organization* (HFSPO)
1995 First-class Ph.D. Honours Prize, *University of Crete*, Greece
1989 Dean's List and First Rank Graduation Honours, *Aristotle University*, Thessaloniki, Greece

SELECTED EXECUTIVE EXPERIENCE

2025 President of the European Molecular Biology Conference (EMBC)
2022 President of the European Institute of Innovation and Technology (EIT) Governing Board
2022 National representative of Greece, European Molecular Biology Conference (EMBO/EMBC)
2022 National representative of Greece, Member of the European Molecular Biology Laboratory (EMBL) Council
2021 Chair of the European Scientific Council (ERC) Standing Committee for Programme Impact Monitoring and Evaluation
2020 Vice President, Scientific Council of the European Research Council (ERC)
2020 Member of the European Institute of Innovation and Technology (EIT) Governing Board
2020 Coordinator of the National Precision Medicine Network for Neurodegenerative Disorders
2018 Member of the Advisory Committee of the Hellenic Foundation for Research and Innovation
2018 Chair, General Assembly of the Presidents of Greek Research Institutions
2018 Coordinator of the Cretan Precision/Personalized Medicine Hub
2018 President of the National Life Sciences Council of Greece
2016 Member of the Scientific Committee of the Hellenic Foundation for Research and Innovation
2016 President, FORTH Board of Directors
2016 Member, Scientific Council of the European Research Council (ERC)
2016 Founder and Director of the Graduate Program on BioInformatics, University of Crete
2014 Chair, FORTH Ethics Committee
2013 Director, IMBB, FORTH
2013 Coordinator of the National BioImaging Research Infrastructure of Greece (BioImaging-GR)

2011 Member of the National Life Sciences Council of Greece
2011 National representative of Greece, European Commission FP7 Health programme
2009 Executive committee member, European Neuroscience Institutes Network (ENInet)
2008 Member of the Executive Board and Vice-President of FORTH's Researcher Association
2007 Elected member of the Scientific Council, IMBB-FORTH
2007 National coordinator, European Network of Neuroscience Institutes (ENInet)
2005 Assistant Coordinator of the European TransDeath EU consortium
2004 Coordinator of the European Commission NemaGENETAG consortium

SELECTED CONFERENCES CHAIRED/ORGANIZED

2025 EMBO Workshop: Cell Biology of the Nervous System: Cellular Mechanisms of Communication. Greece
2023 EMBO Workshop: Cell Biology of the Nervous System Resilience and Vulnerability. Greece
2020 4th Genetics, Geriatrics and Neurodegenerative diseases (GeNeDis) Conference. Greece
2020 EMBO Workshop: Molecular neurobiology II. Greece
2019 EMBO Workshop, Cell Biology of the Neuron: Polarity, Plasticity and Regeneration. Greece
2018 EMBO Workshop: Molecular neurobiology I. Greece
2017 EMBO Conference: Cell biology of the neuron II. Greece
2014 Annual European Cell Death Organization (ECDO) meeting. Greece
2013 Gordon Research Conference on the Biology of Aging. Italy
2011 EMBO Workshop: Cell biology of the neuron I. Greece
2010 European *C. elegans* Neurobiology Meeting. Greece
2009 General Meeting of the European Neuroscience Institutes Network (ENInet). Greece
2006 European *C. elegans* Meeting. Greece
2004 2nd International Conference on the Functional Genomics of Ageing. Greece

SELECTED PUBLICATIONS

Complete publication record at *PubMed* (>**290** articles):
https://pubmed.ncbi.nlm.nih.gov/?term=Tavernarakis+N%5BAuthor%5D&sort=date
Citation metrics available at the following URLs:
Web of Science: https://www.webofscience.com/wos/author/record/B-9684-2013
Scopus: https://www.scopus.com/authid/detail.uri?authorId=20035582600
Google Scholar: https://scholar.google.gr/citations?user=afQKKl8AAAAJ
(*: Corresponding author)

1. Sotiriou A., Konstantinidis G. and Tavernarakis N.* (2026) CYLD-mediated lysine63 deubiquitination regulates synaptic transmission and autophagy to mitigate age-related sequelae. **Nature Communications**, 17: 7164.
2. Tavernarakis N.* (2026) The nuclear shredder behind PARPi resistance. **Nature Cell Biology**, 28: 1095-1097.
3. Luo Z., Li Y., He C., Wu D., Dai W., Hu L., Yang J., Harry B. L., Ju Z., Tavernarakis N., Wang H., Wan Q.-L. and Zhou Q. (2026) ALKB-1-dependent tRNA methylation is required for efficient paternal mitochondrial elimination. **Nature Communications**, 17: 2144.
4. Cao S.-Q., Jimenez-Loygorri I., Qiu Y., Kang Y.J., Do Van K., Smith A. E., Huang J., Pan J.-P., Mao L., Li A., Yang H., Aman Y., Lagartos M. J., Lautrup S., Chen A., Liang K., Zhang H., Yi J., Jin X., Cheung T. C., Apokotou O., Papastefanaki F., Matsas R., McEwan W. A., Cheng F., Cho H., Chen G., Su H., Palikaras K., Luo O. J., Zhao Q. H., Ding D., van Duijn C., Tavernarakis N., Boya P., Tencomnao T. and Fang E. F. (2026) The mitochondrial guardian α-Amyrin mitigates Alzheimer's disease pathology via modulation of the DLK-SARM1-ULK1 axis. **Advanced Science**, e12374.
5. Tavernarakis N.* (2025) Phase separation meets energy generation to boost longevity. **Nature Aging**, 5: 1936-1938.
6. Tavernarakis N.* (2025) For the love of frontier research, or why Elon's rockets keep blowing up. **EMBO Reports**, 26: 4889-4892.

7. Konstantinidis G. and Tavernarakis N.* (2025) Nucleophagy: A two-step exit with the help of an outsider. **Current Biology**, 35: R331-R355.

8. Tsagkari D., Markaki M. and Tavernarakis N.* (2025) NHR-85 modulates mitochondrial and lipid homeostasis to protect against α-synuclein aggregation in *C. elegans*. **Journal of Cell Science**, 138: jcs263651.

9. Charmpilas N., Sotiriou A., Axarlis K., Tavernarakis N.* and Hoppe T. (2024) Reproductive regulation of the mitochondrial stress response in *Caenorhabditis elegans*. **Cell Reports**, 43: 114336.

10. Hofer S. J., Daskalaki I., Bergmann M., Friscic J., Zimmermann A., Mueller M. I., Abdellatif M., Nicastro R., Masser S., Durand S., Nartey A., Waltenstorfer M., Enzenhofer S., Faimann I., Gschiel V., Bajaj T., Niemeyer C., Gkikas I., Pein L., Cerrato G., Pan H., Liang Y. T., Tadic J., Jerkovic A., Aprahamian F., Robbins C. E., Nirmalathasan N., Habisch H., Annerer E., Dethloff F., Stumpe M., Grundler F., Wilhelmi de Toledo F., Heinz D. E., Koppold D. A., Rajput Khokhar A., Michalsen A., Tripolt N. J., Sourij H., Pieber T., de Cabo R., McCormick M., Magnes C., Kepp O., Dengjel J., Sigrist S. J., Gassen N. C., Sedej S., Madl T., De Virgilio C., Stelzl U., Hoffmann M. H., Eisenberg T., Tavernarakis N.*, Kroemer G. and Madeo F. (2024) Spermidine is essential for fasting-mediated autophagy and longevity. **Nature Cell Biology**, 26: 1571-1584.

11. Daskalaki I., Markaki M., Gkikas I. and Tavernarakis N.* (2023) Local coordination of mRNA storage and degradation in the vicinity of mitochondria modulates *Caenorhabditis elegans* somatic ageing. **EMBO Journal**, e112446.

12. Petratou D., Gjikolaj M., Kaulich E., Schafer W. and Tavernarakis N.* (2023) A proton-inhibited DEG/ENaC ion channel maintains neuronal ionstasis and promotes neuronal survival under stress. **iScience**, 26: 107117.

13. Tavernarakis N.* (2023) Remote control of autophagy and metabolism in the liver. **Cell Metabolism**, 35: 725-727.

14. Ploumi C., Kyriakakis E. and Tavernarakis N.* (2023) Coupling of autophagy and the mitochondrial intrinsic apoptosis pathway modulates proteostasis and ageing in *Caenorhabditis elegans*. **Cell Death and Disease**, 14: 110.

15. Palikaras K., Mari M., Ploumi C., Princz A., Filippidis G. and Tavernarakis N.* (2023) Age-dependent nuclear lipid droplet deposition is a cellular hallmark of aging in *Caenorhabditis elegans*. **Aging Cell**, 22: e13788.

16. Tavernarakis N.* (2023) Research Briefing: Nuclear autophagy promotes longevity and germline immortality. **Nature Aging**, 3: 11-12.

17. Papandreou M.-E., Konstantinidis G. and Tavernarakis N.* (2023) Nucleophagy delays ageing and preserves germline immortality. **Nature Aging**, 3: 34-46.

18. Lionaki E., Gkikas I., Daskalaki I., Ioannidi M.-K., Klapa M. I. and Tavernarakis N.* (2022) Mitochondrial protein import determines lifespan through metabolic reprogramming and de novo serine biosynthesis. **Nature Communications**, 13: 651.

19. Tavernarakis N.* (2020) Inflammatory cytokine braking of mitochondrial metabolism. **Nature Immunology**, 21: 1143-1145.

20. Zaninello M., Palikaras K., Naon D., Iwata K., Herkenne S., Quintana-Cabrera R., Semenzato M., Grespi F., Ross-Cisneros F. N., Carelli V., Sadun A. A., Tavernarakis N. and Scorrano L. (2020) Inhibition of autophagy curtails visual loss in a model of autosomal dominant optic atrophy. **Nature Communications**, 11, 4029.

21. Markaki M. and Tavernarakis N.* (2020) *Caenorhabditis elegans* as a model system for human diseases. **Current Opinion in Biotechnology**, 63:118-125.

22. Lou G., Palikaras K., Lautrup S., Scheibye-Knudsen M., Tavernarakis N. and Fang E. F. (2020) Mitophagy and neuroprotection. **Trends in Molecular Medicine**, 26: 8-20.

23. Charmpilas N. and Tavernarakis N.* (2020) Mitochondrial maturation drives germline stem cell differentiation in Caenorhabditis elegans. **Cell Death and Differentiation**, 27: 601-617.

24. Tavernarakis N.* (2019) Ageing: Neural excitation moderates lifespan (Moderation of neural excitation promotes longevity). **Nature**, 574: 338-340.

25. Fang E. F., Hou Y., Palikaras K., Adriaanse B. A., Kerr J. S., Yang B., Lautrup S., Hasan-Olive M.,

Caponio D., Dan X., Rocktäschel P., Croteau D. L., Akbari M., Greig N. H., Fladby T., Nilsen H., Cader M. Z., Mattson M. P., Tavernarakis N. and Bohr V. A. (2019) Mitophagy inhibits amyloid-β and tau pathology and reverses cognitive deficits in models of Alzheimer's disease. **Nature Neuroscience**, PMID: 30742114.

26. Papandreou M.-E. and Tavernarakis N.* (2019) Nucleophagy: from homeostasis to disease. **Cell Death and Differentiation**, PMID: 30647432.

27. Palikaras K., Lionaki E. and Tavernarakis N.* (2018) Mechanisms of mitophagy in cellular homeostasis, physiology and pathology. **Nature Cell Biology**, 20: 1013-1022.

28. Rieckher M., Markaki M., Princz A., Schumacher B. and Tavernarakis N.* (2018) Maintenance of proteostasis by P body-mediated regulation of eIF4E availability during ageing in *Caenorhabditis elegans*. **Cell Reports**, 25: 199-211.

29. Nikoletopoulou V. and Tavernarakis N.* (2018) Regulation and roles of autophagy at synapses. **Trends in Cell Biology**, 28: 646-661.

30. Pietrocola F., Castoldi F., Markaki M., Lachkar S., Chen G., Enot D. P., Durand S., Bossut N., Tong M., Malik S. A., Loos F., Dupont N., Marino G., Abdelkader N., Madeo F., Maiuri M. C., Kroemer R., Codogno P., SadoshimaJ., Tavernarakis N.* and Kroemer G. (2018) Aspirin recapitulates features of caloric restriction. **Cell Reports**, 22: 2395-2407.

31. Nikoletopoulou V., Sidiropoulou K., Kallergi E., Dalezios Y. and Tavernarakis N.* (2017) Modulation of autophagy by BDNF underlies synaptic plasticity. **Cell Metabolism**, 26: 230-242.

32. Kyriakakis E., Charmpilas N. and Tavernarakis N.* (2017) Differential adiponectin signalling couples ER stress with lipid metabolism to modulate ageing in *C. elegans*. **Scientific Reports**, 7: 5115.

33. Schiavi A., Maglioni S., Palikaras K., Shaik A., Strapazzon F., Brinkmann V., Torgovnick A., Castelein N., De Henau S., Braeckman B. P., Cecconi F., Tavernarakis N. and Ventura N. (2015) Iron starvation-induced mitophagy mediates lifespan extension upon mitochondrial stress in *C. elegans*. **Current Biology**, 25: 1810-1822.

34. Palikaras K., Lionaki E. and Tavernarakis N.* (2015) Balancing mitochondrial biogenesis and mitophagy to maintain energy metabolism homeostasis. **Cell Death and Differentiation**, 22: 1399-1401.

35. Palikaras K., Lionaki E. and Tavernarakis N.* (2015) Coordination of mitophagy and mitochondrial biogenesis during ageing in *Caenorhabditis elegans*. **Nature**, 521: 525-528.

36. Niso-Santano M., Malik S. A., Pietrocola F., Bravo-San Pedro J. M., Marino G., Cianfanelli V., Ben-Younes A., Troncoso R., Markaki M., Sica V., Izzo V., Chaba K., Bauvy C., Dupont N., Kepp O., Rockenfeller P., Wolinski H., Madeo F., Lavandero S., Codogno P., Harper F., Pierron G., Tavernarakis N., Cecconi F., Maiuri M. C., Galluzzi L. and Kroemer G. (2015) Unsaturated fatty acids induce non-canonical autophagy. **EMBO Journal**, 34: 1025-1041.

37. Nikoletopoulou V., Papandreou M.-E. and Tavernarakis N.* (2014) Autophagy in the physiology and pathology of the central nervous system. **Cell Death and Differentiation**, 22: 398-407.

38. Chondrogianni N., Georgila K., Kourtis N., Tavernarakis N. and Gonos E. S. (2015) 20S proteasome activation promotes life span extension and resistance to proteotoxicity in *Caenorhabditis elegans*. **FASEB Journal**, 29: 611-622.

39. Nikoletopoulou V., Kyriakakis E. and Tavernarakis N.* (2014) Cellular and molecular longevity pathways: The old and the new. **Trends in Endocrinology and Metabolism**, 25: 212-223.

40. Buttner S., Habernig L., Broeskamp F., Ruli D, Vogtle F. N., Vlachos M., Macchi F., Kuttner V., Carmona-Gutierrez D., Eisenberg T., Ring J., Markaki M., Taskin A. A., Benke S., Ruckenstuhl C., Braun R., Van den Haute C., Bammens T., van der Perren A., Frohlich K.-U., Winderickx J., Kroemer G., Baekelandt V., Tavernarakis N., Kovacs G. G., Dengjel J., Mesinger C., Sigrist S. J. and Madeo F. (2013) Endonuclease G mediates a-synuclein cytotoxicity during Parkinson's disease. **EMBO Journal**, 32: 3041-3054.

41. Coburn C., Allman E., Mahanti P., Benedetto A., Cabreiro F., Pincus Z., Matthijssens F., Araiz C., Mandel A., Vlachos M., Edwards S.-A., Fischer G., Davidson A., Pryor R., Stevens A., Slack F., Tavernarakis N., Braeckman B. P., Schroeder F., Nehrke K. and Gems D. (2013) Anthranilate fluorescence marks a calcium-propagated necrotic wave that promotes organismal death in *C. elegans*.

PLoS Biology, 11: e1001613.

42. Katidou M., Tavernarakis N.* and Karagogeos D. (2013) The contactin RIG-6 mediates neuronal and non-neuronal cell migration in *C. elegans*. **Developmental Biology**, 373: 184-195.

43. Büttner S., Faes L., Reichelt W., Broeskamp F., Habernig L., Benke S., Kourtis N., Ruli D., Carmona-Gutierrez D., Eisenberg T., D'hooge P., Ghillebert R., Franssens V., Harger A., Pieber T. R., Freudenberger P., Kroemer G., Sigrist S. J., Winderickx J., Callewaert G., Tavernarakis N. and Madeo M. (2013) The Ca^{2+}/Mn^{2+} ion-pump PMR1 links elevation of cytosolic Ca^{2+} levels to α-synuclein toxicity in Parkinson's disease models. **Cell Death and Differentiation**, 20: 465-477.

44. Kourtis N., Nikoletopoulou V. and Tavernarakis N.* (2012) Small heat shock proteins protect from heat stroke-associated neurodegeneration. **Nature**, 490: 213-218.

45. Troulinaki K. and Tavernarakis N.* (2012) Endocytosis and intracellular trafficking contribute to necrotic neurodegeneration in *C. elegans*. **EMBO Journal**, 31: 654-666.

46. Morselli E., Marino G., Bennetzen M., Eisenberg T., Megalou E., Schroeder S., Cabrera S., Benit P., Rustin P., Criollo A., Shen S., Kepp O., Maiuri C., Horio Y., Lopez-Otin C., Andersen J. S., Tavernarakis N., Madeo F., and Kroemer G. (2011) Spermidine and resveratrol induce autophagy by distinct pathways converging on the acetylproteome. **Journal of Cell Biology**, 192: 615-629.

47. Kourtis N. and Tavernarakis N.* (2011) Cellular stress response pathways and ageing: intricate molecular relationships. **EMBO Journal**, 30: 2520-2531.

48. Madeo F., Tavernarakis N. and Kroemer G. (2010) Can autophagy promote longevity? **Nature Cell Biology**, 12: 842-846.

49. Artal-Sanz M. and Tavernarakis N.* (2009) Prohibitin couples diapause signaling to mitochondrial energy metabolism during ageing in *Caenorhabditis elegans*. **Nature**, 461: 793-797.

50. Eisenberg T., Knauer H., Schauer A., Fussi H., Buttner S., Ruckenstuhl C., Carmona-Gutierrez D., Ring J., Schroder S., Antonacci L., Fahrenkrog B., Deszcz L., Hartl R., Magnes C., Sinner F., Schraml E., Criollo A., Megalou E., Weiskopf D., Laun P., Heeren G., Breitenbach M., Grubeck-Loebenstein B., Herker E., Frohlich K.-U., Tavernarakis N., Minois N., Kroemer G. and Madeo F. (2009) Induction of autophagy by spermidine promotes longevity. **Nature Cell Biology**, 11: 1305-1314.

51. Artal-Sanz M. and Tavernarakis N.* (2009) Prohibitin and mitochondrial biology. **Trends in Endocrinology and Metabolism**, 20: 394-401.

52. Kourtis N. and Tavernarakis N.* (2009) Autophagy and cell death in model organisms. **Cell Death and Differentiation**, 16: 21-30.

53. Voglis G. and Tavernarakis N.* (2008) A synaptic DEG/ENaC ion channel mediates learning in *C. elegans* by facilitating dopamine signalling. **EMBO Journal**, 27: 3288-3299.

54. Galluzzi L., Joza N., Tasdemir E., Maiuri M. C., Hengartner M., Abrams J. M., Tavernarakis N., Penninger J., Madeo F. and Kroemer G. (2008) No death without life: vital functions of apoptotic effectors. **Cell Death and Differentiation**, 15: 1113-1123.

55. Tasdemir E., Maiuri M. C., Galluzzi L., Vitale I., Djavaheri-Mergny M., D'Amelio M., Criollo A., Morselli E., Zhu C., Harper F., Nannmanrk U., Samara C., Pinton P., Vicencio J.-M., Carnuccio R., Moll U. M., Madeo F., Paterlini-Brechot P., Rizzuto R., Szabadkai G., Pierron G., Blomgren K., Tavernarakis N., Codogno P. Cecconi F. and Kroemer G. (2008) Regulation of autophagy by cytoplasmic p53. **Nature Cell Biology**, 10: 676-687.

56. Tavernarakis N.* (2008) Ageing and the regulation of protein synthesis: A balancing act? **Trends in Cell Biology**, 18: 228-235.

57. Samara C., Syntichaki P. and Tavernarakis N.* (2008) Autophagy is required for necrotic cell death in *Caenorhabditis elegans*. **Cell Death and Differentiation**, 15: 105-112.

58. Syntichaki P. Troulinaki K. and Tavernarakis N.* (2007) eIF4E function in somatic cells modulates ageing in *Caenorhabditis elegans*. **Nature**, 445: 922-926.

59. Wong D., Bazopoulou D., Pujol N., Tavernarakis N. and Ewbank J. J. (2007) Genome-wide investigation reveals pathogen-specific and shared signatures in the response of *Caenorhabditis elegans* to infection. **Genome Biology**, 8: R194.

60. Maiuri M. C., Le Toumelin G., Criollo A., Rain J.-C., Gautier F., Juin P., Tasdemir E., Pierron G., Troulinaki K., Tavernarakis N., Hickman J. A., Geneste O. and Kroemer G. (2007) Functional and

physical interaction between Bcl-X(L) and a BH3-like domain in Beclin-1. **EMBO Journal**, 26: 2527-2539.

61. Liolios K., Tavernarakis N., Hugenholtz P. and Kyrpides N. C. (2006) The Genomes On Line Database (GOLD) v.2: a monitor of Genome Projects world-wide. **Nucleic Acids Research**, 34: D332-D334.

62. Artal-Sanz M., Samara C., Syntichaki P. and Tavernarakis N.* (2006) Lysosomal biogenesis and function is critical for necrotic cell death in *Caenorhabditis elegans*. **The Journal of Cell Biology**, 173: 231-239.

63. Voglis G. and Tavernarakis N.* (2006) The role of synaptic ion channels in synaptic plasticity. **EMBO Reports**, 7: 1104-1110.

64. Syntichaki P., Samara C. and Tavernarakis N.* (2005) The Vacuolar H^+-ATPase mediates intracellular acidification required for neurodegeneration in *C. elegans*. **Current Biology**, 15: 1249-1254.

65. Syntichaki P. and Tavernarakis N.* (2004) Genetic models of mechanotransduction: The nematode *Caenorhabditis elegans*. **Physiological Reviews**, 84: 1097-1153.

66. Syntichaki P. and Tavernarakis N.* (2003) The biochemistry of neuronal necrosis: Rogue biology? **Nature Reviews Neuroscience**, 4: 672-684.

67. Syntichaki P., Xu K., Driscoll M. and Tavernarakis N.* (2002) Specific aspartyl and calpain proteases are required for neurodegeneration in *C. elegans*. **Nature**, 419: 939-944.

68. Syntichaki P. and Tavernarakis N.* (2002) Death by necrosis: Uncontrollable catastrophe or is there order behind the chaos? **EMBO Reports**, 3: 604-609.

69. Boutla A, Kalantidis K, Tavernarakis N., Tsagris M. and Tabler M. (2002) Induction of RNA interference in *Caenorhabditis elegans* by RNAs derived from plants exhibiting post-transcriptional gene silencing. **Nucleic Acids Research** 30: 1688-1694.

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71. Tavernarakis N.*, Everett J., Kyrpides N. and Driscoll M. (2001) Structural and functional features of the intracellular amino-termini of DEG/ENaC ion channels. **Current Biology**, 11: R205-R208.

72. Driscoll M. and Tavernarakis N. (2000) Closing in on a mammalian touch receptor. **Nature Neuroscience**, 3: 7-9.

73. Tavernarakis N., Wang S. L., Dorovkov M., Ryazanof A. and Driscoll M. (2000) Heritable and inducible interference by dsRNA. **Nature Genetics**, 24: 180-183.

74. Winnier A. R., Meir J. Y.-J., Ross J. M., Tavernarakis N., Driscoll M., Ishihara T., Katsoura I. and Miller D. M. III. (1999) Unc-4/UNC-37-dependent repression of motor neuron-specific genes controls synaptic choice in *Caenorhabditis elegans*. **Genes and Development**, 13: 2774-2786.

75. Tavernarakis N.*, Driscoll, M. and Kyrpides, N.C. (1999) The SPFH domain: a universal motif in stomatins and membrane-associated proteins implicated in regulating targeted protein turnover. **Trends in Biochemical Sciences**, 24: 425-427.

76. Harbinder S., Tavernarakis N., Herndon L. A., Kinnell M., Xu S. Q., Fire A. and Driscoll M. (1997) Genetically targeted cell disruption in *Caenorhabditis elegans*. **Proceedings of the National Academy of Sciences USA**, 94: 13128-13133.

77. Tavernarakis N. and Driscoll M. (1997) Molecular modeling of mechanotransduction in the nematode *Caenorhabditis elegans*. **Annual Reviews of Physiology**, 59: 659-689.

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SELECTED FUNDED PROJECTS

Total: Coordinated and managed more than **86** competitive International, European and National research grants, summing up to a total of more than **73.0** million Euros, including two *ERC Advanced Investigator* grants, one *ERC Proof of Concept grant*, several EU, *Marie Curie, HFSPO* and *EMBO* grants, as well as, national *HFRI* and Research Excellence (*Aristeia*) grants. The total budget for the lab exceeds **18.77** million Euros.

Year	Source/Type	Project Title	Role
2023	Marie-Sklodowska-Curie European Postdoctoral Fellowships	Unfolding the early Htt aggregates: an interdisciplinary approach for characterizing novel molecular events that impact Heat Shock Response in Huntington Disease (UnfearHD)	Principal Investigator
2023	Hellenic Foundation for Research and Innovation	Deciphering the role of glia autophagy in neurophysiology and ageing using in vivo chemo-optogenetics (GliaAge)	Coordinator
2023	Marie-Sklodowska-Curie European Postdoctoral Fellowships	Amyloid-β clearance in Alzheimer's disease: Unravelling the role of endocytic pathways of endothelial cells (ClearPath)	Principal Investigator
2022	Horizon-Europe, Widening Access, Excellence Hubs	Connected hubs in ageing: Healthy living to protect cerebrovascular function (CHAngeing)	Principal Investigator
2022	Marie-Sklodowska-Curie Doctoral Networks	Targeting Circadian Clock Dysfunction in Alzheimer's Disease (TClock4AD)	Principal Investigator
2021	ERC Coordination and Support Action	Support to the Vice-Presidents of the ERC Scientific Council	Vice-President
2020	Greek Ministry of Development, General Secretariat for Research and Innovation	National Precision/Personalized Medicine Network for Neurodegenerative Disorders	Coordinator
2020	Hellenic Foundation for Research and Innovation	Mitochondrial autophagy in neuron quality control and survival during ageing	Principal Investigator
2020	Ministry of Development and Investments, General Secretariat for Research and Innovation	Development of novel therapeutic strategies against Parkinson disease	Partner
2020	European Commission, Horizon 2020, FETOPEN	Dynamic adaptive microscopy for label-free multi-parametric imaging in biology and medicine (DynAMic)	Coordinator
2019	Greek Ministry of Education, General Secretariat for Research and Innovation	National Network for Precision Medicine: Unit in Heraklion, Crete	Coordinator
2019	EC Marie Curie, Initial Training Networks	Innovative Training Network on lifespan regulation mechanisms in health and disease	Partner
2019	EMBO short term fellowship	The role of SUMOylation in the regulation of stress responsive transcription factors in Caenorhabditis elegans	Principal Investigator
2018	General Secretariat for Research and Innovation	Encapsulation of chromophores by self-assembled hydrogels with biomedical applications	Principal Investigator
2017	ERC Proof of Concept Grant	A Drug Discovery and Target Identification Screening Platform for Age-Associated Neurodegenerative Disorders	Coordinator
2017	General Secretariat for Research and Innovation	BioImaging Research Infrastructure for Greece	Coordinator

2016	ERC Advanced Investigator Grant	MacroAutophagy and Necrotic Neurodegeneration in Ageing	Coordinator
2018	EC Marie Curie, Individual Fellowships	Identification of insulin signalling factors that delay age-related memory impairment	Principal Investigator
2014	EC Marie Curie, Intra-European Fellowships	The role of MAGE proteins in mitochondria: Novel insights for the regulation of neuronal function	Principal Investigator
2013	EC Marie Curie, Initial Training Networks	Chronic DNA damage in Ageing	Partner
2013	EC Marie Curie, Initial Training Networks	MARie CuRie AGEing Network	Partner
2012	EC Research Potential & Capacities Programme	Unlocking the innovative capacity of multidisciplinary structural biology-driven research in Crete	Partner
2012	General Secretariat for Research and Innovation, Aristeia	Necrotic cell death mechanisms and ageing-associated neurodegeneration	Principal Investigator
2012	EC Research Potential & Capacities Programme	Enhancing Scientific Excellence and Translational Research Potential in Human Diseases	Work Package Coordinator
2011	EMBO Long Term Fellowship	Investigating the role of the MAGE protein Necdin in neurons using *C. elegans* and mouse embryonic stem cell-based models	Principal Investigator
2011	EC Marie Curie, Intra-European Fellowships	Microbial contribution to age-related mortality in *Caenorhabditis elegans*	Principal Investigator
2009	ERC Advanced Investigator Grant	Molecular Basis of Neuronal Ageing	Coordinator
2007	EC Marie Curie, Transfer of Knowledge Fellowships	Advanced Cell Imaging Approaches in Developmental Biology	Partner
2007	EC Coordination and Support actions	Network of European Neuroscience Institutes	National coordinator
2007	Alexander von Humboldt Foundation	Elucidating the contribution of autophagy in necrotic cell death	Coordinator
2006	EC Marie Curie, Transfer of Knowledge Fellowships	Non-linear microscopy methods and applications	Partner
2005	EC Marie Curie, Early Stage Research Training Fellowships	Functional analysis of miRNAs during early development	Partner
2005	EC Specific Targeted Research Project	Programmed cell death across the eukaryotic kingdoms	Work Package Coordinator
2005	EC Marie Curie, Intra-European Fellowships	Mitochondrial pathways in neurodegeneration	Principal Investigator
2004	EC Marie Curie, Early Stage Research Training Fellowships	Early Stage Training in Molecular Imaging Techniques	Principal Investigator
2004	EC Specific Targeted Research Project	Development of nematode gene-tagging tools and resources	Coordinator
2003	EMBO Young Investigator programme	Molecular mechanisms of mechanotransduction	Principal Investigator