



George Mavrothalassitis Professor of Medical Chemistry

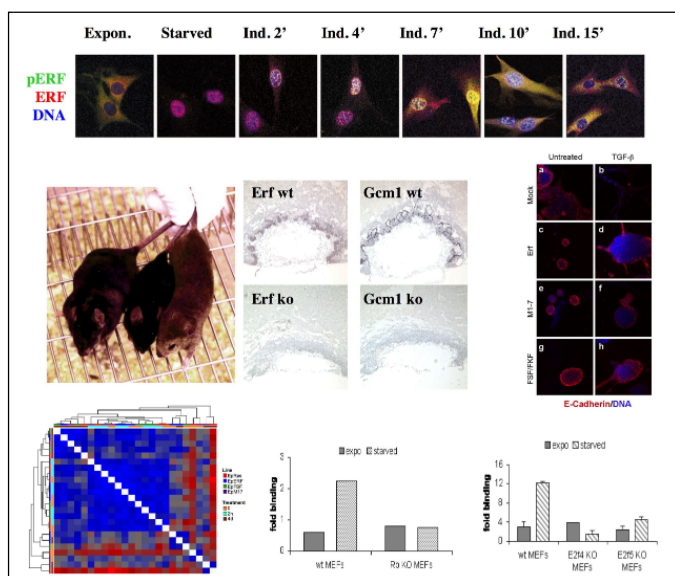
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Academic and Research appointments

- 2010-date Professor, Department of Basic Sciences, Medical School University of Crete and IMBB-FORTH Associate Researcher, Heraklion, Crete, Greece.
- 2000-2010 Associate Professor, Department of Basic Sciences, Medical School University of Crete and IMBB-FORTH Associate Researcher, Heraklion, Crete, Greece.
- 1998-2000 Tenured Assistant Professor, Department of Basic Sciences, Medical School University of Crete and IMBB-FORTH Associate Researcher, Heraklion, Crete, Greece.
- 1995-1998 Assistant Professor, Department of Basic Sciences, Medical School University of Crete and IMBB-FORTH Associate Researcher, Heraklion, Crete, Greece.
- 1993-1995 Visiting Scientist, Laboratory of Molecular Oncology, National Cancer Institute, NIH, Frederick, MD, USA.
- 1991-1993 Visiting Associate, Laboratory of Molecular Oncology, National Cancer Institute, NIH, Frederick, MD, USA.
- 1988-1991 Visiting Fellow, Laboratory of Molecular Oncology, National Cancer Institute, NIH, Frederick, MD, USA.
- 1984-1988 Postdoctoral Fellow, IMBB, Research Center of Crete, Heraklion, Crete, Greece.

Scientific Interests

We are interested in the transcriptional regulation from extracellular signals in normal and pathological development. And in particular along the RTK – MAPK - ETS, pathway, utilising cellular and animal models. We are focusing on the transcriptional repressor ERF and its balancing effects with the Class I ETS oncoproteins. Specifically, its role in embry-



onic development, hematopoiesis, myelination, prostate cancer and craniosynostosis.

selected publications

1. Peraki I, Palis J and Mavrothalassitis G. The Ets2 repressor factor (Erf) is required for effective primitive and definitive hematopoiesis. *Mol Cell Biol* 37: e00183-17, 2017
2. Twigg SR, Vorgia E, McGowan SJ, Peraki I, Fenwick AL, Sharma VP, Allegra M, Zaragkoulias A, Akha ES, 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. Reduced dosage of ERF causes complex craniosynostosis in humans and mice and links ERK1/2 signaling to regulation of osteogenesis. *Nat Genet.* 45:308-13, 2013
3. Maryline Allegra, Elena Vorgia, Marina Ioannou, Gabriele Litos, Hartmut Beug and George Mavrothalassitis. Semaphorin-7a reverses the ERF-induced inhibition of EMT in Ras-dependent mouse mammary epithelial cells. *Mol Biol Cell*, 23:3873-81, 2012
4. Verykokakis M, Papadaki C, Vorgia E, Le Gallic L and Mavrothalassitis G. The Ras-dependent Erf control of cell proliferation and differentiation is mediated by c-Myc repression *J Biol Chem.* 282:30285-94, 2007
5. Papadaki, C., Alexiou, M., Cecena, G., Verykokakis, M., Bilitou, A., Cross, J. C., Oshima, R. G., and Mavrothalassitis, G. Transcriptional repressor erf determines extraembryonic ectoderm differentiation *Mol Cell Biol* 27:5201-5213, 2007
6. Polychronopoulos S, Verykokakis M, Yazicioglu MN, Sakarellos-Daitsiotis M, Cobb MH, Mavrothalassitis G. The transcriptional ETS2 repressor factor associates with active and inactive Erks through distinct FXF motifs. *J Biol Chem.* 281:25601-11, 2006
7. Le Gallic L; Virgilio L; Cohen P; Biteau B; Mavrothalassitis G ERF nuclear shuttling, a continuous monitor of Erk activity that links it to cell cycle progression *Mol. Cell. Biol.* 24: 1206-1218, 2004
8. Meropi Athanasiou, Lionel LeGallic, Dennis K. Watson, Donald G. Blair, and George Mavrothalassitis. Suppression of the Ewing's Sarcoma phenotype by FLI1/ERF repressor hybrids. *Cancer Gene Therapy* 7: 1188-1195, 2000
9. Lionel Le Gallic, Dionyssios Sgouras, Gregory Beal Jr and George Mavrothalassitis. The transcriptional repressor ERF, is a ras/MAPK target that regulates cellular proliferation. *Mol. Cell. Biol.* 19: 4121-4133, 1999
10. Sgouras, D. N., Athanasiou, M. A., Beal, G. J., Fisher, R. J., Blair, D. G. and Mavrothalassitis, G. J.: ERF: An ETS domain protein with strong transcriptional repressor activity, can suppress ets-associated tumorigenesis and regulated by phosphorylation during cell cycle and mitogenic stimulation. *EMBO J.* 14: 4781-4793, 1995