

NAME Dr. Ioanna Maroulakou		POSITION TITLE Professor of Genetics	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Athens, Athens Greece	B.S.	1984	Biology
University of Athens, Athens Greece	Ph.D.	1990	Biology
National Cancer Institute, NIH, USA	Postdoc	1991-1996	Molecular Oncology

Positions and Honors

- 1984-1990 Graduate Student, Laboratory of Biology, School of Health Sciences, University of Athens, Athens, Greece
- 1988 Guest Investigator Fellowship, Laboratory of Cell Biology, Rockefeller University, New York, USA
- 1991-1996 Post-doctoral Fellow, Laboratory of Molecular Oncology, National Cancer Institute, USA
- 1996-2003 Assistant Professor, Dept. of Medicine, Medical University of South Carolina, Charleston, USA
- 2003-2009 Assistant Professor, Dept. of Medicine, Tuft University School of Medicine, Boston, USA
- 2003-2009 Investigator, Molecular Oncology Research Institute, Tufts-NEMC, Boston, USA
- 2009 Associate Professor, Dept. of Pharmacology and Toxicology, Cancer Institute, University of Mississippi Medical Center, Jackson, USA
- 2010 Professor of Genetics, Dept. of Molecular Biology and Genetics, Democritus University of Thrace, Greece

PROFESSIONAL MEMBERSHIPS:

- Member, American Association for Cancer Research
 Member, American Association for the Advancement of Science
 Member, Hellenic Society of Biochemistry and Molecular Biology

OTHER EXPERIENCE AND PROFESSIONAL ACTIVITIES

- 2013- today Head of the Graduate Studies Program "Translational Research in Molecular Biology and Genetics"

HONORS AND AWARDS:

- 9/86-9/90 National Graduate Fellowship, University of Athens, Greece
- 9/87 Grant from European Training Programme (ETP) in Italy
- 6/88-12/88 Guest Investigator Fellowship, Laboratory of Cell Biology, Rockefeller University, USA
- 6/91-6/93 Fogarty Fellowship, Laboratory of Molecular Oncology, National Cancer Institute, NIH, USA
- 6/93-5/96 Renewal of Fogarty Fellowship, Laboratory of Molecular Oncology, National Cancer Institute, NIH, USA

Selected Peer-reviewed Publications

Maroulakou, I. G., Papas, T. S., and Green, J. E.: Differential expression of ets-1 and ets-2 proto oncogenes during murine embryogenesis. *Oncogene* 9: 1551-1565, 1994.

Maroulakou, I. G., Anver, M., Garrett, L., and Green, J. E.: Prostate and breast cancer in transgenic mice carrying a rat C3(1) SV40 TAG fusion gene. *Proc. Natl. Acad. Sci. USA* 91: 11236-11240, 1994.

Maroulakou, I. G., Pokholok, D. K., Cuprash, D. V., Alimzhanov, M. B., Kozlov, S. V., Novobrantseva, T. I., Turetskaya, R. L., Green, J. E., and Nedospasov, S. A.: Cloning and in situ transcriptional analysis of the murine lymphotoxin-b (Ltb) gene. *Proc. Natl. Acad. Sci. USA* 92: 674-678, 1995. (Note: In this paper Maroulakou and Pokholok are equal first authors)

Chen S-L, **Maroulakou IG**, Green JE, Romano-Spica V, Modi W, Lautenberger J, Bhat NK. Isolation and characterization of a novel gene expressed in multiple cancers. *Oncogene*. 1996;12:741-751

Kenney, N. J., Smith, G. H., **Maroulakou, I.**, Johnson, G., Gullick, W. J., Green, J. E., Muller, W. J., Merlino, G. H., Callahan, R., Salomon, D. S., and Dickson, R. B.: Detection of amphiregulin and Cripto-1 in mammary tumors from transgenic mice. *Molecular Carcinogenesis* 15: 44-56, 1996.

Shibata, M.-A., **Maroulakou, I. G.**, Jorcyk, C. L., Gold, L. G., Ward, J. M., and Green, J. E.: p-53 independent apoptosis during mammary tumor progression in C3(1)/SV40 large T antigen transgenic mice: Suppression of apoptosis during the transition from preneoplasia to carcinoma. *Cancer Research* 56(13): 2998-3003, 1996.

Jorcyk, C. L., Garrett, L. J., **Maroulakou, I. G.**, Watson, D. K., and Green J. E.: Multiple regulatory regions control the expression of the Ets-1 proto-oncogene in the developing mouse. *Cellular and Molecular Biology* 43: 211-225, 1997.

Maroulakou, I., Shibata, M.-A., Jorcyk, C. L., Chen, X. X. and Green, J. E.: Reduced p53 dosage associated with mammary tumor metastases in C3(1)TAG transgenic mice. *Molecular Carcinogenesis* 20: 168-174, 1997.

Yoshidome, K., Shibata, M. A., **Maroulakou, I. G.**, Liu, M. L., Jorcyk, C. L., Gold, L. G., Welch, V. N. and Green, J. E.: Genetic alterations in the development of mammary and prostate cancer in the C3(1)/Tag transgenic mouse model. *Int. J. Oncol.* 12(2): 449-453, 1998.

Maroulakou, I. G., Shibata, M.-A., Anver, M. R., Roberts, A., Tsarfaty, I., Resau, J., Ward, J. M. and Green, J. E.: Heterotopic endochondral ossification associated with mixed tumor formation in C3(1)/Tag transgenic mice is associated with elevated TGF-beta1 and BMP-2 expression. *Oncogene* 18(39): 5435-5447, 1999.

Bowe, D. B., Kenney, N. J., Adereth Y. and **Maroulakou, I. G.**: Suppression of her2/neu mammary tumor growth in Cyclin D1-deficient mice is compensated for by cyclin E. *Oncogene*, 21:291-298, 2002 (corresponding author).

Highlighted in The New England Journal of Medicine, section Clinical Implications of Basic Research, entitled "The Reciprocal Dance between Cancer and Development" by Lewis A. Chodosh. 2002. Vol.347 (2):134-136.

Tomczak MF, Gadjeva M, Wang YY, Brown K, **Maroulakou I**, Tschlis PN, Erdman SE, Fox JG, Horwitz BH. Defective activation of ERK in macrophages lacking the p50/p105 subunit of NF-kappaB is responsible for elevated expression of IL-12 p40 observed after challenge with Helicobacter hepaticus. *J Immunol.* 2006 Jan 15;176(2):1244-51.

Maroulakou IG, Oemler W, Naber SP, Tschlis PN. Akt1 ablation inhibits, whereas Akt2 ablation accelerates, the development of mammary adenocarcinomas in Mouse Mammary Tumor Virus (MMTV)-ErbB2/Neu and Polyoma Middle T mice. *Cancer Res* 2007; 67(1): 167-77. (Corresponding Author).

Highlighted in the front page of " Cancer Research" as selected article from the January1, 2007 issue.

Mao C, Tili EG, Dose M, Haks MC, Bear SE, **Maroulakou I**, Horie K, Gaitantris G, Ludwig T, Wiest DL, Gounari F, Tschlis PN. Unequal contribution of akt isoforms in the double-negative to double-positive thymocyte transition. *J. Immunol.* 2007 May 1;178(9):5443-53.

Maroulakou IG, Oemler W, Naber SP, Tsiichlis PN. Distinct roles of the three Akt isoforms in lactogenic differentiation and involution. *J Cell Physiol.* 2008 Nov;217(2):468-77. (Corresponding Author)

Wright, G., **Maroulakou, I.**, Vijayalakshmi, S., Eldridge, J., Tsiichlis, P., and Muise-Helmericks, R.C. VEGF Stimulation of Mitochondrial Biogenesis: Requirement of Akt3 kinase. *FASEB J.* 2008 Sep 22(9):3264-75

Iliopoulos D, Polytarchou C, Hatziapostolou M, Kottakis F, **Maroulakou IG**, Struhl K, Tsiichlis PN. MicroRNAs differentially regulated by Akt isoforms control EMT and stem cell renewal in cancer cells. *Science Signal.* 2009 Oct 13;2(92):ra62.

Polytarchou C., Iliopoulos D., Hatziapostolou M., Kottakis F, **Maroulakou, I.**, Kevin Struhl K., and Tsiichlis P. Akt2 functions as a master regulator of all Akt isoforms and promotes resistance to hypoxia by regulating the induction of miR-21 upon oxygen deprivation. *Cancer Research.* 2011 Jul 1;71(13):4720-31.

Hebron E, Hope C, Kim J, Jensen JL, Flanagan C, Bhatia N, **Maroulakou I**, Mitsiades C, Miyamoto S, Callander N, Hematti P, Asimakopoulos F. MAP3K8 kinase regulates myeloma growth by cell-autonomous and non-autonomous mechanisms involving myeloma-associated monocytes/macrophages. *Br J Haematol.* 2013 Mar;160(6):779-84.

Hope C, Ollar SJ, Heninger E, Hebron E, Jensen JL, Kim J, **Maroulakou I**, Miyamoto S, Leith C, Yang DT, Callander N, Hematti P, Chesi M, Bergsagel PL, Asimakopoulos F. TPL2 kinase regulates the inflammatory milieu of the myeloma niche. *Blood.* 2014 May 22;123(21):3305-15.

Jensen JL, Rakhmilevich A, Heninger E, Broman AT, Hope C, Phan F, Miyamoto S, **Maroulakou I**, Callander N, Hematti P, Chesi M, Bergsagel PL, Sondel P, Asimakopoulos F. Tumoricidal Effects of Macrophage-Activating Immunotherapy in a Murine Model of Relapsed/Refractory Multiple Myeloma. *Cancer Immunol Res.* 2015 Aug;3(8):881-90