

Eleni Vorgia

Date/Place of birth: July 7th, 1983, Athens, Greece
Current address: Chandakos 30, 71202, Heraklion, Crete, Greece
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EDUCATION

- November 2017 - To date **Postdoctoral fellow**
“Explore analogous to Pharma models (isolated gut cells or immortalized gut cell lines / 3D cultures, hanging drop method etc) for uptake, metabolism, or insecticide screens, as well as support of protein characterisation / immunolocalization work”
Lab of Molecular Entomology & Pesticide Science, School of Biology, University of Crete and Institute of Molecular Biology and Biotechnology at Foundation of Research and Technology-Hellas (I.M.B.B./F.O.R.TH), Greece
Supervisor: Prof J. Vontas
- 2016 (6months) **Postdoctoral fellow**
“Physico-chemical and structural characterization of scaffold-based proteins”
Lab of Structural Biology, School of Biology, University of Crete and Institute of Molecular Biology and Biotechnology at Foundation of Research and Technology-Hellas (I.M.B.B./F.O.R.TH), Greece
Supervisor: Prof M. Kokkinidis
- 2013-2016 **Postdoctoral fellow**
“Study of the role of erf gene in oligodendrocyte development through transgenic animals”
Lab of Chemistry, School of Medicine, University of Crete and Institute of Molecular Biology and Biotechnology at Foundation of Research and Technology-Hellas (I.M.B.B./F.O.R.TH), Greece
Supervisor: Prof G. Mavrothalassitis
- 2006-2013 **PhD thesis**
“Regulation of the differentiation and proliferation program of stem cells within the Ras/erk pathway through ERF transcription factor”.
Lab of Chemistry, School of Medicine, University of Crete and

Institute of Molecular Biology and Biotechnology at Foundation of Research and Technology-Hellas (I.M.B.B./F.O.R.TH), Greece
Supervisor: Prof G. Mavrothalassitis

2005

Undergraduate research thesis

“Creation of plasmid constructs for expression of the molecule of neuronal adhesion, TAG-1, in oligodendrocyte, Schwann cells and neurons”

“Study and mapping the regulatory region of the transcription factor NSCL-1”

Lab of Neuroscience, School of Medicine, University of Crete and Institute of Molecular Biology and Biotechnology at Foundation of Research and Technology-Hellas (I.M.B.B./F.O.R.TH)
Supervisor: Prof D. Karagogeos

2001-2005

BSc Degree in Molecular Biology and Genetics

Democritus University of Thrace, Alexandroupolis, Greece
grade: 7,6/10

LANGUAGES

Greek: native

English: (level C2) Proficiency in English-University of Michigan

German: (level C1) Zentrale Mittelstufenprüfung-Goethe Institut

Italian: (level B2) CELI 3–Università di Perugia

PUBLICATIONS

- Vorgia E, Zaragkoulias A, Peraki I, Mavrothalassitis G. (2017) Suppression of Fgf2 by ETS2 repressor factor (ERF) is required for chorionic trophoblast differentiation. *Mol Reprod Dev.* 84(4):286-295.
- Twigg SR, Vorgia E, McGowan SJ, Peraki I, Fenwick AL, Sharma VP, Allegra M, Zaragkoulias A, Sadighi Akha E, Knight SJ, Lord H, Lester T, Izatt L, Lampe AK, Mohammed SN, Stewart FJ, Verloes A, Wilson LC, Healy C, Sharpe PT, Hammond P, Hughes J, Taylor S, Johnson D, Wall SA, Mavrothalassitis G, Wilkie AO. (2013) Reduced dosage of ERF causes complex craniosynostosis in humans and mice and links ERK1/2 signaling to regulation of osteogenesis. *Nat Genet.* 45(3):308-13.
- Allegra M, Zaragkoulias A, Vorgia E, Ioannou M, Litos G, Beug H, Mavrothalassitis G. (2012) Semaphorin-7a reverses the ERF-induced inhibition of EMT in Ras-dependent mouse mammary epithelial cells. *Mol Biol Cell.* (19):3873-81.

- Verykokakis M, Papadaki C, Vorgia E, Le Gallic L, Mavrothalassitis G. (2007) The RAS-dependent ERF control of cell proliferation and differentiation is mediated by c-Myc repression. *J Biol Chem.* (41):30285-94.

CONFERENCE POSTERS/ANNOUNCEMENTS

- Vorgia E, Zaragkoulias A, Mavrothalassitis G (2012)
 “The generic mechanism of trophoblast stem cell differentiation by transcription inhibitor Erf.”
 63rd conference of the Hellenic Society of Biochemistry and Molecular Biology, Heraklion, Crete, Greece
- Vorgia E, Verykokakis M, Nikolaou K, Mavrothalassitis G (2010)
 “The role of the transcription factor ERF during the differentiation of stem cells”
 61st conference of the Hellenic Society of Biochemistry and Molecular Biology, Alexandroupolis, Greece

LABORATORY TECHNIQUES

- **Molecular Biology:** Cloning, Mutagenesis, Isolation and characterization of nucleic acids, PCR, Real-Time PCR, Agarose electrophoresis
- **Microbiology:** Standard techniques of bacterial handling and protein over-expression in *E.coli* cells
- **Imaging techniques:**
In situ hybridization, Immunofluorescence, Immunocytochemistry, Inverted Microscopy, Confocal Microscopy, Transmission Electron Microscopy
- **Animal Handling:**
 Generation of transgenic mice with blastocyst transfer, Mice dissection, Perfusion, Isolation of embryos, brain, fibroblasts and mesenchymal stem cells, Mice brain injection for targeted demyelination in the corpus callosum, Behavioral analysis (open-field analysis, elevated plus maze, locomotor activity assay, footprint test)
- **Cell Culture:**
 Transfection and stable transfection of eukaryotic cells (primary and immortalized cell lines), Infection of eukaryotic cells, Growth and differentiation of embryonic stem cells, neural stem cells, trophoblast stem cells, mesenchymal stem cells (hanging drops, 2D and 3D cultures)

- **Biochemistry techniques**

SDS acrylamide gel electrophoresis, Purification of proteins, Antibody purification

OTHER SKILLS

Safe Laboratory Practice Training (Certified)

OTHER INTERESTS

Photography, yoga, chess, painting, travel