CURRICULUM VITAE

NEKTARIOS TAVERNARAKIS

Research Director

Professor of Molecular Systems Biology

Institute of Molecular Biology and Biotechnology

Foundation for Research and Technology - Hellas

Medical School

University of Crete

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SHORT BIOGRAPHY

Nektarios Tavernarakis holds a Research Director (Professor) position at the Foundation for Research and Technology, in Heraklion, Crete, Greece, heading the Neurogenetics and Ageing laboratory. He is also an elected Excellence Professor of Molecular Systems Biology at the Medical School of the University of Crete. He earned his Ph.D. degree at the University of Crete, and trained as a postdoctoral researcher at Rutgers University in New Jersey, USA. His research focuses on studies of neuronal function and dysfunction. His main interests are the molecular mechanisms of necrotic cell death in neurodegeneration and senescent decline, the molecular mechanisms of sensory transduction and integration by the nervous system, the interplay between cellular metabolism and ageing, and the development of novel genetic tools for biomedical research. For his scientific accomplishments, Nektarios Tavernarakis has received several notable scientific prizes including a European Research Council (ERC) Advanced Investigator grant award, the European Molecular Biology Organization (EMBO) Young Investigator award, the International Human Frontier in Science Program Organization (HFSPO) long-term postdoctoral fellowship, the Dr. Frederick E. G. Valergakis Post-Graduate Research Grand Program Academic achievement award of the Hellenic University Club of New York, the Bodossaki Foundation Scientific Prize for Medicine and Biology, the Alexander von Humboldt Foundation, Friedrich Wilhelm Bessel research award, the Empeirikeion Foundation Academic Excellence Prize, and the Research Excellence award of the Foundation for Research and Technology. Prof. Tavernarakis is also an elected member of EMBO. For more information, please visit: http://www.elegans.gr/.

5 Representative Publications

- Kourtis N., Nikoletopoulou V. and Tavernarakis N. (2012) Small heat shock proteins protect from heat stroke-associated neurodegeneration. **Nature**, 490: 213-218.
- Artal-Sanz M. & Tavernarakis N. (2009) Prohibitin couples diapause signaling to mitochondrial energy metabolism during ageing in *Caenorhabditis elegans*. **Nature**, 461: 793-797.
- Eisenberg T. et al. (2009) Induction of autophagy by spermidine promotes longevity. **Nature Cell Biology**, 11: 1305-1314.
- Syntichaki P. Troulinaki K. & Tavernarakis N. (2007) eIF4E function in somatic cells modulates ageing in *Caenorhabditis elegans*. **Nature**, 445: 922-926.
- Syntichaki P., Xu K., Driscoll M. & Tavernarakis N. (2002) Specific aspartyl and calpain proteases are required for neurodegeneration in *C. elegans*. **Nature**, 419: 939-944.

SCIENTIFIC & LEADERSHIP PROFILE

Nektarios Tavernarakis began working at the Institute of Molecular Biology and Biotechnology (IMBB) as an independent scientist at the level of Assistant Professor in late-2001, after postdoctoral studies in the US (for a total of **3.5** years, interrupted by a **2**-year mandatory army service). He was promoted to the level of Associate Professor in 2004 and to the level of Full Professor (Research Director), effective in mid-2008 (expedited evaluation in September 2007). In June 2010, he was elected Excellence Professor of Molecular Systems Biology at the Medical School of the University of Crete.

His laboratory at IMBB was the first to commence *C. elegans* research in Greece. Despite the difficulties associated with the introduction of a new model organism and the relative geographic isolation of Crete, his team has been able to conduct internationally competitive research of the uppermost quality. This is demonstrated by a number of indicators. Specifically:

- Through innovative studies, the group has progressed significantly beyond the current state-of-the-art, opening new vistas at the forefront of modern research in the fields of ageing, cell death and learning/memory (see for example: *Nature*, 490: 213-218; *Nature*, 461: 793-797; *Nature*, 445: 922-926; *Nature*, 419: 939-944).

- In less than **12** years of independent research in Crete, the lab has published **98** peer-reviewed papers, with many in top-tier, cross-discipline journals (in a total of **122**; including **24** publications of Dr. Tavernarakis as a PhD and postdoctoral researcher). In addition, Nektarios Tavernarakis has published **18** invited book chapters and **19** miscellaneous publications, including editorials and commentaries in international scientific journals, as well as several science popularizing articles. He has also edited **1** book on the biology of ageing, published by *Springer*, New York. Notwithstanding a relatively short publication history (first paper indexed by *Medline* in 1995), and a field of research that involves simple model organisms, his publications have thus far received more than **4,500** citations (excluding self-citations; more than **45** average citations per publication). His *h*-index is currently **39** (as of 10/4/2013; sources include *Scopus*, *ISI* and *Google Scholar*). The 10-year projection of Dr. Tavernarakis' *h*-index is **97** (as per *Nature*, 489: 201-202).

- Among several notable distinctions, Nektarios Tavernarakis is an elected Member of the *European Molecular Biology Organization* (*EMBO*; http://www.embo.org/). In addition, he has been awarded one of the first *Advanced Investigator European Research Council (ERC) Grants* (http://erc.europa.eu/), the *EMBO Young Investigator Award* (http://www.embo.org/funding-awards/young-investigators), the *Alexander von Humboldt Foundation Friedrich Wilhelm Bessel Research Award* (http://www.humboldt-foundation.de/web/bessel-award.html), the *Bodossaki Foundation Scientific Prize for Medicine and Biology*, which is one of the most prestigious scientific distinction for Greeks in Greece and abroad (http://www.bodossaki-foundation.gr/), the *Empeirikeion Foundation Academic Excellence Prize* (http://www.empirikion.gr/), and the *Research Excellence Award* of the Foundation for Research and Technology-Hellas (http://www.forth.gr/). He is also an elected *Excellence* Professor at the Medical School of the University of Crete.

- Within less than **12** years of running the lab, Nektarios Tavernarakis has attracted, coordinated and managed competitive international, European and national research grants summing up to a total of more than **11.8 million** Euros (including an *Advanced Investigator ERC* grant of **2.5 million** Euros, several EU *FP6*, *FP7*, *Marie Curie* and *EMBO* grants, as well as, one of the first national *Aristeia* grants of **0.5 million** Euros). The total budget for the lab exceeds **6.7 million** Euros).

Executive experience & Administrative activities / Scientific consulting & service

- Among multiple executive and administrative duties, Nektarios Tavernarakis has served as the *National representative of Greece* to the European Union FP7 Health programme, as a *Member of the Greek National Life Sciences Council*, as an elected *Vice-President of the Researcher Association* of the Foundation for Research and Technology, as an elected *Member of the Scientific Council* of IMBB, and as a *Member of the Executive Committee* for the European Neurosciences Institutes Network.
- Nektarios Tavernarakis has organized several international scientific conferences, including the 2nd International Conference on the Functional Genomics of Ageing in 2004, the bi-annual, pan-European (with international participation) *C. elegans* Meeting in 2006, the annual meeting of the European Neurosciences Institutes Network in 2009, the 2010 European *C. elegans* Neurobiology Meeting, and the *EMBO Workshop* on the Cell Biology of the Neuron in 2011. He is also the elected organizer of the *Gordon Conference* (*GRC*) on the Biology of Ageing in 2013.
- The Tavernarakis lab has established and runs a state-of-the-art and versatile *Multiphoton BioImaging Facility* at IMBB (currently the only one of its kind in Greece, and one of a few worldwide). The facility incorporates the latest technology in multiphoton imaging, with a mission of enabling researchers to visualize and monitor fundamental biological processes deep inside living cells and organisms. The total cost of the infrastructure (> **1.5 million** Euros) is financed by *ERC* (*NeuronAge* Advanced Investigator Grant). Dr. Tavernarakis has constructed and continuously updates a dedicated web site providing detailed information about demanding BioImaging approaches and applications supported by the facility (http://www.microscopy.gr/).
- Nektarios Tavernarakis has organized and coordinated an international consortium of scientists (*NemaGENETAG*), funded by the EU (**1.8 million** Euros), aiming to generate a genome-wide collection of transposon-tagged *C. elegans* mutants. This valuable resource is also useful to non-*C. elegans* researchers and is available worldwide (for more information on this ambitious project see http://www.elegans.gr/nemagenetag/).
- The Tavernarakis lab is one of the partners of the EU FP7 *EuroBioImaging* Consortium (http://www.eurobioimaging.eu/), and Dr. Tavernarakis is serving as the coordinator of the national initiative to develop an *ESFRI* (*European Strategy Forum on Research Infrastructures*) *BioImaging Research Infrastructure* for Greece (*BioImaging-GR*).
- Nektarios Tavernarakis is serving in several grant/fellowship evaluation panels/committees for *ERC*, *EMBO*, *EU FP7* and *NSF*, among others. In addition, he has been reviewing proposals for **30** different funding organizations, including the *HFSPO*, *NIH*, *ERC*, *NSF*, *EMBO*, *DFG*, and *MRC*. He has reviewed manuscripts for more than **85** different scientific journals, including *Nature*, *Science*, *Cell*, *PNAS*, *EMBO* journals, and *PLoS* journals. He is serving in the editorial boards of several scientific journals, including the *EMBO Reports*, *Biotechnology Journal*, *Cell Death & Disease* (*Nature Publishing Group*), and others. He has also served as the Vice-Chairman of the Scientific Advisory Board, of the *Austrian Academy of Sciences Institute for Biomedical Aging Research*, and in several evaluation and/or promotion panels for Research Institute Directors and Faculty, in Greece and abroad.
- Given that IMBB is a peripheral Institute, the Tavernarakis lab has undertaken a number of initiatives in an effort to facilitate the much-needed interaction with other scientists in Greece and

abroad, and to also strengthen the presence of Greece within the European community of Neuroscience and Cell Biology. Specifically:

- Nektarios Tavernarakis has served as coordinator of EU 6th and 7th Framework Programme consortia (*NemaGENETAG*, *TransDEATH*, others). The lab is participating in the Marie Curie *CELLIMAGE*, *FAMED*, *NONLIMBA*, *Molecular Imaging*, *CODEAGE*, and *MARRIAGE* Early Stage Training and Transfer of Knowledge projects, and the EU FP7 Regional Potential (REGPOT) consortia *TRANSPOT* and *INNOVCRETE*. Dr. Tavernarakis is also the national coordinator of the *European Neuroscience Institutes Network* (ENI-Net; http://www.eni-net.org/), and a founding member of the European Research Institute for Integrated Cellular Pathology (*ERI-ICP*; http://www.eri-icp.org/).
- The team has set up server clusters locally at IMBB that host the two main nematode online resources (*WormBase* and the *C. elegans WWW Server*; http://www.wormbase.org/ and http://elegans.som.vcu.edu/ respectively). This facility serves as a European web mirror, and provides effortless and fast services to the whole European area and regions of Asia. They have also hosted the *Genomes Online Database* (*GOLD*; http://genomesonline.org/), a World Wide Web resource for comprehensive access to information regarding complete and ongoing genome projects, as well as metagenomes and metadata, around the world. In addition, Dr. Tavernarakis has constructed and continuously updates an extensive lab web site, detailing the team's research activities and providing information about laboratory projects, as well as information on worldwide *C. elegans* research (http://www.elegans.gr/).
- As part of the effort to introduce the use of innovative Neuroscience and Cell Biology tools and models (Optogenetics, Microfluidics, Multiphoton Microscopy, etc.) to the scientific community in Greece, and to also balance the relative geographic isolation of the Institute, Dr. Tavernarakis has invited several leading researchers for seminars at IMBB (see http://www.tavernarakislab.gr/news/news.html for specifics). In this context, he has also served as the Scientific editor for the Greek edition of the book "*A Universe of Consciousness: How Matter Becomes Imagination*" by Nobel laureate *Gerald Edelman* and *Giulio Tononi* (*Crete University Press*).

International recognition / Impact / Mentoring

- Nektarios Tavernarakis is an elected Member of the *European Molecular Biology Organization* (*EMBO*). He is also a Distinguished External Senior Fellow of the Freiburg Institute for Advanced Studies (*University of Freiburg*, Germany), a Member of the Scientific Advisory Board for the Cancer and Ageing Research Center of Nice (*University of Nice, CNRS* and *INSERM*, France), the Vice-Chairman of the Scientific Advisory Board for the Institute for Biomedical Ageing Research (*Austrian Academy of Sciences*, *University of Innsbruck*, Austria), an appointed Principal Investigator of the *German Center for Neurodegenerative Diseases* (*DZNE*; Helmholtz Association, Bonn, Germany), and a Member of the *Faculty of 1000* (Biology/Medicine; section on Cell Biology, Stress & Cell Death signalling).
- Work from the Tavernarakis lab has been commented by colleagues in several top-tier scientific journals (including *Nature*, *Science STKE*, *Journal of Cell Biology* and others), has been evaluated in the *Faculty of 1000*, and has been covered repeatedly by the international, national and local press. For details please see, http://www.tavernarakislab.gr/publications/selected_publications.html and http://www.tavernarakislab.gr/news/press.html
- Dr. Tavernarakis has, to this date (10/4/2013), received **131** invitations for seminars and talks (including several *Keynote* and *Honorary* lectures), at scientific conferences and Universities/Research Institutions, worldwide. He has also given multiple lectures as an *Advanced Graduate Course instructor* for the *European Neuroscience Institute* (*ENI*) PhD programme in Berlin, Germany.
- During his tenure at IMBB, Nektarios Tavernarakis has supervised **14** Master's students, **11** Ph.D. students and **9** Postdoctoral scientists. In total, **98** students, research associates and visiting scientists have received training in the Tavernarakis lab. He has also served as a member of Ph.D. thesis committees at the *Karolinska Institute* in Sweden, at the *University of Zurich* in Switzerland, at the *Ecole Normale Superieure* in France, at the *University of Cologne* in Germany, and at the *University of Cyprus*. In addition, he has served as a member of Master's student committees at the *Delaware State University* in USA, at the *Institute for Mechanical and Industrial Engineering* in France, and at the *University of Graz* in Austria.
- Members of the Tavernarakis laboratory have succeeded in obtaining **2** *Marie Curie*, **1** *EMBO*, **2** *Bodossaki Foundation*, and **2** *GSRT* long-term *postdoctoral fellowships*; **1** *EMBO* and **1** *FEBS* short term fellowships; **7** national *doctoral fellowships* (including **2** *Manasaki* fellowships); **3** *best-poster awards* in international scientific conferences; and **15** individual conference participation *scholarships*.
- Two postdoctoral associates in the Tavernarakis lab have each been awarded *ERC Starting Grants*, to establish their own independent labs in Greece and in Spain (in 2007 and 2011 respectively). In addition, PhD students coming out of the lab have obtained highly competitive fellowships from *EMBO*, *HFSPO* and *Marie Curie* to pursue postdoctoral studies at top Universities abroad (*Columbia University*, *Max Plank Institute*, *MIT*, *NYU* and *UCSF* among others).

For more information please visit: http://www.elegans.gr/

EXTENDED CURRICULUM VITAE

Position: Research Director
Institute of Molecular Biology and Biotechnology (IMBB)
Foundation for Research and Technology - Hellas (FORTH)

Professor of Molecular Systems Biology
Medical School, Department of Basic Sciences, University of Crete

Nationality: Greek

Marital status: Married, 2 daughters

Date/Place of birth: May 2nd, 1967, Heraklion, Crete, Greece

Address: Institute of Molecular Biology and Biotechnology
Foundation for Research and Technology - Hellas
N. Plastira 100, Vassilika Vouton, P.O. Box 1385, Heraklion 70013, Crete, Greece

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Web: http://www.elegans.gr/

EDUCATION

B.Sc.: Aristotle University, Department of Biology, Thessaloniki, Greece, 20/7/1989 (Biology)

Ph.D.: University of Crete, Department of Biology and Institute of Molecular Biology and Biotechnology, Heraklion, Greece, 18/5/1995 (Molecular Genetics)

Ph.D. thesis: The yeast transcriptional activator Gcn4p: Expression and function. Heraklion, Crete, 1995

RESEARCH TRAINING

Senior thesis research: Aristotelian University, Thessaloniki, Greece, 1989 (Virology)

Pre-doctoral research: Institute of Molecular Biology and Biotechnology, Crete, Greece 1989-1991 (Immunology, Molecular Biology)

National Cancer Institute, Frederick, Maryland, USA, 1991 (Virology)

Doctoral thesis research: Institute of Molecular Biology and Biotechnology & University of Crete, Department of Biology, Crete, Greece, 1991-1995 (Molecular Genetics)

Post-doctoral research: Department of Molecular Biology and Biochemistry, Rutgers, the State University of New Jersey, USA, 1995-2001, (Neurobiology, *C. elegans* Molecular Genetics)

Career interruption On leave from Rutgers University (Nov. 1996 to Oct. 1998) due to mandatory service with the Greek Armed Forces.

PROFESSIONAL APPOINTMENTS

2010→	Professor (24/6/2010-present), University of Crete Medical School
2008→	Research Director (Level A; Professor; 16/7/2008-present), IMBB/FORTH, Greece
2004-2008	Chief Researcher (Level B; Associate Professor; 16/7/2004-15/7/2008), IMBB/FORTH, Greece
2001	Scientific Rapporteur, Genome Biology, London, UK
2001-2004	Executive Researcher (Level C; Assistant Professor; 1/7/2001-15/7/2004), IMBB/FORTH, Greece
2000	Scientific Counselor with PIR (Protein Information Resource), Georgetown University, USA.
1999-2001	Research Associate, Rutgers University, USA
1999	Scientific Counsellor, Integrated Genomics Inc., USA
1995-1996	Postdoctoral Fellow, Rutgers University, USA
1991	Visiting Scientist, National Cancer Institute, USA

DISTINCTIONS AND AWARDS

2013	Keynote speaker, Symposium “Life Long Fitness and Ageing: Can we monitor? Can we treat?” Gent, Belgium
2013	Keynote speaker, 4th Spanish *C. elegans* Meeting, Seville, Spain
2013	Keynote speaker, Zing Conference on Mitochondria, Metabolic Regulation and the Biology of Aging, Lanzarote, Spain
2012	Academic Excellence Prize, Empeirikeion Foundation, Greece
2012	Science Excellence award, General Secretariat for Research and Technology, Ministry of Education, Greece
2011	Appointed Principal Investigator of the German Center for Neurodegenerative Diseases (DZNE; Helmholtz Association, Bonn, Germany)
2010	Elected Excellence Professor, Medical School, University of Crete
2009	Elected EMBO Member (European Molecular Biology Organization)
2009	ERC Advanced Investigator Grant award (European Research Council)
2008	Keynote speaker, the 8th FEBS – IUBMB Young Scientists Forum, Loutraki, Greece
2008	Keynote speaker, 30th Conference of the Hellenic Society of Biological Sciences, Thessaloniki, Greece
2008	Appointed External Senior Research Fellow, Freiburg Institute for Advanced Studies, Freiburg University, Germany
2007	Research Excellence award, Foundation for Research and Technology-Hellas, Greece
2007	Friedrich Wilhelm Bessel research award, Alexander von Humboldt Foundation, Germany
2007	Research Support award, Empeirikeion Foundation, Greece
2006	Appointed Member, *Faculty of 1000* (Biology/Medicine; section on Cellular Death & Stress Responses)

2005	Honorary speaker, 19th Meeting of the Hellenic Society for Neuroscience, Patras, Greece
2005	Academic Prize in Medicine and Biology, Bodossaki Foundation, Greece
2002	EMBO Young Investigator award (European Molecular Biology Organization)
1996-2000	Long term postdoctoral fellowship, International Human Frontier Science Program Organization (HFSPO)
2001	Scholarship, International *C. elegans* Meeting. California, USA
2001	Scholarship, Gordon Conference on the Biology of Aging. Oxford, UK
2000-2001	Long term postdoctoral fellowship, National Institutes of Health, USA
2000	Scholarship, Gordon Conference on the Biology of Aging. California, USA
1995-1996	Long term postdoctoral fellowship, National Institutes of Health, USA
1996	Long term postdoctoral fellowship, State of New Jersey, Commission on Cancer Research fellow, USA
1996	Academic achievement award, Dr. Frederick E. G. Valergakis Post-Graduate Research Grand Program, Hellenic University Club of New York, USA
1995	Ph.D. Excellence award, University of Crete, Greece
1992-1995	Long term doctoral fellowship, National Fellowship Foundation of Greece
1991	Short term visiting fellowship, National Cancer Institute, Frederick, Maryland, USA
1990	Long term graduate studies fellowship Institute of Molecular Biology and Biotechnology, Crete, Greece,
1989	Dean's List and First Rank University Graduation Honours award, Aristotelian University, Thessaloniki, Greece
1987-1989	Dean's List and Outstanding Annual Performance award, Aristotelian University, Thessaloniki, Greece
1986-1989	Long term undergraduate studies fellowship, National Fellowship Foundation of Greece
1985	Excellence Prize, National Mathematics contest, Greek Mathematical Society

RESEARCH HIGHLIGHTS

2012 Development of experimental Heat Stroke *C. elegans* and mammalian models; identification of mechanisms protecting against heat cytotoxicity and other necrotic insults (Kourtis, Nikoletopoulou and Tavernarakis, Small heat shock proteins protect from heat stroke-associated neurodegeneration. **Nature**, 490: 213-218).

2011 Dissection of the requirement for endocytosis and intracellular trafficking in necrotic cell death. (Troulinaki and Tavernarakis, Endocytosis and intracellular trafficking contribute to necrotic neurodegeneration in *C. elegans*. **EMBO Journal**, 31: 654-666).

2009 Elucidation of the role of mitochondrial prohibitin in cellular energy homeostasis and ageing (Artal-Sanz and Tavernarakis, Prohibitin couples diapause signalling to mitochondrial energy metabolism during ageing in *Caenorhabditis elegans*. **Nature**, 461: 793-797).

2008 Isolation and characterization of DEG/ENaC ion channels, important for dopaminergic signalling and associative learning in *Caenorhabditis elegans* (Voglis and Tavernarakis, ASIC-1, a DEG/ENaC ion channel, mediates associative learning by modulating dopamine signalling in *C. elegans*. **EMBO Journal**, 27: 3288-3299).

2008 Identification of autophagy as a major contributor to necrosis and neurodegeneration (Samara, Syntichaki and Tavernarakis. Autophagy is required for necrotic cell death in *Caenorhabditis elegans*. **Cell Death and Differentiation**, 15: 105-112).

2007 Elucidation of the role of key regulators of protein synthesis in ageing (Syntichaki, Troulinaki and Tavernarakis. eIF4E function in somatic cells modulates ageing in *Caenorhabditis elegans*. **Nature**, 445: 922-926).

2006 Delineation of the involvement of lysosomal biogenesis and function in necrotic cell death (Artal-Sanz, Samara, Syntichaki and Tavernarakis. Lysosomal biogenesis and function is critical for necrotic cell death in *C. elegans*. **Journal of Cell Biology**, 173: 231–239).

2005 Demonstration of the critical role of cellular acidification in neurodegeneration and necrotic cell death (Syntichaki, Samara and Tavernarakis. The Vacuolar H^+-ATPase mediates intracellular acidification required for neurodegeneration in *C. elegans*. **Current Biology**, 15: 1249-1254).

2002 Identification of specific proteolytic enzymes that mediate cellular destruction during neurodegeneration (Syntichaki, Xu, Driscoll and Tavernarakis. Specific aspartyl and calpain proteases are required for neurodegeneration in *C. elegans*. **Nature**, 419: 939-944).

2001 Dissection of the role of intracellular calcium homeostasis in necrotic cell death (Xu, Tavernarakis and Driscoll. Necrotic cell death in *C. elegans* requires the function of calreticulin and regulators of Ca2+ release from the endoplasmic reticulum. **Neuron**, 31: 957-971).

2000 Development of a novel RNA interference (RNAi) method that allows efficient knockdown of neuronal genes (Tavernarakis, Wang, Dorovkov, Ryazanov and Driscoll. Heritable and controllable interference by dsRNA. **Nature Genetics**, 24: 180-183).

1997 Development of an effective genetic cell ablation tool (Harbinder, Tavernarakis, Herndon, Kinnell, Xu, Fire and Driscoll. Genetically targeted cell disruption in *Caenorhabditis elegans* mediated by *mec-4(d)*. **Proceedings of the National Academy of Sciences USA**, 94: 13128-13133).

1997 Identification and characterization of specific ion channel genes involved in proprioception and coordinated locomotion (Tavernarakis, Shreffler, Wang and Driscoll. *unc-8*, a member of the DEG/ENaC superfamily, encodes a subunit of a candidate stretch-gated motor neuron channel that modulates locomotion in *C. elegans*. **Neuron**, 18: 107-119).

1997 Early study that reveals the role of DNA in determining interactions between transcription factors and co-factors (Tavernarakis and Thireos. The DNA target sequence influences the dependence

of the yeast transcriptional activator Gcn4 on co-factors. **Molecular Genetics and Genomics**, 253: 766-769).

EXECUTIVE EXPERIENCE

2013 Coordinator of the national initiative for the development of an ESFRI (European Strategy Forum on Research Infrastructures) BioImaging Research Infrastructure for Greece (BioImaging-GR).

2013 Elected Organizer, Gordon Research Conference on the Biology of Aging, Il Ciocco, Italy.

2012 Executive committee member, INNOVCRETE REGPOT consortium.

2011 Member of the Greek National Life Sciences Council.

2011 National representative of Greece, European Union FP7 Health programme.

2011 Organizer, EMBO Workshop series: Cell biology of the neuron. Fodele, Greece.

2010 Organizer, European *C. elegans* Neurobiology Meeting. Fodele, Greece.

2009 Executive committee member, European Neurosciences Institutes Network (ENI-Net).

2009 Organizer, General Meeting of the European Neurosciences Institutes Network (ENI-Net). Fodele, Greece.

2008 Elected member of the Executive Board and Vice-President of the Researcher Association of the Foundation for Research and Technology – Hellas.

2008 Vice-Chairman, Scientific Advisory Board, Institute for Biomedical Aging Research, Austrian Academy of Sciences, Innsbruck, Austria.

2008 Organizer and Chairman, 2008 European *C. elegans* Meeting. Spain.

2007 Elected member of the Scientific Council, Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology - Hellas.

2007 National coordinator, European Network of Neuroscience Institutes.

2006 Organizer and Chairman, 20th Annual Meeting of the Hellenic Society for Neuroscience. Heraklion, Greece.

2006 Organizer, 2006 European *C. elegans* Meeting. Hersonissos, Greece.

2005 Assistant Coordinator of the European TransDeath 6th FP STREP consortium.

2004 Co-Organizer, 2nd International Conference on the Functional Genomics of Ageing. Heraklion, Greece.

2004 Coordinator of the European NemaGENETAG 6th FP STREP consortium.

2001 Establishment of the Ageing and Neurogenetics Laboratoty at IMBB (Foundation for Research and Technology).

ADMINISTRATIVE SERVICE / CONSULTING

Ad hoc Reviewer/Referee duties for:

- **Funding organizations**
  - Alberta Heritage Foundation for Medical Research (AHFMR, Canada)
  - American Federation for Aging Research (AFAR, USA)
  - Austrian Science Fund (FWF, Austria)
  - Biotechnology and Biological Sciences Research Council (BBSRC, UK)
  - Cancer Research (UK)
  - European Commission Framework Programmes (EC)
  - European Molecular Biology Organization (EMBO)
  - European Research Council (ERC)
  - Fondation pour la Recherche Médicale (FRM, France)
  - General Secretariat for Research and Technology (GSRT, Greece)
  - German Research Foundation (DFG, Germany)
  - Greek State Scholarships Foundation (IKY, Greece)
  - Human Frontier in Science Organization (HFSPO)
  - Hungarian Scientific Research Fund (OTKA, Hungary)
  - Israel Science Foundation (ISF, Israel)
  - Italian Association for Cancer Research (AIRC, Italy)
  - Leverhulme Trust (UK)
  - Medical Research Council (MRC, UK)
  - National Institutes of Health (NIH, USA)
  - National Research Agency (ANR, France)
  - National Science Centre (NCN, Poland)
  - National Science Foundation (NSF, USA)
  - Netherlands Organization for Scientific Research (NWO, Netherlands)
  - Neurological Foundation (New Zealand)
  - Parkinson's Disease Society (UK)
  - Portuguese Foundation for Science and Technology (FCT, Portugal)
  - Research Promotion Foundation (Cyprus)
  - Telethon Foundation (Italy)
  - University of Patras, C. Karatheodori Research Support Programme (Greece)
  - Wiener Wissenschafts-Forschungs und Technologiefonds (WWTF, Austria)

- **Scientific journals**

Ageing Research Reviews
Aging Cell
Anti-Cancer Drugs
Free Radical Research
Frontiers in Genetics
Functional and Integrative Genomics

Apoptosis
Autophagy
Biochimica et Biophysica Acta - Molecular Basis of Disease
Biochimica et Biophysica Acta - Molecular Cell Research
Biochemical Journal
Biogerontology
BioTechniques
Biotechnology Journal
Bioinformatics
BMC Cell Biology
BMC Developmental Biology
BMC Medical Education
BMC-Molecular Biology
BMC Neuroscience
Cancer Letters
Cancer Treatment Reviews
Cell
Cell Cycle
Cell Death and Differentiation
Cell Death and Disease
Cell Metabolism
Cell Research
Cellular and Molecular Life Sciences
ChemBioChem
Current Aging Science
Current Bioinformatics
Current Biology
Current Medicinal Chemistry
Current Pharmaceutical Biotechnology
Current Pharmaceutical Design
Development
Developmental Biology
Disease Markers
EMBO Journal
EMBO Reports
European Journal of Cell Biology
Experimental Cell Research
Experimental Gerontology
Expert Opinion On Drug Discovery
FASEB Journal
FEBS Journal
Genes and Development
Gene Therapy
Gerontology
Hippocampus
Hypertension
Human Molecular Genetics
International Journal of Molecular Sciences
Journal of Cell Biology
Journal of Cell Science
Journal of Gerontology
Journal of Neurochemistry
Journal of Neuroscience
Journal of Visualized Experiments
Lab on a Chip
Mechanisms of Ageing and Development
Methods
Microbial Pathogenesis
Molecular Biology Reports
Molecular Neurobiology
Nature
Nature Communications
Nature Cell Biology
Nature Methods
Nature Neuroscience
Neurobiology of Disease
Neurochemical Research
Nucleic Acids Research
Open Biology
Oxidative Medicine and Cellular Longevity
Plasmid
PLoS Genetics
PLoS One
Proceedings of National Academy of Sciences, USA
Progress in Neurobiology
Rejuvenation Research
Science
Science Translational Medicine
The Scientific World Journal
Trends in Cell Biology
Trends in Genetics
Worm

CONFERENCES CHAIRED / ORGANIZED

- Elected Organizer, Gordon Research Conference on the Biology of Aging, Il Ciocco, Italy, 2013.
- Chairman, Zing Conference on Mitochondria, Metabolic Regulation and the Biology of Aging, Lanzarote, Spain, 2013.
- Chairman, Symposium on the Mechanisms of Disease Development: New Challenges for Translational Research, Athens, Greece, 2013.
- Member of the Organizing Committee, General Meeting of the Hellenic Society of Biochemistry and Molecular Biology, Heraklion, Greece, 2012.
- Chairman, Gordon Research Conference on the Biology of Aging, Ventura, USA, 2012.
- Chairman, Society for Free Radical Research Meeting, Istanbul, Turkey, 2011.
- Member of the Scientific Committee and Chairman, 11th European Light Microscopy Initiative (ELMI) Meeting, Alexandroupolis, Greece, 2011.
- Chairman, Conference on the Molecular Genetics of Aging. Cold Spring Harbor Laboratory, USA, 2010.
- Organizer, EMBO Workshop series: Cell biology of the neuron. Fodele, Greece, 2011.
- Organizer, European C. elegans Neurobiology Meeting. Fodele, Greece, 2010.
- Organizer, General Meeting of the European Neurosciences Institutes Network (ENI-Net). Fodele, Greece, 2009.
- Chairman, 6th Conference of the Hellenic Society of Free Radicals and Oxidative Stress, Ioannina, Greece, 2008.
- Member of the Scientific Committee and Chairman, European *C. elegans* Meeting. Spain, 2008.
- Member of the Scientific Advisory Committee and Chairman, 5th General Meeting of the International Proteolysis Society. Patras, Greece, 2007.
- Chairman, 9th Annual Meeting of the Hellenic Society for Connective tissue and Matrix Biology. Athens Greece, 2007.
- Organizer and Chairman, 20th Annual Meeting of the Hellenic Society for Neuroscience. Heraklion Greece, 2006.
- Organizer, European *C. elegans* Meeting. Hersonissos, Greece, 2006.
- Chairman, Conference of the Hellenic Association of Bioscientists. Athens Greece, 2006.
- Chairman, 2nd International Greek Biotechnology Forum conference. Athens Greece, 2005.
- Chairman, FASEB Research Conference on the Biology of Calpains in Health and Disease. Tucson, USA, 2004.
- Organizer, 2nd International Conference on the Functional Genomics of Ageing. Hersonissos, Greece, 2004.
- Chairman, 11th European Cell Death Organization Euroconference on Apoptosis. Ghent, Belgium, 2003.
- Chairman, International *C. elegans* Meeting. Los Angeles, USA, 2001.

MISCELLANEOUS ADMINISTRATIVE SERVICE

Editorial duties

- Editorial Board Member, *EMBO Reports* (*Nature* Publishing Group).
- Editorial Board Member, *Cell Death & Disease* (*Nature* Publishing Group).
- Editorial Board Member, *Longevity & Healthspan* (*BioMed Central - Springer Science*).
- Editorial Board Member, *Frontiers in Genetics* (Frontiers Research Foundation).
- Editorial Board Member, *Biogerontology* (Springer).
- Editorial Board Member, *Biology Direct* (*BioMed Central)*.
- Editorial Board Member, *Gerontology* (Karger).
- Senior Editor, *Biotechnology Journal* (Wiley).
- Special issue editor on Diseases of the Brain, *Biotechnology Journal*.
- Special issue editor on Brain and Ethics, *Biotechnology Journal*.
- Book Editor, Protein metabolism and homeostasis in ageing. *Landes Bioscience*, Austin, USA.
- Scientific translator, Greek edition of the book "Genetics: From Genes to Genomes" Crete University Press, Utopia Publishing.
- Scientific editor, Crete University Press (Greek edition of the book "*A Universe of Consciousness: How Matter Becomes Imagination*" by Nobel laureate Gerald Edelman and Giulio Tononi).
- Scientific Literature Report editor for *Genome Biology*, London, UK.

Scientific evaluation / counselling committees

2014 ERC Starting Grants evaluation panel member (LS4 Physiology. Pathophysiology and Endocrinology).

2013 Faculty evaluator, The Buck Institute for Research on Aging, Novato, CA, USA.

2013 Faculty evaluator, Nanyang Technological University Medical School, Singapore.

2013 Faculty tenure/evaluation committee member, Biomedical Research Foundation of the Academy of Athens, Athens, Greece.

2013 Member of the evaluation committee for the Director position of the Institute of Biology, Medicinal Chemistry and Biotechnology, National Hellenic Research Foundation, Athens, Greece.

2012 ERC Starting Grants evaluation panel member (LS4 Physiology. Pathophysiology and Endocrinology).

2012→ Member of the Biotech/Medical & Life Extension Boards of the Lifeboat Foundation (http://lifeboat.com/).

2011 President of the evaluation committee for the Director of the Institute of Biological Research and Biotechnology, National Hellenic Research Foundation, Athens, Greece.

2011→ Member of the Greek National Life Sciences Council.

2011→ EMBO Fellowship committee member.

2010 Faculty evaluator, Delaware State University, Dover, DE, USA.

2010 Faculty tenure/evaluation committee member, Biomedical Sciences Research Center "Alexander Fleming", Athens, Greece.

2010 Scientific Advisory Board Member, Cancer and Ageing Research Center of Nice, *University of Nice, CNRS and INSERM*, Nice, France.

2009 Faculty evaluation committee member, University of Cyprus, Nicosia, Cyprus.

2009 FORTH Research Excellence award selection committee member, Foundation for Research and Technology, Heraklion, Greece.

2008 Fellow Faculty evaluator, Alfred P. Sloan Foundation, New York, NY, USA.

2008 Faculty evaluation committee member, National Centre of Scientific Research "Demokritos".

2008-2012 Vice-Chairman, Scientific Advisory Board, Institute for Biomedical Aging Research, *Austrian Academy of Sciences*, Innsbruck, Austria.

2007 Faculty selection committee member, Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology, Heraklion, Greece.

2007 Faculty selection committee secretary, Foundation for Biomedical Research, Academy of Athens, Greece.

2000 Expert Scientific Counsellor with PIR (Protein Information Resource). *Georgetown University*, USA.

1999 Scientific Counsellor/Genome Annotator for *Integrated Genomics Inc*., Chicago, USA.

Other services

- National representative of Greece, European Union Health programme.
- Member, *Faculty of 1000* (Biology/Medicine; section on Cellular Death & Stress Responses).
- Founding Member, European Research Institute for Integrated Cellular Pathology (ERI-ICP).
- Setup and maintenance of the IMBB confocal microscopy facility, user training.
- Establishment/maintenance of 3 European area mirror web servers for:
    - WormBase (http://www.wormbase.org/)
    - *C. elegans* WWW Portal (http://elegans.som.vcu.edu/)
    - Genomes OnLine Database (GOLD; http://www.genomesonline.org/)
- Construction/maintenance of a detailed Lab Web Site (http://www.elegans.gr/) and a dedicated web site for the NemaGENETAG European STREP consortium (http://elegans.imbb.forth.gr/nemagenetag).

TEACHING & MENTORING ACTIVITIES

2001→ Supervision of 14 Master's students, 9 Ph.D. students, 9 Postdoctoral scientists, one research assistant and 7 senior thesis undergraduate students. In total, 98 students, research associates and visiting scientists have received training in the lab.

2007-2012 Member of Ph.D. thesis committees at the *Karolinska Institute* in Sweden, at the *University of Zurich* in Switzerland, at the *Ecole Normale Superieure* in France, at the *University of Cologne* in Germany, and at the *University of Cyprus*.

2005-2012 Member of Master's student committees at the *Delaware State University* in USA, at the *Institute for Mechanical and Industrial Engineering* in France, and at the *University of Graz* in Austria.

2001→ Coordination and teaching of courses for four graduate programs, at the Institute of Molecular Biology and Biotechnology, the Department of Biology and the Medical School, University of Crete, Greece:

- Joint Graduate Program in Molecular Biology and Biomedicine
- Graduate Program in Neurosciences (Medical School)
- Graduate Program in Molecular Pathology (Medical School)
- Graduate Program Brain & Mind (Medical School)
- Supervision of graduate students and postdoctoral researchers visiting from abroad (detailed list follows below).

2009 Course tutor on Advanced Optical Imaging for the European Master in Molecular Imaging (EMMI) programme. Heraklion, Greece.

2008 Advanced graduate course instructor at the European Neuroscience Institute PhD Symposium. Berlin, Germany.

1995-2001 Bench supervision of undergraduate and graduate students, Rutgers University, USA.

1991-1993 Teaching Assistant, University of Crete, Greece.

1990-1995 Tutorials and bench supervision of undergraduate and graduate Biology students, Institute of Molecular Biology and Biotechnology, Heraklion, Crete, Greece.

1990- 1995 High School Biology Instructor, Heraklion, Greece.

1987-1989 Teaching Assistant, Aristotelian University of Thessaloniki, Greece.

Supervision of Master's theses

Student	Years
Stephan Andreas Angermayr	2006-2007
Dafni Bazopoulou	2003-2004
Nikolaos Charmpilas	2012-
Ioanna Daskalaki	2012-
Konstantina Georgila	2009-2010
Nikos Kourtis	2006-2007
Lucie Lambert	2006-2007
Adamantia Milonaki	2009-2010
Konstantinos Palikaras	2010-2011
Matthias Rieckher	2007-2009
Chrysa Samara	2002-2003
Kostoula Troulinaki	2003-2004
Manolis Vlachos	2008-2009
Giannis Voglis	2002-2003

Supervision of Ph.D. theses

Student	Years
Dafni Bazopoulou	2005-2009
Ilias Gkikas	2013-
Nikos Kourtis	2008-2011
Konstantinos Palikaras	2011-
Dionysia Petratou	2012-
Andrea Princz	2013-
Matthias Rieckher	2010-2013
Chrysa Samara	2004-2007
Kostoula Troulinaki	2005-2009
Giannis Voglis	2004-2007

Supervision of Postdoctoral associates

Name	Years
Artemis Andreou	2009-2012
Marta Artal-Sanz	2004-2008
Manos Kyriakakis	2012-
Eirini Lionaki	2011-
Maria Markaki	2009-2010
Evgenia Megalou	2008-
Vassiliki Nikoletopoulou	2011-
Popi Syntichaki	2001-2006
Irini Topalidou	2004

Training of scientists visiting from abroad

Name	Visiting from
Stephan Andreas Angermayr	University of Graz, Austria
Marta Artal-Sanz	University of Amsterdam, Netherlands
Maria Anna Bauer	University of Graz, Austria
Didac Carmona-Gutierrez	University of Graz, Austria
Marita Flynn	Delaware State University, USA
Mostafa Ghannad Rezaie	University of Michigan, USA
Bettina Hotzi	Eotvos Lorand University, Hungary
Elena Kypri	University of Cyprus, Cyprus
Lucie Lambert	Institute for Mechanical and Industrial Engineering, France
Lucia Micutkova	Institute for Biomedical Aging Research, Austria
Sampeter Odera	University of California, San Francisco, USA
Andrea Princz	Eotvos Lorand University, Hungary
Matthias Rieckher	University of Applied Science, Mannheim, Germany
Alfonso Schiavi	University of Rome "Tor Vergata", Italy
Sebastian Schmeisser	University of Jena, Germany
Andrea Taferner	Institute for Biomedical Aging Research, Austria

RESEARCH FUNDING

#	Source/Type	Title	Role	Duration
36	European Commission 7th Framework Programme, Coordination and support actions	InnovCrete: Unlocking the innovative capacity of multidisciplinary structural biology-driven research in Crete	Partner	2012-2015
35	European Commission Marie Curie Actions, Initial Training Networks	Chronic DNA damage in Ageing (CodeAge)	Partner	2013-2016
34	European Commission Marie Curie Actions, Initial Training Networks	MARie CuRie AGEing Network (MarriAge)	Partner	2013-2016
33	Greek Ministry of Education, General Secretariat for Research and Technology, Aristeia	Necrotic cell death mechanisms and ageing-associated neurodegeneration	Principal Investigator	2013-2016
32	Greek Ministry of Education, Research and training support programme "Thales"	The role of genetic and environmental factors in ageing and longevity	Workpackage Leader	2012-2016
31	Greek Ministry of Education, Research and training support programme "Thales"	Development and applications of mutagenesis and transgenesis technologies based on the transposable element *Minos*	Partner	2012-2016
30	European Commission 7th Framework Programme, Coordination and support actions	TransPOT: Enhancing University of Crete Medical School Scientific Excellence and Translational Research Potential in Human Diseases	Workpackage Leader	2012-2014
29	Greek Ministry of Education, General Secretariat for Research and Technology, Support of post-doctoral researchers	Understanding the role of Necdin during neural development and in the pathogenesis of Prader-Willi Syndrome	Principal Investigator	2012-2014
28	Greek Ministry of Education, General Secretariat for Research and Technology, Support of post-doctoral researchers	The role of mitochondrial import translocases in mitochondrial biogenesis and function during aging	Principal Investigator	2012-2014
27	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	2011-2013
26	European Commission Marie Curie Actions, Intra-European Fellowships	Microbial contribution to age-related mortality in *Caenorhabditis elegans*	Principal Investigator	2011-2013

25	European Science Foundation (ESF), European Cooperation in Science and Technology (COST) Action	Chemistry of non-enzymatic protein modification – modulation of protein structure and function	National Representative	2011-2014
24	European Commission 7th Framework Programme, Research Infrastructures / Capacities	European BioImaging Infrastructure (Euro-BioImaging)	Institutional Delegate	2010-2013
23	Greek Ministry of Education	Scholarships of the Greek Government to foreign citizens	Principal Investigator	2010-2013
22	Bodossakis Foundation	Neuronal synaptic plasticity in learning and memory during aging in *Caenorhabditis elegans*	Principal Investigator	2010-2012
21	NIH INBRE Faculty Investigator Seed Grant	Molecular mechanisms of learning and memory: Investigating the role of DEL-4 a member of the DEG/ENaC ion channel family in associative learning	Consultant	2009-2012
20	EMBO Short Term Fellowship	Modelling Friedreich's Ataxia in *C. elegans*: the role of autophagy in response to frataxin deficiency	Principal Investigator	2009
19	European Research Council, Advanced Investigator Award	Molecular Basis of Neuronal Ageing (NeuronAge)	Coordinator	2009-2014
18	Bodossakis Foundation	Physiological role of SUMO modification of DNA helicases in multi-cellular organisms using *C. elegans* as a model organism	Coordinator	2009-2011
17	Cyprus Foundation for Research Promotion (Programs Didactor and Ygeia)	Investigating the mechanism that regulates centrosome duplication in mammalian cells	Partner	2009-2011
16	National Institutes of Health, USA, R21 Grant	The effect of aging on sensory neurons in *C. elegans* using in vivo imaging	Consultant	2009-2010
15	University of Crete, Medical school	Manasaki Scholarships	Principal Investigator	2008
14	European Commission Marie Curie Actions, Host Fellowships for the Transfer of Knowledge	Advanced Cell Imaging Approaches in Developmental Biology	Partner	2007-2010
13	European Commission 6th Framework Programme, Coordination and Support actions	Network of European Neuroscience Institutes (ENI-Net)	National coordinator	2007-2009

12	Alexander von Humboldt Foundation, Friedrich Wilhelm Bessel Research Awards	Elucidating the contribution of autophagy in necrotic cell death	Coordinator	2007-2008
11	Empeirikeion Foundation, Research support grants	Identification and characterization of genes involved in neurodegenerative cell death	Coordinator	2007-2008
10	European Commission Marie Curie Actions, Host Fellowships for the Transfer of Knowledge	Non-linear microscopy methods and applications	Partner	2006-2010
9	European Commission Marie Curie Actions, Host fellowships for Early Stage Research Training	Functional analysis of miRNAs during early development	Partner	2005-2009
8	Greek Ministry of Education, Pythagoras II	Molecular mechanisms of skin carcinogenesis	Partner	2005-2008
7	European Commission 6th Framework Programme, Specific Targeted Research Project	Programmed cell death across the eukaryotic kingdoms (TransDeath)	Workpackage Leader	2005-2008
6	European Commission Marie Curie Actions, Intra-European Fellowships	Mitochondrial pathways in neurodegeneration	Principal Investigator	2005-2007
5	European Commission Marie Curie Actions, Host fellowships for Early Stage Research Training	Early Stage Training in Molecular Imaging Techniques	Principal Investigator	2004-2008
4	European Commission 6th Framework Programme, Specific Targeted Research Project	Development of nematode gene-tagging tools and resources (NemaGeneTag)	Coordinator	2004-2007
3	European Molecular Biology Organization, EMBO Young Investigator programme	Molecular mechanisms of mechanotransduction	Principal Investigator	2003-2006
2	Greek Ministry of Education, Irakleitos doctoral fellowships	Genetic dissection of the molecular mechanisms of cell degeneration	Coordinator	2003-2006
1	Institute of Molecular Biology and Biotechnology, Internal funding	*Caenorhabditis elegans* molecular genetics laboratory	Principal Investigator	2001-2009

PATENTS

3. Driscoll M. and **Tavernarakis N**. (2001) Compositions and methods for gene silencing. United States Patent Application: 20050229272.
2. Ryazanov A. G., **Tavernarakis N.**, Driscoll M., Pavur K. S., and Nefsky B. (2000) Compositions and methods for extending life span. Patent Application: WO2000US09209.
1. **Tavernarakis N**., Hatzidakis G. and Krambovitis E. (1996) Rapid amplification and detection of nucleic acids. Patent No.: 5569582.

PUBLICATIONS

(*Corresponding author)

Books

- Protein Metabolism and Homeostasis in Aging (2010) Edited by **Nektarios Tavernarakis**. Springer-Verlag New York Inc., Series: *Advances in Experimental Medicine and Biology*, New York, NY, USA.

Peer-reviewed papers

122. Nikoletopoulou V., Markaki M., Palikaras K. and **Tavernarakis N.*** (2013) Crosstalk between apoptosis, necrosis and autophagy. **Biochimica et Biophysica Acta-Molecular Cell Research**, in press.
121. 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**, in press.
120. Büttner S., Broeskamp F., Habernig L., Ruli D, Vlachos M., Macchi F., Carmona-Gutierrez D., Eisenberg T., Ring J., Markaki M., Minois M., Ruckenstuhl C., Bammens T., Braun R., Van den Haute C., Fröhlich K.-U., Winderickx J., Kroemer G., Baekelandt V., **Tavernarakis N**., Kovacs G. G., Sigrist S. J. and Madeo F. (2013) Endonuclease G mediates α-synuclein cytotoxicity during Parkinson's disease. **EMBO Journal**, in press.
119. Kypri E., Cristodoulou A., Maimaris Y., Lethan M., Markaki M., Lyssandrou C., Christoforou M., Lederer C. W., **Tavernarakis N.**, Geimer S., Pedersen L. B. and Santama N. (2013) The nucleotide binding proteins Nubp1 and Nubp2 are negative regulators of ciliogenesis. **Cellular and Molecular Life Sciences**, in press.
118. Lionaki E. and **Tavernarakis N.*** (2013) Oxidative stress and mitochondrial protein quality control in ageing. **Journal of Proteomics**, in press.
117. Markaki M. and **Tavernarakis N.*** (2013) Metabolic control by TOR and autophagy during ageing. **Gerontology**, in press.
116. Nikoletopoulou V. and **Tavernarakis N.*** (2013) Mitochondrial biogenesis and dynamics in neurodegeneration: A causative relationship. **Neurochemical Research**, in press.
115. Mersha M., Formisano R., McDonald R., Pandey P., **Tavernarakis N.** and Harbinder S. (2013) The *C. elegans* D1-like dopamine receptor DOP-2 mediates behavioral plasticity through the Gα subunit GPA-14. **Behavioral and Brain Functions**, 9: 16.

114. Büttner S., Faes L., Reichelt W., Broeskamp F., Habernig L., Benke S., Kourtis N., Ruli D., D'hooge P., Ghillebert R., Eisenberg T., Carmona-Gutierrez D., 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.

113 Lionaki E. and **Tavernarakis N.*** (2013) High throughput and longitudinal analysis of ageing and senescent decline in *Caenorhabditis elegans*. **Methods in Molecular Biology**, 965: 485-500.

112. Lionaki E. and **Tavernarakis N.*** (2013) Assessing ageing and senescent decline in *Caenorhabditis elegans*: Cohort survival analysis. **Methods in Molecular Biology**, 965: 473-484.

111. Lionaki E., Markaki M. and **Tavernarakis N.*** (2013) Autophagy and ageing: Insights from invertebrate model organisms. **Ageing Research Reviews**, 12: 413-428.

110. Schiavi A., Torgovnick A., Kell A., Megalou E. V., Castelain N., Guccini I., Marzocchetta L., Gelino S., Hansen M., Malisan F., Condo I., Bei R., Rea S. L., Braeckman B., **Tavernarakis N.**, Testi R. and Ventura N. (2013) Mitochondrial control of *Caenorhabditis elegans* aging via hypoxia-like induction of autophagy. **Experimental Gerontology**, 48:191-201.

109. Bauer M. A., Carmona-Gutiérrez D., Ruckenstuhl C., Reisenbichler A., Megalou E. V., Eisenberg T., Magnes C., Jungwirth H., Sinner F. M., Pieber T. R., Fröhlich K.-U., Kroemer K., **Tavernarakis N.** and Madeo F. (2013) Spermidine promotes mating and fertilization efficiency in model organisms. **Cell Cycle**, 12: 346-352.

108. 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.

107. Palikaras K. and **Tavernarakis N.*** (2012) Mitophagy in neurodegeneration and ageing. **Frontiers in Genetics**, 3: 297.

106. Kourtis N., Nikoletopoulou V. and **Tavernarakis N.*** (2012) The heat shock response pathway and organelle-mediated ionstasis: A universal protective axis against neurodegeneration. **Aging**, 4: 856-858.

105. Nikoletopoulou V. and **Tavernarakis N.*** (2012) Calcium homeostasis in ageing neurons. **Frontiers in Genetics**, 3: 200.

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

103. Troulinaki K. and **Tavernarakis N.*** (2012) Necrotic cell death and neurodegeneration: The involvement of endocytosis and intracellular trafficking. **Worm**, 1: 176-181.

102. Klionsky D., … Markaki M., … **Tavernarakis N.**, et al. (2012) Guidelines for the use and interpretation of assays for monitoring autophagy. **Autophagy**, 8: 445-544.

101. Nikoletopoulou V. and **Tavernarakis N.*** (2012). Pluripotent Cell differentiation: A versatile tool to study neuron function and dysfunction. **Biotechnology Journal**, 7: 1156-1168.

100. Anisimov V. N., Bartke A., Barzilai N., Batin M. A., Blagosklonny M. V., Brown-Borg H., Budovskaya Y., Campisi J., Friguet B., Fraifeld V., Franceschi C., Gems D., Gladyshev V., Gorbunova V., Gudkov A. V., Kennedy B., Konovalenko M., Kraemer B., Moskalev A., Petropoulos I., Pasyukova E., Rattan S., Rogina B., Seluanov A., Shaposhnikov M., Shmookler Reis R., **Tavernarakis N.**, Vijg J., Yashin A. and Zimniak P. (2012) The Second International Conference "Genetics of Aging and Longevity". **Aging**, 4: 305-317.

99. Soulitzis N., Neofytou E., Psarrou M., Anagnostis A., **Tavernarakis N.**, Siafakas N. and Tzortzaki E. G. (2012) Downregulation of lung mitochondrial prohibitin in COPD. **Respiratory Medicine**, 106: 954-961.

98. Zhu S., Dong D., Birk U. J., Rieckher M., **Tavernarakis N.**, Qu X., Liang J., Tian J. and Ripoll J. (2012) Automated motion correction for *in vivo* Optical Projection Tomography. **IEEE Transactions on Medical Imaging**, 31: 1358-1371.

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

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

95. Rieckher M., Birk U. J., Meyer H., Ripoll J. and **Tavernarakis N.*** (2011) Microscopic optical projection tomography *in vivo*. **PLoS One**, 6: e18963.

94. Tserevelakis G. J., Filippidis, G., Megalou E., Fotakis C. and **Tavernarakis N.** (2011) Cell tracking in live *Caenorhabditis elegans* embryos via third harmonic generation imaging microscopy measurements. **Journal of Biomedical Optics**, 16: 046019/1-6.

93. Krasagakis K., Metaxari M., Zervou M., Stathopoulos E. N., Eberle J., Kanitakis J., Georgoulias V., Krüger-Krasagakis S., **Tavernarakis N.** and Tosca A. D. (2011) Identification of the M541L sequence variation of the transmembrane *Kit* domain in Merkel cell carcinoma. **Anticancer Research**, 31: 807-811.

92. Marino G., Morselli E., Bennetzen M. V., Eisenberg T., Megalou E., Schroeder S., Cabrera S., Benit P., Rustin P., Criollo A., Kepp O., Galluzzi L., Shen S., Malik S. A., Maiuri M. C., Horio Y., Lopez-Otin C., Andersen J. S., **Tavernarakis N.**, Madeo F. and Kroemer G. (2011) Longevity-relevant regulation of autophagy at the level of the acetylproteome. **Autophagy**, 7: 647-649.

91. Markaki M. and **Tavernarakis N.*** (2011) The role of autophagy in genetic pathways influencing ageing. **Biogerontology**, 12: 377-386.

90. 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., López-Otín 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.

89. Krasagakis K., Fragiadaki I., Metaxari M., Krüger-Krasagakis S., Tzanakakis G. N., Stathopoulos E. N., Eberle J., **Tavernarakis N.**, and Tosca A. D. (2011) *Kit* receptor activation by autocrine and paracrine stem cell factor stimulates growth of merkel cell carcinoma *in vitro*. **Journal of Cellular Physiology**, 226: 1099-1109.

88. Artal-Sanz M. and **Tavernarakis N.*** (2010) Opposing function of mitochondrial prohibitin in aging. **Aging**, 2: 1004-1011.

87. Markaki M. and **Tavernarakis N.*** (2010) Modelling human diseases in *Caenorhabditis elegans*. **Biotechnology Journal**, 5: 1261-1276.

86. Gessmann R., Kourtis N., Petratos K. and **Tavernarakis N.*** (2010) Molecular modelling of mechanosensory ion channel structural and functional features. **PLoS One**, 5: e12814.

85. Birk U. J., Rieckher M., Konstantinides N., Darrell A., Sarasa-Renedo A., Meyer H., **Tavernarakis N.** and Ripoll J. (2010) Correction for specimen movement and rotation errors for *in vivo* optical projection tomography. **Biomedical Optics Express**, 1: 87-96.

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

83. Tserevelakis G. J., Filippidis G., Krmpot A. J., Vlachos M., Fotakis C. and **Tavernarakis N.** (2010) Imaging *Caenorhabditis elegans* embryogenesis by Third-Harmonic Generation microscopy. **Micron**, 41: 444-447.

82. Vlachos M. and **Tavernarakis N.*** (2010) Non-apoptotic cell death in *Caenorhabditis elegans*. **Developmental Dynamics**, 239: 1337-1351.

81. Eisenberg T., Carmona-Gutierrez D., Büttner S., **Tavernarakis N.** and Madeo F. (2010) Necrosis in yeast. **Apoptosis**, 15: 257-268.

80. Morselli E., Maiuri M. C., Markaki M., Megalou E., Pasparaki A., Palikaras K., Galluzzi L., Criollo A., Malik S. A., Madeo F., **Tavernarakis N.*** and Kroemer G. (2010) Caloric restriction and resveratrol prolong longevity via the sirtuin-1 mediated induction of autophagy. **Cell Death and Disease**, 1: e10; doi:10.1038/cddis.2009.8.

79. Morselli E., Maiuri M. C., Markaki M., Megalou E., Pasparaki A., Palikaras K., Criollo A., Galluzzi L., Malik S. A., Vitale I., Michaud M., Madeo F., **Tavernarakis N.*** and Kroemer G. (2010) The life span-prolonging effect of sirtuin-1 is mediated by autophagy. **Autophagy**, 6: 186-188.

78. Liolios K., Chen A., Mavromatis K., Tavernarakis N., Hugenholtz P., Markowitz V. and Kyrpides N. C. (2010) The Genomes On Line Database (GOLD) in 2009: status of genomic and metagenomic projects and their associated metadata. **Nucleic Acids Research**, 38: D346-D354.

77. Morselli E., Galluzzi L., Kepp O., Criollo A., Maiuri M. C., **Tavernarakis N.***, Madeo F., and Kroemer G. (2009) Autophagy mediates pharmacological lifespan extension. **Aging**, 1: 961-970.

76. Andreou A. M. and **Tavernarakis N.*** (2009) SUMOylation and cell signalling. **Biotechnology Journal**, 4: 1740-1752.

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

74. Eisenberg T., Knauer H., Schauer A., Fussi H., Büttner S., Ruckenstuhl C., Carmona-Gutierrez D., Ring J., Schröder 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., Fröhlich 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.

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

72. Filippidis G., Gualda E. J., Mari M., Troulinaki K., Fotakis C. and **Tavernarakis N.** (2009) *In vivo* imaging of cell morphology and cellular processes in *Caenorhabditis elegans*, using non-linear phenomena. **Micron**, 40: 876-880.

71. Filippidis G., Troulinaki K., Fotakis C. and **Tavernarakis N.** (2009) *In vivo* polarization-dependant Second and Third harmonic generation imaging of *Caenorhabditis elegans* pharyngeal muscles. **Laser Physics**, 19: 1475-1479.

70. Rieckher M., Kourtis N., Pasparaki A. and **Tavernarakis N.*** (2009) Transgenesis in *Caenorhabditis elegans*. **Methods in Molecular Biology**, 561: 21-39.

69. Bazopoulou D. and **Tavernarakis N.*** (2009) The NemaGENETAG initiative: Large scale transposon insertion gene-tagging in *Caenorhabditis elegans*. **Genetica**, 137: 39-46.

68. Kourtis N. and **Tavernarakis N.*** (2009) Cell-specific monitoring of protein synthesis *in vivo*. **PLOS One**, 4: e4547.

67. Megalou E. and **Tavernarakis N.*** (2009) Autophagy in *Caenorhabditis elegans*. **Biochimica et Biophysica Acta-Molecular Cell Research**, 1793: 1444-1451.

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

65. **Tavernarakis N.*** (2008) Editorial: Brain Matters. **Biotechnology Journal**, 3: 1459.

64. 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.
63. Gualda E. J., Filippidis G., Mari M., Voglis G., Vlachos M., Fotakis C. and **Tavernarakis N.** (2008) *In vivo* imaging of neurodegeneration in *Caenorhabditis elegans* by third harmonic generation microscopy. **Journal of Microscopy**, 232: 270-275.
62. **Tavernarakis N.***, Pasparaki A., Tasdemir E., Maiuri M. C. and Kroemer G. (2008) The effects of p53 on whole organism longevity are mediated by autophagy. **Autophagy**, 4: 810-814.
61. Tasdemir E., Maiuri M. C., Morselli E., Criollo A., D'Amelio M., Djavaheri-Mergny M., Cecconi F., **Tavernarakis N.** and Kroemer G. (2008) A dual role of p53 in the control of autophagy. **Autophagy**, 4: 810-814.
60. 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.
59. Artal-Sanz M. and **Tavernarakis N.*** (2008) Mechanisms of ageing and energy metabolism in *Caenorhabditis elegans*. **IUBMB Life**, 60: 315-322.
58. **Tavernarakis N.*** (2008) Ageing and the regulation of protein synthesis: A balancing act? **Trends in Cell Biology**, 18: 228-235.
57. Galluzzi L., Tasdemir E., Maiuri 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.
56. Samara C. and **Tavernarakis N.*** (2008) Autophagy and cell death in *Caenorhabditis elegans*. **Current Pharmaceutical Design**, 14: 97-115.
55. Gualda E. J., Filippidis G., Voglis G., Mari M., Fotakis C. and **Tavernarakis N.** (2008) *In vivo* imaging of cellular structures in *Caenorhabditis elegans* by combined TPEF, SHG and THG microscopy. **Journal of Microscopy**, 229: 141-150.
54. Syntichaki P. Troulinaki K. and **Tavernarakis N.*** (2007) Protein synthesis: a novel determinant of ageing in *C. elegans*. **Annals of the New York Academy of Sciences**, 1119: 289-295.
53. Liolios K., Mavromatis K., **Tavernarakis N.** and Kyrpides N. (2007) The Genomes On Line Database (GOLD) in 2007: status of genomic and metagenomic projects and their associated metadata. **Nucleic Acids Research**, 36: D475-479.
52. Tsibidis G. D. and **Tavernarakis N.** (2007) Nemo: A computational tool for analyzing nematode locomotion. **BMC Neuroscience**, 8: 86-93.
51. Samara C., Syntichaki P. and **Tavernarakis N.*** (2007) Autophagy is required for necrotic cell death in *Caenorhabditis elegans*. **Cell Death and Differentiation**, 15: 105-112.
50. 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 *C. elegans* to infection. **Genome Biology**, 8: R194.
49. **Tavernarakis N.*** (2007) Protein synthesis and ageing: eIF4E and the soma vs. germline distinction. **Cell Cycle**, 6: 1168-1171.
48. **Tavernarakis N.*** (2007) Editorial: Diseases of the brain—neuronal function and dysfunction. **Biotechnology Journal**, 2: 517-518.
47. 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-XL and a BH3-like domain in Beclin-1. **EMBO Journal**, 26: 2527-2539.

46. **Tavernarakis N.*** (2007) Cardiomyocyte necrosis: alternative mechanisms, effective interventions. **Biochimica et Biophysica Acta-Molecular Cell Research**, 1773: 480-482.
45. Syntichaki P. Troulinaki K. and **Tavernarakis N.*** (2007) eIF4E function in somatic cells modulates ageing in *Caenorhabditis elegans*. **Nature**, 445: 922-926.
44. Kourtis N. and **Tavernarakis N.*** (2007) Non-developmentally programmed cell death in *Caenorhabditis elegans*. **Seminars in Cancer Biology**, 17: 122-133.
43. Artal-Sanz M., de Jong L. and **Tavernarakis N.*** (2006) *Caenorhabditis elegans*: a versatile platform for drug discovery. **Biotechnology Journal**, 1: 1405-1418.
42. Lochnit G., Grabitzki J., Henkel B., **Tavernarakis N.** and Geyer G. (2006) First identification of a phosphorylcholine-substituted protein from *Caenorhabditis elegans*. Isolation and characterization of the aspartyl protease ASP-6. **Biological Chemistry**, 387: 1487-1493.
41. Voglis G. and **Tavernarakis N.*** (2006) The role of synaptic ion channels in synaptic plasticity. **EMBO Reports**, 7: 1104-1110.
40. Syntichaki P. and **Tavernarakis N.*** (2006) Signalling pathways regulating protein synthesis during ageing. **Experimental Gerontology**, 41: 1020-1025.
39. Artal-Sanz M., Samara C., Syntichaki P. and **Tavernarakis N.*** (2006) Lysosomal biogenesis and function is critical for necrotic cell death in *C. elegans*. **Journal of Cell Biology**, 173: 231-239.
38. Koukidou M., Klinakis A., Reboulakis C., Zagoraiou L., **Tavernarakis N.**, Livadaras I., Economopoulos E. and Savakis C. (2006) Germline transformation of the olive fly *Bactrocera oleae* using a universal transgenesis marker. **Insect Molecular Biology**, 15: 95-103.
37. 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.
36. 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.
35. Artal-Sanz M. and **Tavernarakis N.*** (2005) Proteolytic mechanisms in necrotic cell death and neurodegeneration. **FEBS Letters**, 579: 3287-3296.
34. Filippidis G., Kouloumentas C., Kapsokalyvas D., Voglis G., **Tavernarakis N.** and Papazoglou T. G. (2005) Imaging of *Caenorhabditis elegans* samples and sub-cellular localization of new generation photosensitizers for photodynamic therapy, using non-linear microscopy. **Journal of Physics D: Applied Physics**, 38: 2625-2632.
33. Filippidis G., Kouloumentas C., Voglis G., Zaxaropoulou F., Papazoglou T. G. and **Tavernarakis N.** (2005) Imaging of *Caenorhabditis elegans* neurons by Second Harmonic Generation and Two-Photon Excitation Fluorescence. **Journal of Biomedical Optics**, 10: 024015/1-8.
32. Troulinaki K. and **Tavernarakis N.*** (2005) Neurodegenerative Conditions Associated with Ageing: A Molecular Interplay? **Mechanisms in Ageing and Development**, 126: 23-33.
31. Syntichaki P. and **Tavernarakis N.*** (2004) Genetic models of mechanotransduction: The nematode *Caenorhabditis elegans*. **Physiological Reviews**, 84: 1097-1153.
30. Samara C. and **Tavernarakis N.*** (2003) Calcium-dependent and aspartyl proteases in neurodegeneration and ageing in *C. elegans*. **Ageing Research Reviews**, 2: 451-471.
29. Syntichaki P. and **Tavernarakis N.*** (2003) The biochemistry of neuronal necrosis: Rogue biology? **Nature Reviews Neuroscience**, 4: 672-684.

28. 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.
27. Gonos E. S., Agrafiotis D., Dondas A. S., Efthimiopoulos D., Galaris D., Karamanos N. K., Kletsas D., Koletas E., Panayotou G., Sekeri-Pataryas K. E, Simoes D., Sourlingas T. G., Stathakos D., Stratigos A. J., **Tavernarakis N.**, Trougatos G. and Vynios D. H. (2002) Ageing research in Greece. **Experimental Gerontology**, 37: 735-747.
26. Syntichaki P. and **Tavernarakis N.*** (2002) Death by necrosis: Uncontrollable catastrophe or is there order behind the chaos? **EMBO Reports**, 3: 604-609.
25. 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 posttranscriptional gene silencing. **Nucleic Acids Research**, 30: 1688-1694.
24. **Tavernarakis N.** and Driscoll M. (2002) Caloric restriction, protein synthesis and lifespan: a role for protein turnover? **Mechanisms in Aging and Development**, 123: 215-229.
23. **Tavernarakis N.*** and Driscoll M. (2001) Mechanotransduction in *Caenorhabditis elegans*: The role of DEG/ENaC ion channels. **Cell Biochemistry and Biophysics**, 35: 1-18.
22. Xu K., **Tavernarakis N.** and Driscoll M. (2001) Necrotic cell death in *C. elegans* requires the function of calreticulin and regulators of Ca2+ release from the endoplasmic reticulum. **Neuron**, 31: 957-971.
21. **Tavernarakis N.*** and Driscoll M. (2001) Degenerins: At the core of the metazoan mechanotransducer? **Annals of the New York Academy of Sciences**, 940: 28-41.
20. **Tavernarakis N.***, Everett J., Kyrpides N. and Driscoll M. (2001) Features of the intracellular amino-termini of DEG/ENaC ion Channels. **Current Biology**, 11: R205-R208.
19. Driscoll M. and **Tavernarakis N.** (2000) Closing in on a mammalian touch receptor. **Nature Neuroscience**, 3, 7-9.
18. **Tavernarakis N.***, and Driscoll M. (2000) *Caenorhabditis elegans* degenerins and vertebrate ENaC ion channels contain an extracellular domain related to venom neurotoxins. **Journal of Neurogenetics**, 13: 257-264.
17. Benos P., **Tavernarakis N.**, Brogna S., Thireos G. and Savakis C. (2000) Acquisition of a potential marker for insect transformation: isolation of a novel alcohol dehydrogenase gene from *Bactrocera oleae* by functional complementation in yeast. **Molecular Genetics and Genomics**, 263: 90-95.
16. **Tavernarakis N**., Wang S. L., Dorovkov M., Ryazanov A. and Driscoll M. (2000) Heritable and inducible interference by dsRNA. **Nature Genetics**, 24: 180-183.
15. 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.
14. **Tavernarakis N.***, Driscoll M. and. Kyrpides N. C. (1999) The SPFH domain: a universal motif in membrane associated proteins implicated in regulating targeted protein turnover. **Trends in Biochemical Sciences**, 24: 425-427.
13. 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* mediated by *mec-4(d).* **Proceedings of the National Academy of Sciences USA**, 94: 13128-13133.
12. Driscoll M. and **Tavernarakis N.** (1997) Molecules that mediate touch transduction in the nematode *Caenorhabditis elegans.* **Gravitational and Space Biology Bulletin**, 10: 33-42.

11. **Tavernarakis N.*** and Thireos G. (1997) The DNA target sequence influences the dependence of the yeast transcriptional activator Gcn4 on co-factors. **Molecular Genetics and Genomics**, 253: 766-769.
10. **Tavernarakis N.** and Driscoll M. (1997) Molecular modeling of mechanotransduction in the nematode *Caenorhabditis elegans.* **Annual Reviews of Physiology**, 59: 659-689.
9. **Tavernarakis N.**, Shreffler W., Wang S. L. and Driscoll M. (1997) *unc-8,* a member of the DEG/ENaC superfamily, encodes a subunit of a candidate stretch-gated motor neuron channel that modulates locomotion in *C. elegans.* **Neuron**, 18: 107-119.
8. **Tavernarakis N.***, Alexandraki D., Liodis P., Tzamarias D. and Thireos G. (1996) Gene overexpression reveals alternative mechanisms to induce *GCN4* mRNA translation. **Gene**, 179: 271-277.
7. **Tavernarakis N.*** and Thireos G. (1996) Genetic evidence for functional specificity of the yeast Gcn2 kinase. **Molecular Genetics and Genomics**, 251: 613-618.
6. Katsoulou C., Tzermia M., **Tavernarakis N.** and Alexandraki, D. (1996) Sequence analysis of a 40.7 Kb segment from the left arm of yeast chromosome X revealed 14 known genes and 13 new open reading frames including homologues to genes clustered on the right arm of chromosome XI. **Yeast**, 12: 787-797.
5. **Tavernarakis N.**, Hatzidakis G., Vlatakis G. and Krambovitis E. (1995) Amplification and non-isotopic detection of specific DNA sequences in a single microtiter well. **Serodiagnosis and Immunotherapy in Infectious Disease**, 7: 202-206.
4. Kyrpides N., **Tavernarakis N.**, Papamatheakis J. and Thireos G.(1995) A transient *GCN4* mRNA destabilization follows *GCN4* translational de-repression. **Journal of Biological Chemistry**, 270: 17317-17320.
   Equal contribution by Kyrpides N. and **Tavernarakis N.**
3. **Tavernarakis N.*** and Thireos G. (1995) Transcriptional interference mediated by *GCN4* overexpression reveals multiple mechanisms for the mediation of transcriptional activation. **Molecular Genetics and Genomics**, 247: 571-578.
2. **Tavernarakis N.** and Thireos G. (1995) A recombinatorial method useful for cloning dominant alleles in *Saccharomyces cerevisiae.* **Nucleic Acids Research**, 23: 537-538.
1. **Tavernarakis N.**, Triantafyllaki A., Hatzakis E. and Krambovitis E. (1993) Detection of anti-Rev antibodies in human immunodeficiency virus type-1 patients using a recombinant 18kD Rev protein. **Serodiagnosis and Immunotherapy in Infectious Disease**, 5: 117-121.

INVITED BOOK CHAPTERS

18. **Tavernarakis N.*** and Driscoll M. (2013) Cell/Neuron degeneration. In **Brenner's Encyclopedia of Genetics** (2nd edition; Stanley Maloy and Kelly Hughes, editors), Academic Press, San Diego, USA.
17. Nikoletopoulou V. and **Tavernarakis N.*** (2013) Necrotic cell death in model organisms (*C. elegans*). In **Necrotic Cell Death** (Han-Ming Shen and Peter Vandenabeele, editors) Springer/Humana Press, New York, USA.
16. **Tavernarakis N.*** (2013) Protein synthesis. In the **Molecular and Cellular Biology of Aging** (Jan Vijg, Judith Campisi and Gordon Lithgow, editors), Jones and Bartlett Publishers, Inc., Sudbury, USA.

15. Palikaras K. and **Tavernarakis N.*** (2013) *Caenorhabditis elegans* (Nematode). In **Brenner's Encyclopedia of Genetics** (2nd edition; Stanley Maloy and Kelly Hughes, editors), Academic Press, San Diego, USA.
14. Palikaras K. and **Tavernarakis N.*** (2012) Multiphoton fluorescence light microscopy. In **eLS: Citable reviews in the life sciences** (Jose M. Valpuesta, editor), Wiley-Blackwell, London, UK.
13. Andreou A.M. and **Tavernarakis N.*** (2010) Roles for sumo modification during senescence. In **Protein metabolism and homeostasis in ageing** (Nektarios Tavernarakis, editor), Landes Bioscience and Springer, New York, USA.
12. Artal-Sanz M., Troulinaki K. and **Tavernarakis N.*** (2009) Aging: Invertebrate Models of Normal Brain Aging. In the **Handbook of The Neuroscience of Aging** (Patrick R. Hof and Charles V. Mobbs, editors), Academic Press, Elsevier Inc., Oxford, UK.
11. Artal-Sanz M., Troulinaki K. and **Tavernarakis N.*** (2009) Aging: Invertebrate Models of Normal Brain Aging. In the **Encyclopedia of Neuroscience** (Larry Squire, editor), Academic Press, Elsevier Inc., Oxford, UK.
10. Artal-Sanz M. and **Tavernarakis N.*** (2008) Common aging mechanisms: Energy metabolism and longevity in *Caenorhabditis elegans*. In **Life Span Extension: from single cell organism to man** (Christian Sell, editor), Humana Press, Springer, New York, USA.
9. Troulinaki K. and **Tavernarakis N.*** (2008) Protein synthesis and ageing. In **Protein Biosynthesis: New Research** (Frank Columbus, editor), Nova Science Publishers, Inc. New York, USA.
8. Rieckher M. and **Tavernarakis N.*** (2008) Caspase-independent cell death mechanisms in simple animal models. In **Acute Neuronal Injury: The Role of Excitotoxic Programmed Cell Death Mechanisms** (Denson G. Fujikawa, editor) Springer Verlag, New York, USA.
7. Gualda E. J., Filippidis G., Voglis G., Mari M., Fotakis C. and **Tavernarakis N.** (2007) *In vivo* imaging of anatomical features of the nematode *Caenorhabditis elegans* using non-linear (TPEF-SHG-THG) microscopy. In **Confocal, Multiphoton and Nonlinear Microscopic Imaging III** (Tony Wilson and Ammasi Periasamy, editors), SPIE Press, Bellingham, USA.
6. Kourtis N. and **Tavernarakis N.*** (2007) Mechanosensory transduction in the nematode *Caenorhabditis elegans*. In **Mechanosensitivity in Cells and Tissues: Mechanosensitive Ion Channels** (Andre Kamkin and Irina Kiseleva, editors) Springer Verlag, Heidelberg, Germany.
5. Bazopoulou D. and **Tavernarakis N.*** (2007) Mechanosensitive ion channels in *Caenorhabditis elegans*. In **Current Topics in Membranes** (Owen Hamill, Sidney Simon and Dale Benos, editors), Elsevier Inc., Academic Press, San Diego, USA.
4. Bazopoulou M. D., Voglis G. and **Tavernarakis N.*** (2007) The role of DEG/ENaC ion channels in sensory mechanotransduction. In **Molecular Sensors for Cardiovascular Homeostasis** (Donna Wang, editor), Springer Science Academic Publishers, New York, USA.
3. Voglis G. and **Tavernarakis N.*** (2005) Mechanotransduction in the nematode *Caenorhabditis elegans*. In **Mechanosensitivity in Cells and Tissues** (Andre Kamkin and Irina Kiseleva, editors), Academic Book Russian International Publishers, Inc. Russia.
2. Bazopoulou M. D., Troulinaki K. and **Tavernarakis N.*** (2004) Protein Turnover and ageing. In **Focus on Protein Research** (John W. Robinson, editor), Nova Science Publishers, Inc. New York, USA.
1. **Tavernarakis N.*** and Driscoll M. (2001) Cell/Neuron degeneration. In **The Encyclopedia of Genetics** (Sydney Brenner and Jeffrey Miller, editors), Academic Press, New York, USA.

MISCELLANEOUS PUBLICATIONS

19. Aviles-Espinosa R., Tserevelakis G. J., C. O. Santos S. I., Filippidis G., Krmpot A. J., Vlachos M., **Tavernarakis N.**, Brodschelm A., Kaenders W., Artigas D. and Loza-Alvarez P., (2010) Cell division stage in *C. elegans* imaged using third harmonic generation microscopy. In **Biomedical Optics, OSA Technical Digest** (Optical Society of America, ms. BTuD78).
18. Andreou A.M. and **Tavernarakis N.*** (2009) Preface: Ageing and the importance of protein metabolism and homeostasis. In **Protein metabolism and homeostasis in ageing** (Nektarios Tavernarakis, editor), Landes Bioscience and Springer, New York, USA.
17. **Tavernarakis N.*** (2008) Preface to the Greek Edition. In **A Universe Of Consciousness: How Matter Becomes Imagination** (Gerald Edelman and Giulio Tononi), Crete University Press, Heraklion Greece.
16 Filippidis G., Gualda E. J., Mari M., Voglis G., Vlachos M., Fotakis C. and **Tavernarakis N.** (2008) *In vivo* imaging of cellular structures and processes in *Caenorhabditis elegans*, using non-linear microscopy. **IEEE Proceedings on Imaging Systems and Techniques**.
15. **Tavernarakis N.*** (2008) Foreword. In **Mechanosensitivity and the Nervous System** (Andre Kamkin and Irina Kiseleva, editors) Springer Verlag, Heidelberg, Germany.
14. **Tavernarakis N.*** (2008) Protein synthesis and ageing: a balancing act? **The FEBS Journal**, 275 S1: 32, IL3E-5.
13. Kourtis N. and **Tavernarakis N.*** (2008) Monitoring protein synthesis by fluorescence recovery after photobleaching (FRAP) *in vivo*. **Nature Protocols**, DOI: 10.1038/nprot.2008.84.
12. **Tavernarakis N.*** (2007) Revealing the secrets of ageing. **Research and Technology**, Periodical of the General Secretariat for Research and Technology, 23: 35-37.
11. **Tavernarakis N.*** (2006) Proteolytic pathways in necrotic cell death. **BioTech International**, 16: 1-4.
10. **Tavernarakis N.***, Syntichaki P., Samara C. and Troulinaki K. (2005) Biochemical pathways mediating necrotic cell death and neurodegeneration in *Caenorhabditis elegans*. **The FEBS Journal**, 272 S1: 178, B4-004.
9. **Tavernarakis N.***, Syntichaki P., Samara C. and Voglis G. (2004) Of Men and Worms II: The role of *C. elegans* in modern biomedical research. The Greek quarterly **BIO**, 9: 42-49.
8. **Tavernarakis N.***, Syntichaki P., Samara C. and Voglis G. (2004) Of Men and Worms I: The biology of the nematode *C. elegans*. The Greek quarterly **BIO**, 8: 30-34.
7. **Tavernarakis N.*** (2003) Death by misadventure. **New Scientist**, 2382: 30-33.
6. **Tavernarakis N.*** (2002) RNAi is antagonized by A→I hyperediting. **Genome Biology**, 3(3): reports0013.
5. **Tavernarakis N.*** (2002) Extending the lifespan of long-lived mice. **Genome Biology**, 3(3): reports0012.
4. **Tavernarakis N.*** (2001) Identification of neuropeptide-like protein gene families in *Caenorhabditis elegans* and other species. **Genome Biology**, 3(2): reports0010.
3. **Tavernarakis N.***, Xu K. and Driscoll M. (2001) Execution of necrotic-like cell death in *Caenorhabditis elegans* requires Cathepsin D activity. **Scientific World Journal**, 1: 139-141.
2. **Tavernarakis N.**, Hatzidakis G. and Krambovitis E. (1997) Rapid amplification and detection of nucleic acids. **Biotechnology Advances**, 15: 471.
1. **Tavernarakis N.** and Thireos G. (1994) A dominant mutation affects the activation potential of certain transcription activators in yeast. **Journal of Cellular Biochemistry**, 56 S18C: 38, L247.

INVITED & SPONSORED LECTURES

131. Coordination of mitophagy and the mitochondrial retrograde response during ageing. (2013) MRC Clinical Sciences Centre, Imperial College, London, UK.
130. Non-linear microscopy and optical projection tomography. (2013) 19th International *C. elegans* Meeting, Los Angeles, USA.
129. Ageing and Protein Homeostasis. (2013) INsPiRE Workshop on ageing and cancer cell biology: Convergent and divergent molecular mechanisms, Athens, Greece.
128. Intrinsic mechanisms protecting against neurodegeneration: The heat stroke paradigm (2013) Symposium of the Foundation for Research and Technology—Hellas, Heraklion, Greece.
127. Research - Innovation - Entrepreneurship: Problems and Opportunities. (2013) 2nd "Greece Innovates!" Applied Research & Innovation Competition Forum, Heraklion, Crete, Greece.
126. Heat stroke and neurodegeneration: The protective role of the heat shock response. (2013) 9th Aegean Meeting on Neurological Therapeutics, Heraklion, Greece.
125. Coordination of mitophagy and the mitochondrial retrograde response during ageing. (2013) 3rd MULTIMOD Workshop, Chalkidiki, Greece.
124. Neurodegeneration in heat stroke: The protective role of the heat shock response. (2013) Cologne Excellence Cluster on Cellular Stress Responses in Aging-Associated Diseases (CECAD), Cologne, Germany.
123. Coordination of mitophagy and the mitochondrial retrograde response during ageing. (2013) Leibniz Research Institute for Environmental Medicine, Düsseldorf, Germany.
122. Coordination of mitophagy and the mitochondrial retrograde response during ageing. (2013) Symposium on Life Long Fitness and Ageing, Gent, Belgium.
121. Necrosis in heat stroke: The protective role of the heat shock response. (2013) Cold Spring Harbor Asia conference on the Mechanisms and Functions of Non-apoptotic Cell Death, Suzhou, Shanghai, China.
120. Coordination of mitophagy and the mitochondrial retrograde response in ageing. (2013) Instituto de Biomedicina de Sevilla, Seville, Spain.
119. Heat stroke and neurodegeneration: Protective hormesis via induction of the heat shock response. (2013) 4th Spanish Worm Meeting, Carmona (Seville), Spain.
118. Ageing and Protein Homeostasis. (2013) University of Athens, Athens, Greece.
117. Coordination of mitophagy and the mitochondrial retrograde response during ageing. (2013) Zing Conference on Mitochondria, metabolic regulation and the Biology of Aging, Lanzarote, Spain.
116. Protein Homeostasis during Ageing. (2012) Henry Stewart Talks, London, UK (http://www.hstalks.com/).
115. Mitochondrial metabolism and ageing: Lessons from *C. elegans*. (2012) Symposium on Successful Aging, Innsbruck, Austria.
114. The role of autophagy in cell death and longevity. (2012) The FENS Forum of Neuroscience, Barcelona, Spain.
113. Ageing Mechanisms and Mitigants: Autophagy, a mediator of longevity? (2012) British Society for Research on Ageing Meeting, Birmingham, UK.
112. The role of endocytosis and intracellular trafficking in necrotic neurodegeneration. (2012) 8th Aegean Meeting on Neurological Therapeutics, Heraklion, Greece.

111. Mitochondrial energy metabolism and protein homeostasis in ageing. (2012) 2nd International Conference on the Genetics of Aging and Longevity, Moscow, Russia.
110. *Caenorhabditis elegans* models of neurodegeneration and necrotic cell death. (2012) Workshop on animal models of neurodegeneration and behavioural tests for assessment of motor and cognitive function, Hellenic Pasteur Institute, Athens, Greece.
109. Heat stroke-induced neurodegeneration: The protective role of the heat shock response. (2011) Bogazici University, Istanbul, Turkey.
108. Microscopic optical projection tomography *in vivo*. (2011) Symposium/Workshop on New Imaging Technologies in Health and Disease, Athens, Greece.
107. Molecular mechanisms of skin DNA damage and repair in ageing. (2011) 2nd National Symposium of Dermatology Research, Heraklion, Greece.
106. Heat stroke-induced cell death mechanisms. (2011) 19th European Cell Death Organization Euroconference on Apoptosis, Stockholm, Sweden.
105. Animal models for oxidative stress research. (2011) Society for Free Radical Research Meeting, Istanbul, Turkey.
104. Oxidative stress and mitochondrial protein quality control in ageing. (2011) Society for Free Radical Research Meeting, Istanbul, Turkey.
103. Molecular mechanisms underlying age-associated neurodegeneration. (2011) Conference on Ageing and Neurodegeneration, Bonn, Germany.
102. Autophagy and ageing. (2011) Cluster in Biomedicine Summer School on active and healthy ageing, Trieste, Italy.
101. Advanced light microscopy applications: Microscopic optical projection tomography *in vivo*. (2011) 11th European Light Microscopy Initiative (ELMI) Meeting. Alexandroupolis, Greece.
100. Ageing research and the search for the fountain of youth. (2011) Open Doors Day at the Foundation for Research and Technology-Hellas, Heraklion, Greece.
99. Heat stroke-induced neurodegeneration mechanisms. (2011) 7th Aegean Meeting on Neurologic Therapeutics, Heraklion, Greece.
98. Heat stroke, heat shock and neurodegeneration. (2011) Karolinska Institute, Stockholm, Sweden.
97 Modern ageing research: In search of the fountain of youth. (2011) Museum of Medicine, Heraklion, Greece.
96. Genetic dissection of necrotic vs. apoptotic cell death in *Caenorhabditis elegans*. COST Action meeting: Life or Death of Protozoan Parasites, Brussels, Belgium.
95. Heat stroke, heat shock and necrosis. (2011) Biomedical Research Foundation of the Academy of Athens, Greece.
94. The evolution of ageing. (2011) Darwin days at the Museum of Natural History, Heraklion, Greece.
93. Mitochondrial energy metabolism and protein homeostasis in *C. elegans* ageing. (2010) Institute of Medical Technology, University of Tampere, Finland.
92. Dissecting the mechanisms of neurodegeneration and necrosis in *C. elegans*. (2010) EMBO Members Workshop, Heidelberg, Germany.
91. Autophagy, ageing and longevity. (2010) 7th European Congress of Biogerontology, Palermo, Italy.
90. Principles of Fluorescence and Confocal Microscopy. (2010) European Master in Molecular Imaging (EMMI) Programme. Heraklion, Greece.

89. Energy metabolism and protein homeostasis in ageing. (2010) 5th meeting on the Molecular Genetics of Aging, Cold Spring Harbor Laboratory, USA.
88. Cellular energy metabolism and ageing in *Caenorhabditis elegans*. (2010) Annual meeting of the Austrian Association of Molecular Life Sciences and Biotechnology, Vienna, Austria.
87. Prohibitin, mitochondrial energy metabolism and ageing in *C. elegans*. (2010) Gordon Research Conference on the Biology of Aging, Les Diablerets, Switzerland.
86. My scientific autobiography and life in science. (2010) EMBO Fellows Meeting, EMBL Heidelberg, Germany.
85 Mitochondrial metabolism and ageing. German Centre for Neurodegenerative Diseases. (2010) Bohn, Germany.
84. The mitochondrial prohibitin complex and the regulation of metabolism during ageing. (2010) Cluster of Excellence for Aging Research, Symposium on *C. elegans*, Cologne, Germany.
83. How to use a model organism to study ageing and protein quality control. (2010) FEBS/European Society for Free Radical Research, summer school on protein maintenance and turnover in aging and diseases, Spetses, Greece.
82. Necrotic cell death and the protective role of the heat shock response. (2010) International Cell Death Society Symposium, Side, Turkey.
81. Mitochondrial prohibitin and the regulation of metabolism during ageing. (2010) Max Delbrueck Center for Molecular Medicine (MDC), Berlin, Germany.
80. Necrosis and the heat shock response. (2010) Conference on integrated cellular pathology: death, danger and degeneration, Pasteur Institute, Paris, France.
79. A new class of gerontogenes involved in regulating mitochondrial biogenesis and function. (2010) Workshop on Mitochondria and senescence, Telomeres, and DNA damage, Brussels, Belgium.
78. In search of the neuronal correlates of consciousness and memory. (2010) Department of Psychology, University of Crete, Rethimno, Greece.
77. Prohibitin, mitochondrial metabolism and ageing. (2009) Department of Biology, Aristotelian University, Thessaloniki, Greece.
76. Insulin signalling, mitochondrial metabolism and protein modification. (2009) Workshop on oxidative stress, protein damage and protein maintenance, Brussels, Belgium.
75. What has *Caenorhabditis elegans* taught us about necrotic cell death and neurodegeneration? (2009) U848-INSERM, Institut Gustave-Roussy, Villejuif, France.
74. Understanding ageing: Stress, genes and the environment. (2009) Euroscience Mediterranean Event 2009, Athens Greece.
73. Stress, mitochondria and ageing (2009) 9th Symposium of the Foundation for Research and Technology—Hellas, Patras, Greece.
72. The genetics of non-apoptotic cell death in *Caenorhabditis elegans*. (2009) Symposium on the Evolution of Programmed Cell Death in infection and immunity, Würzburg, Germany.
71. Cell Cycle/Apoptosis. (2009) Bodossaki Seminar Series, Athens, Greece.
70. Principles of advanced optical imaging: Fluorescence and Confocal Microscopy. (2009) European Master in Molecular Imaging (EMMI) Programme. Heraklion, Greece.
69. Aging research in *Caenorhabditis elegans*. (2009) Lifespan Young Investigator Workshop, Tartu, Estonia.

68. Dissecting the molecular mechanisms of neurodegeneration in simple animal models. (2009) Fifth Aegean meeting on Neurologic Therapeutics. Agia Pelagia, Greece.
67. In search of the neuronal correlates of consciousness. (2009) Evgenidion Foundation, Athens, Greece.
66. Autophagy in neurodegeneration and necrotic cell death. (2009) University of Graz, Austria.
65. The role of autophagy in neurodegeneration and necrotic cell death. & The role of acid sensing ion channels in dopamine neurotransmission and behavioural plasticity. (2009) Umea University, Sweden.
64. Dopaminergic signalling and associative learning in *C. elegans*. (2009) Karolinska Institute, Stockholm, Sweden.
63. Modulation of dopaminergic signalling and associative learning in *C. elegans*. (2009) Instituto de Neurociencias de Alicante, Spain.
62. Genetic and environmental factors in ageing. (2008) Conference of the Hellenic Association for Biosciences, Thessaloniki, Greece.
61. The role of autophagy in neurodegeneration and necrotic cell death. (2008) National Hellenic Research Foundation, Athens, Greece.
60. Cellular energy metabolism and ageing in *Caenorhabditis elegans*. (2008) 3rd International Conference on the Molecular and Cellular Biology of Helminth Parasites: New Technologies, New Opportunities. Hydra, Greece.
59. The role of mitochondrial energy metabolism in *C. elegans* diapause and ageing. (2008) 6th Conference of the Hellenic Society of Free Radicals and Oxidative Stress, Ioannina, Greece.
58. Animal models for aging and age-associated diseases. (2008) European Summit on Age Related Diseases, Wroclaw, Poland.
57. Protein synthesis and ageing: a balancing act? (2008) 33rd FEBS Congress/11th IUBMB Conference, Athens, Greece.
56. Mitochondrial energy metabolism during diapause and ageing in *C. elegans*. (2008) 8th FEBS Young Scientist Forum, Loutraki, Greece.
55. The role protein synthesis in ageing and senescent decline. (2008) Institute for Biomedical Aging Research, Innsbruck, Austria.
54. Ageing and the cellular energy equilibrium. (2008) 30th Conference of the Hellenic Society of Biological Sciences, Thessaloniki, Greece.
53. The art of scientific writing and grantsmanship. (2008) European Neuroscience Institute PhD Symposium, Berlin, Germany.
52. DEG/ENaC ion channels, dopaminergic signalling and associative learning in *C. elegans*. (2008) European Neuroscience Network meeting, Rome, Italy.
51. An acid sensing ion channel mediates associative learning by modulating dopamine signalling in *C. elegans*. (2008) INSERM U789, Ecole Normale Superieure, Paris, France.
50. Ageing and regulation of protein synthesis: A balancing act? (2007) University of Zurich, Zurich, Switzerland.
49. Autophagy and necrotic cell death in *Caenorhabditis elegans*. (2007) 15th European Cell Death Organization Euroconference on Apoptosis, St. Bernardin, Slovenia.
48. Introduction to Inflammation and Cell Death Cascades. (2007) 5th General Meeting of the International Proteolysis Society, Patras, Greece.

47. Life Sciences: Always an interdisciplinary endeavor (2007) 8th Symposium of the Foundation for Research and Technology—Hellas, Rethymnon, Greece.
46. Regulation of protein synthesis and ageing: A balancing act? (2007) 1st Scientific retreat, Graduate program on the "Molecular Basis of Human Disease", Heraklion, Greece.
45. The DEG/ENaC family of ion channels: Diverse roles in sensory transduction and integration. (2007) The Onassis Foundation Lectures in Biology, Heraklion, Greece.
44. Protein synthesis and ageing: eIF4E function in somatic cells modulates ageing in *C. elegans*. (2007) National Centre of Scientific Research "DEMOKRITOS", Athens Greece.
43. The role of DEG/ENaC ion channels in mechanotransduction. (2007) International Society of Nephrology, World Congress of Nephrology, Rio de Janeiro, Brazil.
42. Deciphering the molecular mechanisms of learning and memory: Specific synaptic ion channels and the modulation of neuronal communication. (2006) Bodossakis lectures in Biology, Thessaloniki, Greece.
41. Modelling necrotic cell death and neurodegeneration in *C. elegans*: Insights and implications. (2006) Symposium on protein transport, synaptic function, and neurodegenerative disease. European Neuroscience Institute, Goettingen, Germany.
40. Advancements in biological imaging: Modern methods and applications. (2006) Conference of the Hellenic Association of Bioscientists, Athens Greece.
39. Genetic dissection of the molecular mechanisms mediating necrotic cell death in *Caenorhabditis elegans*. (2005) Hellenic Society for Biochemistry and Molecular Biology Athens Greece.
38. Molecular mechanisms of neurodegeneration. (2005) NCSR Demokritos, Athens Greece.
37. Modern fluorescence microscopy methods and applications. International workshop on modern Light Microscopy techniques in Biomedical Research. (2005) Heraklion Greece.
36. *Caenorhabditis elegans*: A "designer" model organism to investigate Biology. (2005) University of Cyprus, Nicosia, Cyprus.
35. Using simple tools to understand necrotic cell death and neurodegeneration. (2005) 19th Meeting of the Hellenic Society for Neuroscience, Patras, Greece.
34. Molecular pathways mediating neurodegeneration. (2005) Rinshoken, the Tokyo Metropolitan Institute of Medical Science, Tokyo Japan.
33. The role of Calpains in neurodegeneration. (2005) Japan Neuroscience Congress, Yokohama, Japan.
32. Molecular pathways mediating neurodegeneration. (2005) RIKEN Brain Science Institute, Tokyo Japan.
31. Requirement for specific DEG/ENaC ion channels in associative learning and memory in *C. elegans*. (2005) Blankenese Conference 2005, Hamburg Germany.
30. Molecular targets and strategies for combating neurodegeneration. 2nd International Greek Biotechnology Forum conference, Athens Greece.
29. Regulatory proteases in necrotic cell death. (2005) 30th FEBS Congress /9th IUBMB Conference, Budapest, Hungary.
28. Molecular mechanisms of necrosis. (2005) The Onassis Foundation Lectures in Biology, Heraklion, Greece.
27. Scientific Prize lecture. (2005) The Bodossaki Foundation, Athens, Greece.

26. Molecular pathways mediating neurodegeneration in *C. elegans* (2005) University of Zurich, Zurich, Switzerland.
25. Modelling neurodegeneration in *C. elegans*: Insights and implications. (2004) National and Kapodistrian University of Athens, Greece.
24. Proteolytic pathways mediating neurodegeneration in *C. elegans*. (2004) Institute of Biochemistry, Justus-Liebig-University, Giessen, Germany.
23. Seeing is believing: Modern fluorescence microscopy technologies and tools. International workshop on modern Light Microscopy techniques in Biomedical Research. (2004) Heraklion Greece.
22. Calcium and protease cascades in neurodegeneration. (2004) FASEB Conference on the Biology of Calpains in Health and Disease. Tucson, USA.
21. Nematode Gene-Tagging Tools and Resources. (2004) Interlaken, Switzerland.
20. Pathways in macromolecule metabolism and ageing: Proteolytic mechanisms that mediate neurodegeneration in *C. elegans*. (2004) 2nd International Conference on the Functional Genomics of Ageing. Hersonissos, Greece.
19. Molecular mechanisms of neurodegeneration in *C. elegans*. (2003) MRC Toxicology Unit, Leicester, UK.
18. Calpains and Aspartyl proteases in neurodegeneration. (2003) 3rd General Meeting of the International Proteolysis Society. Nagoya, Japan.
17. Proteolysis and pH in necrotic cell death. 11th European Cell Death Organization Euroconference on Apoptosis. (2003) Ghent, Belgium.
16. Rogue Biology: The genetics of neurodegeneration in *C. elegans*. (2003) SFB 596 Symposium. Bavaria, Germany.
15. New roles for degenerin ion channels in *C. elegans*. (2003) 3rd EMBO Young Investigator meeting. EMBL-Heidelberg, Germany.
14. Mechanisms of necrotic cell death. (2003) University of Geneva Medical School, Switzerland.
13. The genetics of neurodegeneration in *C. elegans*. (2003) Pasteur Institute France.
12. Electrophysiology with laser probes? Second Harmonic Generation microscopy in *C. elegans*. (2003) EMBO symposium on Fluorescence Microscopy. EMBL-Heidelberg, Germany.
11. Proteolytic mechanisms in necrotic cell death. (2003) Max Plank Institute for Neurobiology, Germany.
10. Necrosis: Rogue biology? (2003) Hellenic Pasteur Institute, Greece.
9. Shedding light on mechanotransduction. (2002) 5th Symposium of the Foundation for Research and Technology-Hellas, Metsovo, Greece.
8. Degenerins: At the core of the nematode mechanotransducer? (2002) Institut de Pharmacologie et de Toxicologie, Université de Lausanne, Switzerland.
7. Molecular mechanisms underlying the effects of caloric restriction on protein synthesis and aging in *C. elegans*. (2001) Gordon conference on the Biology of Aging: From Genetics to Physiology, UK.
6. Aging in *C. elegans*: "Let's talk of graves, of worms, and epitaphs" (2000) IMBB Seminar Series, Greece.
5. The complete nematode DEG/ENaC family. (2000) 3rd International Symposium on the ENaC/Degenerins Gene Superfamily: From Molecules to Diseases. Switzerland.

4. Genetic disruption of the translational regulator, Elongation Factor-2 kinase, confers a Clk phenotype and extends lifespan in *Caenorhabditis elegans*. (2000) Gordon conference on The Biology of Aging, USA.
3. Genes, Neurons and Behavior: Lessons from the *Caenorhabditis elegans* Genome. (1999) Integrated Genomics Inc. Seminar Series, USA.
2. A dominant mutation affects the activation potential of certain transcription activators in yeast. (1994) Keystone Symposia, USA.
1. Translational regulation by eIF2 phosphorylation in yeast. (1992) International NATO/FEBS Advanced Science Institute on Post-transcriptional control of gene expression, Spetses, Greece.

PUBLICATIONS IN REFEREED INTERNATIONAL CONFERENCE PROCEEDINGS

Oral presentations

41. Tserevelakis G., Megalou E. V., Filippidis G., Petanidou B., Fotakis C. and Tavernarakis N. (2013) Imaging lipid depositions with third-harmonic generation microscopy. 19th International *C. elegans* Conference. Los Angeles, USA.
40. Kourtis N., Nikoletopoulou V. and Tavernarakis N. (2012) Small heat shock proteins protect from heat stroke-associated neurodegeneration. EMBO Conference Series: *C. elegans* Neurobiology. Heidelberg, Germany.
39. Kourtis N. and Tavernarakis N. (2011) Small Heat Shock Proteins Protect Against Neurodegeneration. EMBO Workshop on the cell biology of the neuron, Fodele, Greece.
38. Schiavi A., Torgovnick A., Megalou E. V., Tavernarakis N., Testi R. and Ventura N. (2010) Frataxin Suppression Reduces Fat Accumulation and induces autophagy in a p53-dependent manner, independently of a caloric restriction-like response. 2nd European *C. elegans* Neurobiology Meeting, Fodele, Greece.
37. Kourtis N. and Tavernarakis N. (2010) Small Heat Shock Proteins Protect Against Necrotic Cell Death. 2nd European *C. elegans* Neurobiology Meeting, Fodele, Greece.
36. Katidou M., Tavernarakis N. and Karagogeos D. (2010) The Contactin RIG-6 Mediates Axon Outgrowth and Navigation in *C. elegans*. 2nd European *C. elegans* Neurobiology Meeting, Fodele, Greece.
35. Rieckher M., Birk U., Ripoll J. and Tavernarakis N. (2010) *In vivo* Optical Projection Tomography (OPT) imaging in *Caenorhabditis elegans*. 2nd European *C. elegans* Neurobiology Meeting, Fodele, Greece.
34. Andreou A., Kalemaki K. and Tavernarakis N. (2010) Ageing, protein synthesis and the sumoylation pathway. East Asia *C. elegans* Meeting, Tokyo, Japan.
33. Megalou E., Voglis G. and Tavernarakis N. (2009) An acid-sensing ion channel mediates associative learning in *C. elegans* by modulating dopamine signaling. European Conference on Nematode Neurobiology, Cambridge, UK.
32. Kourtis N. and Tavernarakis N. (2009) Cell-specific monitoring of protein synthesis *in vivo*. EMBO practical course; FRET, FLIM, FCS, FRAP and 3D imaging; Applications to cell and developmental biology, Biopolis, Singapore.
31. Filippidis G., Gualda E. J., Mari M., Voglis G., Vlachos M., Fotakis C. and Tavernarakis N. (2008) *In vivo* imaging of cellular structures and processes in *Caenorhabditis elegans*, using non-linear microscopy. IEEE International Workshop on Imaging Systems and Techniques. Chania, Greece.

30. Bazopoulou D. and Tavernarakis N. (2008) Characterization of PQN-21, a prion-like protein involved in learning and memory in *C. elegans*. European *C. elegans*, Meeting, Carmona, Spain.
29. Artal-Sanz M. and Tavernarakis N. (2008) Prohibitin couples diapause signaling to mitochondrial energy metabolism during ageing in *C. elegans*. European *C. elegans*, Meeting, Carmona, Spain.
28. Troulinaki K. and Tavernarakis N. (2008) The role of intracellular trafficking and endocytosis in *C. elegans* neurodegeneration. European *C. elegans*, Meeting, Carmona, Spain.
27. Rieckher M., and Tavernarakis N. (2008) Screening for novel mediators of necrotic cell death in *Caenorhabditis elegans*. European Neuroscience Institutes workshop, Berlin, Germany.
26. Bazopoulou D. and Tavernarakis N. (2008) PQN-21, a prion-like protein involved in learning and memory in *C. elegans*. European Neuroscience Institutes workshop, Berlin, Germany.
25. Troulinaki K. and Tavernarakis N. (2008) Endocytosis and intracellular trafficking in *C. elegans* neurodegeneration. European Neuroscience Institutes workshop, Berlin, Germany.
24. Kourtis N. and Tavernarakis N. (2008) A non-radioactive method for monitoring protein synthesis rates in *Caenorhabditis elegans*. European Neuroscience Institutes workshop, Berlin, Germany.
23. Robert V., Bazopoulou D., Yohann Durverger Y., Gallagher J., Bessereau J.L., Ewbank J., Geysen J., Kuwabara P., Segalat L. and Tavernarakis N. (2007) Heterologous transposition in *C. elegans*: development of new genetics and genomic tools and resources. 16th International *C. elegans* Conference. Los Angeles, USA.
22. Syntichaki P., Troulinaki K. and Tavernarakis N. (2007) Protein synthesis is a novel determinant of ageing in *C. elegans*. 12th Congress of the International Association of Biomedical Gerontology, Spetses, Greece.
21. Artal-Sanz M. and Tavernarakis N. (2006) The mitochondrial prohibitin complex modulates ageing in *C. elegans*. European *C. elegans*, Meeting, Hersonissos, Greece.
20. Gallagher J., Bessereau J.L., Ewbank J., Geysen J., Kuwabara P., Segalat L. and Tavernarakis N. (2006) Nematode Gene-Tagging Tools and Resources. European *C. elegans*, Meeting, Hersonissos, Greece.
19. Samara C., Syntichaki P. and Tavernarakis N. (2006) Autophagy contributes to necrotic cell death in *C. elegans*. European *C. elegans*, Meeting, Hersonissos, Greece.
18. Voglis G. and Tavernarakis N. (2006) ASIC-1 is required for associative learning and memory in *C. elegans*. European *C. elegans*, Meeting, Hersonissos, Greece.
17. Gallagher J., Bessereau J.L., Ewbank J., Geysen J., Kuwabara P., Segalat L. and Tavernarakis N. (2005) Nematode Gene-Tagging Tools and Resources. 15th International *C. elegans* Conference. Los Angeles, USA.
16. Samara C., Syntichaki P., Troulinaki K. and Tavernarakis N. (2005) Macroautophagy contributes to neurodegeneration in *C. elegans*. 15th International *C. elegans* Conference. Los Angeles, USA.
15. Samara C., Syntichaki P., Troulinaki K. and Tavernarakis N. (2004) Macroautophagy and neurodegeneration in *C. elegans*. 12th European Cell Death Organization Euroconference on Apoptosis. Chania, Greece.
14. Tavernarakis N., Bessereau J.L, Ewbank J., Geysen J., Kuwabara P., and Segalat L. (2004) Nematode Gene-Tagging Tools and Resources. European *C. elegans* Meeting, Switzerland.
13. Syntichaki P., Samara C. and Tavernarakis N. (2004) Vacuolar H+-ATPase-mediated intracellular acidification is required for necrotic cell death in *C. elegans*. European *C. elegans* Meeting, Switzerland.
12. Syntichaki P. and Tavernarakis N. (2004) Investigating the role of protein turnover in ageing. 2nd International Conference on the Functional Genomics of Ageing. Heraklion Greece.

11. Samara C., Syntichaki P. and Tavernarakis N. (2003) pH homeostasis is critical for neurodegeneration in *C. elegans*. 14th International *C. elegans* Conference. Los Angeles, USA.
10. Royal D., Tavernarakis N., Royal M.A., Gong L., Nunez Y. and Driscoll M. (2003) Extrageneic and intragenic suppressors of mec-4(d)-induced necrotic-like cell death. 14th International *C. elegans* Conference. Los Angeles, USA.
9. Syntichaki P. and Tavernarakis N. (2002) Specific aspartyl and calpain proteases are required for neurodegeneration in *C. elegans*. European *C. elegans* Meeting, Italy.
8. Tavernarakis N., Xu K. and Driscoll M. (2001) Execution of necrotic-like cell death in *C. elegans* requires the activity of specific aspartyl proteases. International *C. elegans* Meeting, USA.
7. Xu K., Tavernarakis N. and Driscoll M. (2001) *mec-4(d)*-induced necrotic-like cell death in *C. elegans* requires calreticulin and regulators of ER-mediated Ca2+ release. International *C. elegans* Meeting, USA.
6. Tavernarakis N., Everett J. and Driscoll M. (2000) Protease-related features of the intracellular amino-termini of DEG/ENaC Ion Channels. 3rd International Symposium on the ENaC/Degenerins Gene Superfamily: From Molecules to Diseases. Switzerland.
5. Tavernarakis N., Wang S. L., and Driscoll M. (2000) Components of the cytoskeleton, involved in the biogenesis of membrane channels, interfere with mec-4(d)-induced cell death. East Coast *C. elegans* Meeting, USA.
4. Tavernarakis N., Wang S. L., Dorovkov M., Ryazanov A. and Driscoll M. (1999) Inherited and controllable interference by dsRNA. International *C. elegans* Meeting, USA.
3. Xu K., Tavernarakis N. and Driscoll M. (1997) Genetic dissection of neurodegenerative death mechanisms. International *C. elegans* Meeting, USA.
2. Tavernarakis N., Wang S. L., Xu K., Shreffler W. and Driscoll M. (1996) *unc-8* encodes a degenerin expressed in motorneurons and nose touch receptors. East Coast *C. elegans* Meeting, USA.
1. Tavernarakis N., Pavlakis G. and Krambovitis E. (1991) Expression of immunologically reactive recombinant Tat, Rev and Tev proteins of HIV-1. Proceedings of the VII International Conference on AIDS, Italy.

Poster presentations

98. Taferner A., Pircher H., Tavernarakis N., Jansen-Dürr P. (2013) Functional analysis of the acylpyruvase FAHD1 in *C. elegans*. 19th International *C. elegans* Conference. Los Angeles, USA.
97. Lionaki E., Palikaras K. and Tavernarakis N. (2013) The inner mitochondrial membrane translocase complex TIM23 modulates mitochondrial biogenesis and function during ageing in *C. elegans*. 19th International *C. elegans* Conference. Los Angeles, USA.
96. Rieckher M., Zacharakis G., Ripoll J. and Tavernarakis N. (2013) *C. elegans* imaging by combined, selective plane illumination microscopy and optical projection tomography in a microfluidic device. 19th International *C. elegans* Conference. Los Angeles, USA.
95. Palikaras K. and Tavernarakis N. (2013) Coordination of mitophagy and the mitochondrial retrograde response during ageing in *C. elegans*. 19th International *C. elegans* Conference. Los Angeles, USA.
94. Rieckher M., Princz A. and Tavernarakis N. (2013) Regulation of eIF4E compartmentalization by the heat shock response during ageing in *C. elegans*. 19th International *C. elegans* Conference. Los Angeles, USA.
93. Eisenberg T., Büttner S., Faes L., Reichelt W., Broeskamp F., Habernig L., Benke S., Kourtis N., Ruli D., D'hooge P., Ghillebert R., Carmona-Gutierrez D., Franssens V., Harger A., Pieber T. R.,

Freudenberger P., Kroemer G., Sigrist S. J., Winderickx J., Callewaert G., Tavernarakis N. and Madeo M. (2009) Induction of autophagy by spermidine promotes longevity. (2013) Zing Conference on Mitochondria, metabolic regulation and the Biology of Aging, Lanzarote, Spain.

92. Schiavi A., Torgovnick A., Megalou E. V., Castelain N., Guccini I., Gelino S., Hansen M., Braeckman B., Tavernarakis N., Testi R. and Ventura N. (2013) Autophagy induction extends lifespan and reduces lipid content in response to frataxin silencing in *Caenorhabditis elegans*. Zing Conference on Mitochondria, metabolic regulation and the Biology of Aging, Lanzarote, Spain.
91. Bazopoulou D., Chronis N., Nektarios Tavernarakis N. (2012) PQN-21, a prion-like protein exerts its function in learning and memory through amphid glial cells. EMBO Conference Series: *C. elegans* Neurobiology. Heidelberg, Germany.
90. Andreou A. and Tavernarakis N. (2011) The role of the sumoylation pathway in the regulation of protein synthesis during ageing. 18th International *C. elegans* Conference. Los Angeles, USA.
89. Kourtis N. and Tavernarakis N. (2011) Specific small heat shock proteins regulate calcium homeostasis in the medial Golgi to protect against necrotic cell death. 18th International *C. elegans* Conference. Los Angeles, USA.
88. Schiavi A., Torgovnick A., Megalou E. V., Testi R., Tavernarakis N. and Ventura N. (2011) Electron transport chain disruption extends lifespan and reduces fat accumulation through p53-dependent induction of autophagy. 18th International *C. elegans* Conference. Los Angeles, USA.
87. Megalou E. and Tavernarakis N. (2011) The role of autophagy in lifespan extension by resveratrol and spermidine. 18th International *C. elegans* Conference. Los Angeles, USA.
86. Schiavi A., Torgovnick A., Megalou E. V., Tavernarakis N., Testi R. and Ventura N. (2011) Mild Frataxin suppression reduces fat accumulation, induces autophagy and protects from motility defects in *C. elegans*. 18th International *C. elegans* Conference. Los Angeles, USA.
85. Troulinaki K. and Tavernarakis N. (2011) Clathrin-mediated endocytosis and intracellular trafficking are required for necrotic cell death in *C. elegans*. 18th International *C. elegans* Conference. Los Angeles, USA.
84. Markaki M., Megalou E., Pasparaki A., Palikaras K. and Tavernarakis N. (2010) The role of autophagy in lifespan extension by caloric restriction and resveratrol. East Asia *C. elegans* Meeting, Tokyo, Japan.
83. Katidou M., Tavernarakis N. and Karagogeos D. (2010) The contactin RIG-6 mediates axon outgrowth and navigation in *C. elegans*. EMBO Conference Series: *C. elegans*: Development and Gene Expression, Heidelberg, Germany.
82. Kourtis N., and Tavernarakis N. (2009) The protective role of small heat shock proteins against necrotic cell death. EMBO Conference Series: *C. elegans*: Development and Gene Expression, Heidelberg, Germany.
81. Aviles-Espinosa R., Tserevelakis G. J., C. O. Santos S. I., Filippidis G., Krmpot A. J., Vlachos M., Tavernarakis N., Brodschelm A., Kaenders W., Artigas D. and Loza-Alvarez P., (2010) Cell division stage in C. elegans imaged using third harmonic generation microscopy. Biomedical Optics Conference, Miami, USA.
80. Milonaki A. and Tavernarakis N. (2010) Cytoskeleton dynamics and ageing. FEBS/European Society for Free Radical Research, summer school on protein maintenance and turnover in aging and diseases, Spetses, Greece.
79. Georgila K, Kourtis N, Chondrogianni N., Gonos E. and Tavernarakis N. (2010) *C. elegans* as a model system for the study of neurodegenerative disorders caused by altered protein turnover. FEBS/European Society for Free Radical Research, summer school on protein maintenance and turnover in aging and diseases, Spetses, Greece.

78. Chondrogianni N., Kapeta S., Tavernarakis N. and Gonos E. S. (2009) Does proteasome activation affect cellular or organismal lifespan? 21st IUBMB/12th FAOBMB International Congress of Biochemistry and Molecular Biology. Shangai, China.
77. Chondrogianni N., Kapeta S., Tavernarakis N. and Gonos E. S. (2009) The role of proteasome activation on the lifespan of *C. elegans*. LinkAge-MarkAge Joint Summer School, Fréjus, France.
76. Kourtis N., and Tavernarakis N. (2009) Small heat shock proteins protect against necrotic cell death. 17th International *C. elegans* Conference. Los Angeles, USA.
75. Artal-Sanz M. and Tavernarakis N. (2009) Prohibitin couples diapause signaling to mitochondrial metabolism during ageing in *C. elegans*. 17th International *C. elegans* Conference. Los Angeles, USA.
74. Formisano R., McDonald R., Pierpont T., Sabanayagam C., Tavernarakis N. and Dhillon H. S. (2009) Expression analysis of a Gα subunit gene that potentially interacts with dopamine receptor involved in *Caenorhabditis elegans* learning. 39th annual meeting, Society for Neuroscience, Chicago, USA.
73. Katidou M., Tavernarakis N. and Karagogeos D. (2009) The contactin homolog *rig-6* is involved in axon guidance and branching in *C. elegans*. 17th International *C. elegans* Conference. Los Angeles, USA.
72. Rieckher M., Meyer H., Birk U., Tavernarakis N. and Ripoll J. (2009) Imaging *C. elegans* by Optical Projection Tomography. 17th International *C. elegans* Conference. Los Angeles, USA.
71. Bazopoulou D. and Tavernarakis N. (2009) PQN-21, a prion-like protein is involved in learning and memory in *C. elegans*. 17th International *C. elegans* Conference. Los Angeles, USA.
70. Troulinaki K. and Tavernarakis N. (2009) Clathrin-mediated endocytosis and intracellular trafficking are required for necrotic cell death in *C. elegans*. 17th International *C. elegans* Conference. Los Angeles, USA.
69. Vlachos M. and Tavernarakis N. (2009) Investigating the link between late-onset neurodegeneration and the ageing process. European Neuroscience Institutes meeting, Fodele, Greece.
68. Kourtis N., and Tavernarakis N. (2009) Necrotic cell death and the heat shock response. European Neuroscience Institutes meeting, Fodele, Greece.
67. Katidou M., Tavernarakis N. and Karagogeos D. (2009) The contactin homolog *rig-6* is required for axon navigation in *C. elegans*. European Neuroscience Institutes meeting, Fodele, Greece.
66. Rieckher M., Markaki M. and Tavernarakis N. (2009) The impact of somatic misexpression of germline features on neuronal ageing in *Caenohabditis elegans*. European Neuroscience Institutes meeting, Fodele, Greece.
65. Troulinaki K. and Tavernarakis N. (2009) Clathrin-mediated endocytosis and intracellular trafficking in necrotic cell death. European Neuroscience Institutes meeting, Fodele, Greece.
64. Rieckher M. and Tavernarakis N. (2009) The impact of somatic misexpression of germline features on neuronal ageing in *Caenorhabditis elegans*. Mosbacher Colloquium on the Molecular and Cellular Mechanisms of Memory, Mosbach, Germany.
63. Meyer H., Rieckher M., Voglis G., Tavernarakis N. and Ripoll J. (2008) *In vivo* Optical Projection Tomography (OPT) imaging in *Caenorhabditis elegans*. European *C. elegans*, Meeting, Carmona, Spain.
62. Katidou M., Tavernarakis N. and Karagogeos D. (2008) Characterization of *rig-6*, a member of the contactin subfamily of the immunoglobulin superfamily in *C. elegans*. European *C. elegans*, Meeting, Carmona, Spain.

61. Kourtis N., and Tavernarakis N. (2008) Monitoring protein synthesis rates in *Caenorhabditis elegans*. European *C. elegans*, Meeting, Carmona, Spain.
60. Meyer H., Lambert L., Metaxakis A., Darrell A., Atrops S., Voglis G., Tavernarakis N., Marias K., Savakis C. and Ripoll J. (2007) Towards rapid 3D quantitative in-vivo imaging using optical projection tomography. Focus on Microscopy Meeting, Valencia, Spain.
59. Kourtis N. and Tavernarakis N. (2007) A non-radioactive method for monitoring protein synthesis rates in *C. elegans*. 16th International *C. elegans* Conference. Los Angeles, USA.
58. Katidou M., Tavernarakis N. and Karagogeos D. (2007) RIG-6, a member of the contactin subfamily of the immunoglobulin superfamily in *C.elegans:* expression and putative function. 16th International *C. elegans* Conference. Los Angeles, USA.
57. Bazopoulou D. and Tavernarakis N. (2007) Characterization of PQN-21, a prion-like protein involved in learning and memory in *C. elegans*. 16th International *C. elegans* Conference. Los Angeles, USA.
56. Artal-Sanz M. and Tavernarakis N. (2007) The role of the mitochondrial prohibitin complex in *C. elegans* ageing. 16th International *C. elegans* Conference. Los Angeles, USA.
55. Samara C., Syntichaki P. and Tavernarakis N. (2007) Autophagy is required for necrotic cell death in *Caenorhabditis elegans*. 16th International *C. elegans* Conference. Los Angeles, USA.
54. Voglis G. and Tavernarakis N. (2007) An acid sensing ion channel mediates associative learning in *C. elegans* by modulating dopamine signaling. 16th International *C. elegans* Conference. Los Angeles, USA.
53. Syntichaki P., Troulinaki K. and Tavernarakis N. (2007) eIF4E function in somatic cells modulates ageing in *C. elegans*. 16th International *C. elegans* Conference. Los Angeles, USA.
52. Troulinaki K. and Tavernarakis N. (2007) The role of intracellular trafficking and endocytosis in *C. elegans* neurodegeneration. 16th International *C. elegans* Conference. Los Angeles, USA.
51. Gualda E. J., Filippidis G., Voglis G., Mari M., Fotakis C. and Tavernarakis N. (2007) *In vivo* imaging of anatomical features of the nematode *Caenorhabditis elegans* using non-linear (TPEF-SHG-THG) microscopy. SPIE European Conferences on Biomedical Optics, Munich, Germany.
50. Bazopoulou D. and Tavernarakis N. (2006) Characterization of PQN-21, a prion-like protein involved in learning and memory in *C. elegans*. European *C. elegans*, Meeting, Hersonissos, Greece.
49. Syntichaki P., Troulinaki K. and Tavernarakis N. (2006) Signaling via eIF4E regulates ageing in *C. elegans*. European *C. elegans*, Meeting, Hersonissos, Greece.
48. Troulinaki K. and Tavernarakis N. (2006) The role of endocytosis and intracellular trafficking in *C. elegans* neurodegeneration. European *C. elegans*, Meeting, Hersonissos, Greece.
47. Artal-Sanz M., Samara C., Syntichaki P. and Tavernarakis N. (2006) Lysosomal biogenesis and function is critical for necrotic cell death in C. elegans. European *C. elegans*, Meeting, Hersonissos, Greece.
46. Bazopoulou D. and Tavernarakis N. (2006) Towards the development of a Minos-based transposon tool in *C. elegans*. European *C. elegans*, Meeting, Hersonissos, Greece.
45. Pasparaki A., Tavernarakis N. and Tzortzaki E. (2006) Bleomycin-induced fibrosis in *C. elegans*? European *C. elegans*, Meeting, Hersonissos, Greece.
44. Voglis G., and Tavernarakis N. (2005) Specific DEG/ENaC ion channels are required for proper learning and memory in *C. elegans*. 15th International *C. elegans* Conference. Los Angeles, USA.
43. Artal-Sanz M. and Tavernarakis N. (2005) The role of the mitochondrial prohibitin complex in *C. elegans* ageing. 15th International *C. elegans* Conference. Los Angeles, USA.

42. Syntichaki P., Samara C. and Tavernarakis N. (2005) The Vacuolar H^+-ATPase-mediates intracellular acidification, required for necrotic cell death in *C. elegans*. 15th International *C. elegans* Conference. Los Angeles, USA.
41. Syntichaki P. and Tavernarakis N. (2004) Investigating the role of protein turnover in ageing. European *C. elegans* Meeting, Switzerland.
40. Samara C., Syntichaki P., Troulinaki K. and Tavernarakis N. (2004) Macroautophagy and neurodegeneration in *C. elegans*. European *C. elegans* Meeting, Switzerland.
39. Voglis G., Bazopoulou D. and Tavernarakis N. (2004) Specific DEG/ENaC ion channels are required for proper learning and memory in *C. elegans*. European *C. elegans* Meeting, Switzerland.
38. Syntichaki P., Samara C. and Tavernarakis N. (2004) Vacuolar H^+-ATPase-mediated intracellular acidification is required for necrotic cell death in *C. elegans*. 12th European Cell Death Organization Euroconference on Apoptosis. Chania, Greece.
37. Voglis G. and Tavernarakis N. (2003) New roles for degenerins: from mechanotransduction to chemosensation and associative learning. 14th International *C. elegans* Conference. Los Angeles, USA.
36. VoglisG. and Tavernarakis N. (2003) The DEG/ENaC family of ion channels in *C. elegans*: From mechanotransduction to chemosensation and associative learning. 3rd EMBO Young Investigator meeting. EMBL-Heidelberg, Germany.
35. Royal D., Tavernarakis N. and Driscoll M. (2002) Toward Understanding Mechanotransducing channel function: *mec-6* Influences the stability of the MEC-4 subunit but not the MEC-10 subunit. East Coast *C. elegans* Meeting, USA.
34. Syntichaki P. and Tavernarakis N. (2002) Protein turnover and ageing. Conference on the Functional Genomics of Ageing, Spain.
33. Syntichaki P. and Tavernarakis N. (2002) The role of protein turnover in caloric restriction and ageing. European *C. elegans* Meeting, Italy.
32. Tabler M., Boutla A., Kalantidis K., Delidakis C., Tavernarakis N., Livadaras I. and Tsagris M. (2002) RNA-induced gene silencing in plants and invertebrates. ESF Workshop on the Impact of Nucleic Acid Chemistry on Gene Function Analysis, Germany.
31. Boutla A., Kalantidis K., Tavernarakis N. Tsagris M. and Tabler M. (2002) Induction of Silencing in Invertebrates by Synthetic and Natural RNAs. Keystone Meeting on RNA Interference, Co-suppression and Related Phenomena, USA
30. Tavernarakis N. and Driscoll M. (2001) Molecular mechanisms underlying the effects of caloric restriction on aging in *C. elegans*. 13th International *C. elegans* Meeting, USA.
29. Tavernarakis N., Gerstbrein B., Modi A. and Driscoll M. (2001) Functional analysis of the complete DEG/ENaC family of ion channel proteins of *C. elegans*. 13th International *C. elegans* Meeting, USA.
28. Everett J. K., Wang S. L., Tavernarakis N., Montelione G., Kyrpides N. and Driscoll M. (2001) Elaborating the composition and structure of a touch-transducing complex: towards the determination of the structure of the MEC-4 N-terminal intracellular domain and characterization of 4 proteins that interact with this domain. 13th International *C. elegans* Meeting, USA.
27. Gerstbrein B., Xu K., Tavernarakis N. and Driscoll M. (2001) Exploring necrotic cell death in *C. elegans*. 13th International *C. elegans* Meeting, USA.
26. Xu K., Tavernarakis N., Gerstbrein B. and Driscoll M. (2001) Molecular Genetic Dissection of Necrotic Cell Death Mechanisms in *C. elegans*. Keystone Symposia: The Molecular Basis of Neurodegenerative Disease. USA.

25. Tavernarakis N., Xu K. and Driscoll M. (2001) Execution of necrotic-like cell death in *Caenorhabditis elegans* requires Cathepsin D activity. Nature Conference on Cell Death and Ageing. USA.
24. Tavernarakis N., Gerstbrein B., Ning Y., Modi A. and Driscoll M. (2000) The whole enchilada (degenerin flavor). East Coast *C. elegans* Meeting, USA.
23. Tavernarakis N., Mendola C. E, Pavur K. S., Altun-Gultekin Z., Wadsworth W., Driscoll M. and Ryazanov A. G. (2000) Elongation factor-2 kinase affects Caenorhabditis elegans life span by regulating protein turnover. East Coast *C. elegans* Meeting, USA.
22. Tavernarakis N., Everett J. and Driscoll M. (2000) Protease-related features of the intracellular amino-termini of DEG/ENaC Ion Channels. East Coast *C. elegans* Meeting, USA.
21. Wang S. L., Tavernarakis N., Zhang Y. and Driscoll M. (2000) CeMi-2, a Component of a Histone Deacetylase Complex, Is Essential for *C. elegans* Development. East Coast *C. elegans* Meeting, USA.
20. Nefsky B., Tavernarakis N., Pavur K. S., Ryazanov L., Wadsworth W., Driscoll M. and Ryazanov A. G. (2000) The role of protein synthesis and turnover in *C. elegans* aging. Gordon conference on The Biology of Aging, USA.
19. Tavernarakis N., Wang S. L. and Driscoll M. (1999) Cytoskeleton dynamics affect the function of membrane channels and interfere with *mec-4(d)*-induced cell death. 12th International *C. elegans* Meeting, USA.
18. Thieringer H. A., Tavernarakis N. and Driscoll M. (1999) Analysis of a deletion mutation of *del-1*, a member of the degenerin/epithelial sodium channel (DEG/ENaC) superfamily. 12th International *C. elegans* Meeting, USA.
17. Tavernarakis N., Mendola C. E., Pavur K. S., Zhang L., Altun-Gultekin Z., Wadsworth W., Driscoll M., and Ryazanov A. G. (1999) Knockout of Elongation Factor-2 kinase extends lifespan in *C. elegans*. 12th International *C. elegans* Meeting, USA.
16. Tavernarakis N., Wang S. L., Mano I., Shreffler W., Xue J. and Driscoll M. (1997) *mec-6* encodes a novel protein needed for degenerin channel stability. 11th International *C. elegans* Meeting, USA.
15. Ross J. M., Tavernarakis N., Driscoll M., Ishihara T., Katsura I. and . Miller D. M., III. (1997) *unc-4/unc-37* repression of VB-specific genes defines the VA pattern of synaptic input. 11th International *C. elegans* Meeting, USA.
14. Xu K., Tavernarakis N. and Driscoll M. (1997) Death Defying Acts II. The Worm Breeder's Gazette, vol. 14, No. 5, USA.
13. Tavernarakis N., Xue J., Driscoll M. (1996) The degenerin gene family is also expanding. The Worm Breeders' Gazette, vol. 14, No. 2, USA.
12. Singh H., Tavernarakis N. and Driscoll M. (1996) *mec-4(d)* as a reverse genetic ablation tool. East Coast *C. elegans* Meeting, USA and West Coast *C. elegans* Meeting, Canada.
11. Royal D., Royal M. A., Wu E., Lints R., Singh H., Xu K., Tavernarakis N. and Driscoll M. (1996) An anti-death crusade: Screening for suppressors of *mec-4(d)*-induced neurodegeneration. East Coast *C. elegans* Meeting, USA.
10. Tavernarakis N., Wang S. L., Shreffler W. and Driscoll M. (1996) *unc-8* revealed. The Worm Breeders' Gazette, vol. 14, No. 3, USA.
9. Tavernarakis N., Shreffler W., Wang S. L. and Driscoll M. (1996) UNC-8 and DEL-1: Two degenerins expressed in motor neurons may modulate locomotion. The Worm Breeders' Gazette, vol. 14, No. 4, USA.

8. Shreffler W., Tavernarakis N. and Driscoll M. (1996) Further characterization of the *unc-8* suppressor locus, *sup-40.* The Worm Breeders' Gazette, vol. 14, No. 4, USA.

7. Kyrpides N., Tavernarakis N., Papamatheakis J., and Thireos G. (1995) A transient *GCN4* mRNA destabilization follows *GCN4* translational de-repression. Proceedings of the Jacques Monod Conference on the Cytoplasmic Fate of Eukaryotic mRNA, France.
Equal contribution by Kyrpides N. and Tavernarakis N.

6. Tzermia M., Katsoulou C., Tavernarakis N. and Alexandraki D. (1995) The complete sequence of a 40.7Kb segment located on the left arm of yeast chromosome X identified 11 known genes and revealed 15 new open reading frames including homologues of other yeast hypothetical proteins. Yeast vol. 11, May 1995. Special issue on the Seventeenth International Conference on Yeast Genetics and Molecular Biology, Portugal.

5. Tzermia M., Tavernarakis N., Thireos G., and Alexandraki D. (1993) Sequencing of a 6 Kb segment from cosmic pUKG040 and of the left telomeric region of chromosome XI. BRIDGE-BIOTECH Yeast Genome Sequencing Meeting, Belgium.

4. Thireos G., Alexandraki D., Georgakopoulos T., Maniataki E. and Tavernarakis N. (1992) Transcriptional and translational control mechanisms: the *GCN4* model in yeast. 16th International Conference of Yeast Genetics and Molecular Biology, Austria.

3. Thireos G., Alexandraki D., Dialynas G., Georgakopoulos T., Georgatsou E., Maniataki E. and Tavernarakis N. (1992) Transcriptional and translational control mechanisms: the *GCN4* model in yeast. 9th Balkan Biochemical and Biophysical Days, Greece.

2. Thireos G., Alexandraki D., Georgakopoulos T., Maniataki E. and Tavernarakis N. (1992) Translational and transcriptional regulation of gene expression: The *GCN4* model in yeast. Workshop on "Control of Gene Expression in Yeast", Spain.

1. Benco D., Unge T., Solomin L., Ciminale V., Tavernarakis N., Pavlakis G. and Felber B. (1991) Mechanism of function of HIV Rev and HTLV Rex. Proceedings of the VII International Conference on AIDS, Italy.

PUBLICATIONS IN NATIONAL CONFERENCE PROCEEDINGS

15. Rieckher M., Zacharakis G., Ripoll J. and Tavernarakis N. (2012) Rapid in vivo imaging of small model organisms by combining selective plane illumination microscopy and optical projection tomography. 63rd Congress of the Hellenic Society of Biochemistry and Molecular Biology, Heraklion, Greece.
14. Nikoletopoulou V., Charmpilas N. and Tavernarakis N. (2012) The role of MAGE-1 in mitochondrial function and ageing. 63rd Congress of the Hellenic Society of Biochemistry and Molecular Biology, Heraklion, Greece.
13. Palikaras K. and Tavernarakis N. (2012) The role of mitophagy and retrograde response in ageing. 63rd Congress of the Hellenic Society of Biochemistry and Molecular Biology, Heraklion, Greece.
12. Markaki M. and Tavernarakis N. (2012) Autophagic degradation of key protein synthesis factors and ageing. 63rd Congress of the Hellenic Society of Biochemistry and Molecular Biology, Heraklion, Greece.
11. Megalou E.V., Tserevelakis G., Filippidis G., Petanidou B. and Tavernarakis N. (2012) Imaging *C. elegans* fat stores with Third Harmonic Generation Microscopy. 63rd Congress of the Hellenic Society of Biochemistry and Molecular Biology, Heraklion, Greece.
10. Gessmann R., Kourtis N., Petratos K. and Tavernarakis N. (2009) Modeling of mechanosensory ion channel structural and functional features. 6th Annual Meeting of Hellenic Society for Computational Biology and Bioinformatics, Athens, Greece.
9. Chondrogianni N., Kapeta S., Kourtis N., Tavernarakis N. and Gonos E. S. (2009) The role of proteasome activation on cellular and organismal lifespan. 6th Annual Meeting of Hellenic Society for Biochemistry and Molecular Biology, Athens, Greece.
8. Chondrogianni N., Kapeta S., Tavernarakis N. and Gonos E. S. (2009) The impact of proteasome activation on cellular and organismal lifespan. 10th Annual Meeting of Hellenic Association for Connective Tissue and Matrix Biology. Patras, Greece.
7. Tzortzaki E., Psarou M., Neophytou E., Zarogianni K., Siafakas N. M. and Tavernarakis N. (2008) Induction of prohibitin expression in human chronic obstructive pulmonary disease. 17th Conference of the Hellenic Respiratory Society, Alexandroupoli, Greece.
6. Bazopoulou D. and Tavernarakis N. (2008) PQN-21, a prion-like protein involved in learning and memory in *C. elegans*. 22nd Meeting of the Hellenic Society for Neuroscience, Athens, Greece.
5. Katidou M., Tavernarakis N. and Karagogeos D. (2007) The RIG-6 contactin homologue is involved in axon guidance in *C. elegans*. 22nd Meeting of the Hellenic Society for Neuroscience, Athens, Greece.
4. Katidou M., Tavernarakis N. and Karagogeos D. (2007) Characterization of *rig-6*, a member of the contactin subfamily of the immunoglobulin superfamily in *C. elegans*. 21st Meeting of the Hellenic Society for Neuroscience, Thessaloniki, Greece.
3. Katidou M., Tavernarakis N. and Karagogeos D. (2007) RIG-6: a member of the contactin subfamily of the immunoglobulin superfamily in *C. elegans*. Hellenic Society for Biochemistry and Molecular Biology Athens Greece.
2. Samara C., Syntichaki P. and Tavernarakis N. (2006) Autophagy promotes necrotic cell death and neurodegeneration in *C. elegans*. 20th Meeting of the Hellenic Society for Neuroscience, Heraklion, Greece.
1. Voglis G. and Tavernarakis N. (2006) ASIC-1, a DEG/ENaC ion channel, mediates associative learning by modulating dopamine signaling in *C. elegans*. 20th Meeting of the Hellenic Society for Neuroscience, Heraklion, Greece.

MEMBERSHIP IN SCIENTIFIC ORGANIZATIONS

2009 European Molecular Biology Organization (EMBO)

2007 Network of European Neuroscience Institutes (ENINET)

2006 International Proteolysis Society (IPS)

2005 Federation of European Neuroscience Societies (FENS)

2005 Hellenic Society for Neuroscience (HSN)

2005 American Association for the Advancement of Science (AAAS)

2004 European Cell Death Organization (ECDO)

2003 American Physiological Society (APS)

PRESS RELEASES

December 24, 2012	IMBB researcher receives the Empeirikeion Foundation Academic Excellence Prize. *Foundation for Research and Technology*, Heraklion, Crete, Greece.
September 12, 2012	Cell biology: If you can't stand the heat, warm up first! *Nature*, London, UK.
September 12, 2012	IMBB researchers uncover a universal and potent protective mechanism against neuronal necrosis. *Foundation for Research and Technology*, Heraklion, Crete, Greece.
December 14, 2011	IMBB researchers reveal a novel mechanism underlying necrotic neurodegeneration. *Foundation for Research and Technology*, Heraklion, Crete, Greece.
May 13, 2010	Advanced Multiphoton Confocal Microscopy facility established at IMBB/FORTH. *Foundation for Research and Technology*, Heraklion Crete Greece.
October 19, 2009	EMBO welcomes 66 leading life scientists as members. *EMBO*, Heidelberg, Germany.
October 8, 2009	IMBB researchers reveal a novel mechanism regulating metabolism and ageing. *Foundation for Research and Technology*, Heraklion, Crete, Greece.
December 5, 2008	IMBB researchers uncover a novel mechanism, important for learning and memory. *Foundation for Research and Technology*, Heraklion, Crete, Greece.
November 4, 2008	NeuronAge research earns IMBB researcher an ERC Advanced Investigator Grant. *Foundation for Research and Technology*, Heraklion, Crete, Greece.
February 5, 2007	IMBB researchers reveal a novel mechanism modulating ageing. *Foundation for Research and Technology*, Heraklion, Crete, Greece.
May 29, 2005	IMBB researcher receives the Bodossakis Foundation Scientific Prize. *Foundation for Research and Technology*, Heraklion, Crete, and *Bodossakis Foundation*, Athens, Greece.
October 30, 2002	IMBB researchers reveal mechanisms underlying neurodegeneration. *Foundation for Research and Technology*, Heraklion, Crete, Greece.

MISCELLANEOUS

- Included in the International Biographical Centre of Cambridge biographies, England (http://www.internationalbiographicalcentre.com/).
- Included in the Marquis Who's Who in Science and Engineering biographies, USA (http://www.marquiswhoswho.com/).
- Included in the Hübners Who is Who, Greece and Europe (http://www.whoiswho-verlag.gr/).

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