

GEORGE DIALLINAS CURRICULUM VITAE

Name **George**
Surname **Diallinas**
Place and date of birth Heraklion, August 21, 1961
Residence Iridanou 16, 11528, Athens, Greece
Professional address Department of Biology,
National and Kapodistrian University of Athens,
Panepistimioupolis 15784 Athens, Greece.
tel.301-7274649, fax.301-7274702, e-mail: diallina@biol.uoa.gr

DEGREES

1984 **BSc** Cell Biology, Essex University, UK
1985 **DEA** in Microbiology, University Paris-Sud (XI), Orsay, Paris France
1989 **PhD** Molecular Genetics, University Paris-Sud (XI), Paris France

TRAINING-ACADEMIC POSITIONS

1990 - 1993 Postdoctoral fellow, Institute of Molecular Biology and Biotechnology (I.M.B.B.), Yeast gene expression laboratory, Heraklion, Crete, Greece.
1994-1995 Postdoctoral fellow, Plant Physiology Laboratory, Institute of Molecular Biology and Biotechnology (I.M.B.B.), Heraklion, Crete, Greece.
1995 - 1996 Postdoctoral fellow, *A. nidulans* gene expression regulation group, Institut de Génétique et Microbiologie, Centre d'Orsay, Université de Paris-XI, Orsay, France.
1996-1998 Postdoctoral fellow, Plant Molecular Biology Laboratory, I.M.B.B., Heraklion, Crete, Greece.
1998-2002 Lecturer Microbiology, University of Athens, Faculty of Biology, Department of Botany, University of Athens, Athens, Greece
2002-2008 Assistant Professor, Molecular Microbiology, University of Athens, Faculty of Biology, Department of Botany, University of Athens, Greece
2008-2014 Associate Professor, Molecular Microbiology, University of Athens, Faculty of Biology, Department of Botany, University of Athens, Athens, Greece
2014- Professor, Molecular Microbiology, University of Athens, Faculty of Biology, Department of Botany, University of Athens, Athens, Greece
2018- EMBO member

CURRENT RESEARCH

- Genetically, biochemically and biophysically dissect structure-function relationships underlying transporter function, specificity and molecular evolution
- Identify the pathways and molecular mechanisms involved in the membrane trafficking, exocytosis, endocytosis and turnover of specific transporters and other membrane cargoes in response to fungal growth and to various physiological or stress signals
- Study the role of transporters in fungal pathogenicity and use in silico modeling of specific purine transporters for rational antifungal drug design.

Links:

La webpage: <https://scholar.google.com/citations?user=ZRYSaM8AAAAJ&hl=el&oi=ao>
<https://scholar.google.gr/citations?user=ZRYSaM8AAAAJ&hl=el&oi=ao>
<https://pubmed.ncbi.nlm.nih.gov/?term=diallinas+g&sort=date>

99 peer-reviewed publications, H-index 38

> 175 publications in congresses/workshops

SELECTED PUBLICATIONS (last 5 years)

- 1: Dimou S, Martzoukou O, Dionysopoulou M, Bouris V, Amillis S, Diallinas G. Translocation of nutrient transporters to cell membrane via Golgi bypass in *Aspergillus nidulans*. *EMBO Rep.* 2020 Jul 3;21(7):e49929. doi: 10.15252/embr.201949929.
- 2: Diallinas G, Martzoukou O. Transporter membrane traffic and function: lessons from a mould. *FEBS J.* 2019 Dec;286(24):4861-4875. doi: 10.1111/febs.15078
- 3: Papadaki GF, Lambrinidis G, Zamanos A, Mikros E, Diallinas G. Cytosolic N- and C-Termini of the *Aspergillus nidulans* FurE Transporter Contain Distinct Elements that Regulate by Long-Range Effects Function and Specificity. *J Mol Biol.* 2019 Sep 6;431(19):3827-3844. doi: 10.1016/j.jmb.2019.07.013.
- 4: Mikros E, Diallinas G. Tales of tails in transporters. *Open Biol.* 2019 Jun 28;9(6):190083. doi: 10.1098/rsob.190083.
- 5: Martzoukou O, Diallinas G, Amillis S. Secretory Vesicle Polar Sorting, Endosome Recycling and Cytoskeleton Organization Require the AP-1 Complex in *Aspergillus nidulans* Genetics. 2018 Aug;209(4):1121-1138. doi: 10.1534/genetics.118.301240.
- 6: Pyle E, Kalli AC, Amillis S, Hall Z, Lau AM, Hanyaloglu AC, Diallinas G, Byrne B, Politis A. Structural Lipids Enable the Formation of Functional Oligomers of the Eukaryotic Purine Symporter UapA. *Cell Chem Biol.* 2018 Jul 19;25(7):840-848.e4. doi: 10.1016/j.chembiol.2018.03.011.
- 7: Kourkoulou A, Pittis AA, Diallinas G. Evolution of substrate specificity in the Nucleobase-Ascorbate Transporter (NAT) protein family. *Microb Cell.* 2018 Mar 22;5(6):280-292. doi: 10.15698/mic2018.06.636.
- 8: Papadaki GF, Amillis S, Diallinas G. Substrate Specificity of the FurE Transporter Is Determined by Cytoplasmic Terminal Domain Interactions. *Genetics.* 2017 Dec;207(4):1387-1400. doi: 10.1534/genetics.117.300327.
- 9: Martzoukou O, Amillis S, Zervakou A, Christoforidis S, Diallinas G. The AP-2 complex has a specialized clathrin-independent role in apical endocytosis and polar growth in fungi. *Elife.* 2017 Feb 21;6:e20083. doi: 10.7554/eLife.20083.
- 10: Sioupouli G, Lambrinidis G, Mikros E, Amillis S, Diallinas G. Cryptic purine transporters in *Aspergillus nidulans* reveal the role of specific residues in the evolution of specificity in the NCS1 family. *Mol Microbiol.* 2017 Jan;103(2):319-332. doi: 10.1111/mmi.13559..
- 11: Diallinas G. Dissection of Transporter Function: From Genetics to Structure. *Trends Genet.* 2016 Sep;32(9):576-590. doi: 10.1016/j.tig.2016.06.003.
- 12: Alguel Y, Amillis S, Leung J, Lambrinidis G, Capaldi S, Scull NJ, Craven G, Iwata S, Armstrong A, Mikros E, Diallinas G, Cameron AD, Byrne B. Structure of eukaryotic purine/H(+) symporter UapA suggests a role for homodimerization in transport activity. *Nat Commun.* 2016 Apr 18;7:11336. doi: 10.1038/ncomms11336.
- 13: Martzoukou O, Karachaliou M, Yalelis V, Leung J, Byrne B, Amillis S, Diallinas G. Oligomerization of the UapA Purine Transporter Is Critical for ER- Exit, Plasma Membrane Localization and Turnover. *J Mol Biol.* 2015 Aug 14;427(16):2679-96. doi: 10.1016/j.jmb.2015.05.021
- 14: Evangelinos M, Martzoukou O, Chorozián K, Amillis S, Diallinas G. BsdA(Bsd2)-dependent vacuolar turnover of a misfolded version of the UapA transporter along the secretory pathway: prominent role of selective autophagy. *Mol Microbiol.* 2016 Jun;100(5):893-911. doi: 10.1111/mmi.13358.
- 15: Evangelinos M, Anagnostopoulos G, Karvela-Kalogeraki I, Stathopoulou PM, Scazzocchio C, Diallinas G. Minos as a novel Tc1/mariner-type transposable element for functional genomic analysis in *Aspergillus nidulans*. *Fungal Genet Biol.* 2015 Aug;81:1-11. doi: 10.1016/j.fgb.2015.05.007. Epub 2015 May 25.
- 16: Kryptou E, Evangelidis T, Bobonis J, Pittis AA, Gabaldón T, Scazzocchio C, Mikros E, Diallinas G. Origin, diversification and substrate specificity in the family of NCS1/FUR transporters. *Mol Microbiol.* 2015 Jun;96(5):927-50. doi: 10.1111/mmi.12982.

INVITED PRESENTATIONS (last 10 years)

1. Advanced course on Plasma membrane transporters: Physiology, Genetics and Phylogeny 3rd edition, Braga, Portugal, 2010
2. Advanced course on Plasma membrane transporters: Physiology, Genetics and Phylogeny 4th edition, Braga, Portugal, 2012
3. Eurofungbase Meeting, Berlin, Germany, 2012
4. Plasma membrane transporters: Physiology, Genetics and Phylogeny, Braga, Portugal, 2012 (Advanced course)
5. 13rd International Workshop on Expression, Structure and Function of Membrane Protein, Florence, Italy, September 2012
6. FEBS Special Meeting in Protein Quality Control and Ubiquitin Systems in health and disease, Kusadasi, Turkey 2012
7. 27th Fungal Genetics Conference at Asilomar, Membrane trafficking and molecular organization, Asilomar, CA, USA, March 2013
8. 31st Small Meeting on Yeast Transport and Energetics, Opening lecture, Antalya, Turkey, September 2013
6. 12th European conference on Fungal Genetics, Seville, March 23-27, 2014
9. 1st Proteostasis Meeting, Cost proteostasis action bm1307, Valencia, Spain, 2014
10. 4th International Workshop on Expression, Structure and Function of Membrane Protein, Florence, Italy, September 2014
11. 13th European Fungal Genetics Conference, Paris, France, 4-6 April, 2016
12. Unconventional Protein and Membrane Traffic, October 2016 Lecce, Italy
13. Special Molecular Genetics course on Transporters, BOKU University Vienna, Austria (Erasmus), June 2017
14. 14th European Fungal Genetics Conference, Haifa, Israel., April, 2018
15. 1st Small Meeting on Endocytic Trafficking and Signaling, July 2018, Braga, Portugal
16. EMBO new members meeting, October 2108, Heidelberg, Germany.
17. Instituto Gulbenkian (IGC), June 2019, Lisbon, Portugal
18. Department of Molecular Biosciences, The Wenner-Gren Institute, Stockholm University, July 2019, Sweden
19. EMBO workshop on *Molecular mechanisms of unconventional protein secretion in eukaryotic cells*, September 2019, Assisi, Italy
20. 2nd Small Meeting on *Endocytic Trafficking and Signaling*, July 2020. Braga, Portugal

SABBATICALS

1. February 2005-April 2005 (3 months), Genetics & Developmental Biology lab, Prof. C. Delidakis, IMBB, ITE, Heraklio, Crete, Greece
2. September 2009-March 2010 (6 months), Faculdade de Biologia, Universidade do Minho, Braga, Portugal, Yeast Genetics and Biotechnology lab, Prof. M. Casal
3. November 2018-February 2019 (3 months), Department of Life Sciences, Università di Parma, lab of Prof. R. Percudani (*EMBO short term fellowship*)

ORGANISATION OF INTERNATIONAL CONFERENCES

1. President of the organizing and scientific committee, 19th Small Meeting on Yeast Transport and Energetics (SMYTE), Chania, Crete, Greece, September 2001
2. Member of the organizing and scientific committee of the 62th Scientific Conference of the Hellenic Society of Biochemistry & Molecular Biology, December 2013
3. President of the organizing and scientific committee, 34th Small Meeting on Yeast Transport and Energetics (SMYTE), Chania, Crete, Greece, September 2016.
4. President of organizing/scientific committee of the EMBO workshop Transporters: from folding and subcellular traffic to structure, function and evolution, Chania, Crete, Greece, September 2021

PRIZES/ AWARDS/ ACADEMY MEMBERSHIPS

1. Archimedes E.U. Award (www.cordis.lu/improving/awards/home.htm), 2002
2. John S. Latsis Public Benefit Foundation Research Award, 2012
3. Fondation Santé Research Award, 2014-16, 2018-20
4. Elected EMBO member
5. EMBO short term fellowship
6. Advisory Board of the Hellenic Institut Pasteur, 2016
7. Scientific Board of the European University of Cyprus, 2016

CONTRIBUTIONS TO EARLY CAREER OF EXMEMBER SOF THE LAB

ex-PhD students (M. Koukaki, S. Amillis, A. Pantazopoulou, S. Goudela I. Papageorgiou, Z .Erpapazoglou, N. D. Lemuh, A. Vlanti, G. Anosontzis, C. Gournas, E. Kryptou, M. Evangelinos, O. Martzoukou) moved to excellent labs in Europe, USA or Greece, performing high quality basic research as post-docs/researchers/group leaders (CIB-CSIC, Madrid; Institut Jacques Monod-CNRS, Universités Paris 7; Uppsala Biomedical Center, UCLA, USA; University of Washington, USA; University of Chicago, Université Libre de Bruxelles, IMBB-Crete, Greece; IIBEA-Athens, Greece, NCRS Democritus, Athens, Greece). Several ex-Diploma students are also presently performing top research at prestigious Institutions, such as EBML, MRC, Harvard University, Centre for Genomic Regulation, (A. Pittis, V. Bitsikas, K. Kagias, J. Bobonis, G. Rapti, etc.)

OTHER

- **Teaching** of Undergraduate courses; General Microbiology, Molecular Microbiology. Post-graduate courses; Plant Molecular Biology, Microbial Biotechnology, Biophysics (1998-present).
- **Translation** of part of textbook “Microbiology”, Pelczar, Chan, Krieg eds (2005).
- **Member** of Biophysical Society (USA), Biochemical Society-FEBS, Hellenic Scientific Societies EEMBB, PEB & EEBE.
- **Visiting Professor** in the University of Minho, Braga, Portugal.
- **Administrative Duties** - Advisory Board: Biological Sciences program at European University of Cyprus (2015-). Directors Board: The Hellenic Pasteur Institute (2015-2020).
- **Responsible for Erasmus exchanges** with > 10 European Universities.
- **Supervision of Research Students:** 25 PhDs for University of Athens (19 completed, 6 ongoing) and co-supervision of 4 PhDs for University of Minho, Braga, Portugal. Supervision of 14 MSc and 68 Diploma (B.Sc) theses.
- **Editorial Board** of *Molecular Membrane Biology*.
- **Reviewer** for several (> 50) scientific journals including *Science*, *Nature Communications*, *The EMBO Journal*, *eLIFE*, *FEBS J*, *Molecular Microbiology*, *Journal of Microbiology*, *Biochemical Society Transactions*, *Frontiers in Pharmacology*, *Plant Physiology*, *J. Mol. Biology*, etc. & for the USDA-USA, the Austrian Science Fund (FWF), The Research Foundation - Flanders (FWO), the Greek Ministries of Education and Development, and the Greek Organization of Pharmaceuticals (EOF) etc.