

## BIOGRAPHICAL SKETCH

Nektarios Tavernarakis

<p>Name: <i>[Last, First, Middle Initial(s), Degree(s)]</i>  <b>Tavernarakis, Nektarios, N, PhD</b></p> <p>Personal Webpage:  <a href="http://www.elegans.gr/">http://www.elegans.gr/</a></p>	<p><b>POSITION TITLE:</b>  Chairman of the Board of Directors  Foundation for Research and Technology-Hellas</p> <p>Research Director  Institute of Molecular Biology and Biotechnology  Foundation for Research and Technology-Hellas</p> <p>Professor of Molecular Systems Biology  Medical School, University of Crete</p>
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### EDUCATION /TRAINING

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Aristotle University, Thessaloniki	BSc	07/89	Biology
University of Crete	PhD	05/95	Molecular Genetics
Rutgers, the State University of New Jersey	Postdoctoral	07/01	Neurobiology

### A. ACADEMIC AND PROFESSIONAL POSITIONS

#### **POSITIONS HELD**

Dates: Title, Professor of ...., School of Medicine, University of Crete

2013 Chairman, Foundation for Research & Technology - Hellas, Greece

2013 Director, Institute of Molecular Biology and Biotechnology-FORTH, Greece

2010 Professor, School of Medicine, University of Crete, Greece

2008 Research Director (Professor level), IMBB-FORTH, Greece

2004 Chief Researcher (Associate Professor level), IMBB-FORTH, Greece

2001 Scientific Rapporteur, Genome Biology, London, UK

2001 Executive Researcher (Assistant Professor level), IMBB-FORTH, Greece

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

1999 Research Associate, Rutgers University, USA

1999 Scientific Counsellor, Integrated Genomics Inc., USA

1995 Postdoctoral Fellow, Rutgers University, USA

1991 Visiting Scientist, National Cancer Institute, USA

Applicant Name (Tavernarakis, Nektarios, Nikolaos):

#### **ADVISORY-ADMINISTRATIVE DUTIES**

- 2017 Organizer, EMBO Workshop series: Cell biology of the neuron II. Fodele, Greece
- 2016 Editorial Board Member, FEBS Journal (Wiley)
- 2013 Director, Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology - Hellas
- 2013 Elected Organizer, Gordon Research Conference on the Biology of Aging, Il Ciocco, Italy
- 2014 Editorial Board Member, Scientific Reports (Nature Publishing Group)
- 2012 ERC Starting Grants evaluation panel member (LS4 Physiology. Pathophysiology and Endocrinology)
- 2011 EMBO Fellowship committee member
- 2011 Member of the Greek National Life Sciences Council
- 2011 National representative of Greece, European Commission FP7 Health programme
- 2011 Organizer, EMBO Workshop series: Cell biology of the neuron I. Fodele, Greece
- 2010 Editorial Board Member, EMBO Reports (EMBO)
- 2009 Executive committee member, European Neuroscience Institutes Network (ENInet)

#### **B. RESEARCH INTERESTS**

Nektarios Tavernarakis is the Chairman of the Board of Directors at the Foundation for Research and Technology-Hellas (FORTH), Research Director at the Institute of Molecular Biology and Biotechnology (IMBB), and Professor of Molecular Systems Biology at the Medical School of the University of Crete, in Heraklion, Greece. He is the Director of the Graduate Program on Bioinformatics at the Medical School of the University of Crete, and is also heading the Neurogenetics and Ageing laboratory of IMBB. He is an elected member of the *Scientific Council of the European Research Council (ERC)*, the *European Molecular Biology Organization (EMBO)*, and *Academia Europaea*. He has also served as the Director of the Institute of Molecular Biology and Biotechnology. 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 the molecular mechanisms of necrotic cell death and neurodegeneration, the interplay between cellular metabolism and ageing, the mechanisms of sensory transduction and integration by the nervous system, and the development of novel genetic tools for biomedical research. For his scientific accomplishments, he has received several notable scientific prizes, including an innovation-supporting *ERC Proof of Concept Grant* and two *ERC Advanced Investigator Grants* (in 2009 and 2016). He is one of the first in Europe, and until now the only one in Greece, to have been awarded this highly competitive and prestigious grant twice. He is also the recipient of the *EMBO Young Investigator award*, the *Alexander von Humboldt Foundation, Friedrich Wilhelm Bessel research award*, the *Galien Scientific Research Award*, the *Helmholtz International Fellow Award*, the *Bodossaki Foundation Scientific Prize for Medicine and Biology*, the *Empeirikeion Foundation Academic Excellence Prize*, the *Research Excellence award of the Foundation for Research and Technology-Hellas*, the *BioMedical Research Award of the Academy of Athens*, the *International Human Frontier in Science Program Organization (HFSP) long-term Postdoctoral Fellowship*, and the *Dr. Frederick Valergakis Post-Graduate Research Grant Program Academic Achievement Award* of the Hellenic University Club of New York.

Applicant Name (Tavernarakis, Nektarios, Nikolaos):

**C. SELECTED PEER-REVIEWED PUBLICATIONS** (*max 10*) (*in chronological order*).

1. Nikolettou V., Sidiropoulou K., Kallergi E., Dalezios Y. and Tavernarakis N. (2017) Modulation of autophagy by BDNF underlies synaptic plasticity. *Cell Metabolism*, 26: 230-242.
2. Schiavi A., Maglioni S., Palikaras K., Shaik A., Strapazon F., Brinkmann V., Torgovnick A., Castelein N., De Henau S., Braeckman B. P., Cecconi F., Tavernarakis N. and Ventura N. (2015) Iron starvation-induced mitophagy mediates lifespan extension upon mitochondrial stress in *C. elegans*. *Current Biology*, 25: 1810-1822.
3. Palikaras K., Lionaki E. and Tavernarakis N. (2015) Coordination of mitophagy and mitochondrial biogenesis during ageing in *Caenorhabditis elegans*. *Nature*, 521: 525-528.
4. Niso-Santano M., Malik S. A., Pietrocola F., Bravo-San Pedro J. M., Marino G., Cianfanelli V., Ben-Younes A., Troncoso R., Markaki M., Sica V., Izzo V., Chaba K., Bauvy C., Dupont N., Kepp O., Rockenfeller P., Wolinski H., Madeo F., Lavandro S., Codogno P., Harper F., Pierron G., Tavernarakis N., Cecconi F., Maiuri M. C., Galluzzi L. and Kroemer G. (2015) Unsaturated fatty acids induce non-canonical autophagy. *EMBO Journal*, 34: 1025-1041.
5. Kourtis N., Nikolettou V. and Tavernarakis N. (2012) Small heat shock proteins protect from heat stroke-associated neurodegeneration. *Nature*, 490: 213-218.
6. Morselli E., Marino G., Bennetzen M., Eisenberg T., Megalou E., Schroeder S., Cabrera S., Benit P., Rustin P., Criollo A., Shen S., Kepp O., Maiuri C., Horio Y., Lopez-Otin C., Andersen J. S., Tavernarakis N., Madeo F., and Kroemer G. (2011) Spermidine and resveratrol induce autophagy by distinct pathways converging on the acetylproteome. *Journal of Cell Biology*, 192: 615-629.
7. Madeo F., Tavernarakis N. and Kroemer G. (2010) Can autophagy promote longevity? *Nature Cell Biology*, 12: 842-846.
8. Artal-Sanz M. and Tavernarakis N. (2009) Prohibitin couples diapause signaling to mitochondrial energy metabolism during ageing in *Caenorhabditis elegans*. *Nature*, 461: 793-797.
9. Syntichaki P., Troulinaki K. and Tavernarakis N. (2007) eIF4E function in somatic cells modulates ageing in *Caenorhabditis elegans*. *Nature*, 445: 922-926.
10. 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.