

Curriculum Vitae

Name: Evangelia Patsavoudi

Higher Education: Biology, **University of Patras**
1977-1981

Post-Graduate Studies: Animal Physiology
1981-1982 Diplome d'Etudes Approfondies (DEA)
Universite Pierre&Marie Curie (ParisVI)

1982 - 1985 Animal Physiology
Doctorate Thesis carried out at the:
College de France.
Universite Pierre & Marie Curie (ParisVI)
Title : Differentiation of Leydig cells in vitro
in rat embryos.

Other courses:

July – September 1984 Hyridolab, **Institut Pasteur de Paris**
Educational course on the:”Production of
Monoclonal Antibodies.”

February 1990 **Max Plank Institute, Tubingen** Germany
Seminar of the European Molecular
Biology Organisation (EMBO)
Title:”Development, Regeneration and
Plasticity of the Nervous System
Experimental Course”

Professional Activities:

1998-2016: Collaborating Researcher and Group Leader
Department of Biochemistry, **Hellenic Pasteur
Institute**

1998-present: Professor of Biology
Department of Biomedical Engineering
University of West Attica

Other Teaching Activities: Post graduate MSc course in Medical Physics,
University of Patras.

- Responsible supervisor of several final year projects of Biology and Medical students
- Responsible supervisor since 1991 of PhD students that obtained their PhD doctorate thesis from the Biology Department or Medical School of the Kapodistrian University of Athens

CITATIONS: Over 700

Approved Patents: Compositions and methods for treating neoplasias This application claims the benefit of U.S. Provisional Application No.: 61/386,764, filed September 27, 2010.

PUBLICATIONS IN INTERNATIONAL PEER REVIEWED JOURNALS

1. A. Jost, **E. Patsavoudi**, S. Marge, M. Castanier and R. Scholler. (1984) Relations entre organogenese testiculaire et secretion de testerone par le testicule in vitro. Pathologie Biologie 32, p. 860-862.
2. R. Agelopoulou, S. Marge, **E. Patsavoudi** and A. Jost. (1984) Initial phases of the rat testis differentiation in vitro. Journal of Embryology and Experimental Morphology 83, p. 15-31.
3. S. Marge, **E. Patsavoudi**, A. Jost, M. Castanier and R. Scholler. (1984) Dissociation entre organogenese endocrine du testicule de rat in vitro. INSERM 123, p. 407-412.
4. **E. Patsavoudi**, S. Marge, M. Castanier, R. Scholler and A. Jost. (1985) Dissociation between testicular morphogenesis and functional differentiation of Leydig cells. Journal of Endocrinology, 105, p. 233-238.
5. A. Jost, S. Marge and **E. Patsavoudi**. (1986) Morphogenesis and endocrine cytodifferentiation of the fetal testis. Serono Symposia Review II p. 41-48.
6. **E. Patsavoudi**, C. Hurel and R. Matsas. (1989) Neuron and myelin specific monoclonal antibodies recognizing cell surface antigens of the central and peripheral nervous system. Neuroscience, 30, p. 463-478.
7. **E. Patsavoudi**, C. Hurel and R. Matsas. (1991) Purification and characterization of a neuron-specific surface antigen defined by monoclonal antibody BM88. J. of Neurochem., 56, p. 782-788.
8. D. Thomaidou and **E. Patsavoudi**. (1993) Identification of a novel neuron specific surface antigen in the developing nervous system by monoclonal antibody 4C5. Neuroscience 53, p. 813-827.

9. L. Probert, J. Keffer, P. Corbella, H. Cazlaris, **E. Patsavoudi**, S. Stephens, E. Kaslaris, D. Kioussis and G. Kollias. (1993) Wasting ischaemia and lymphoid abnormalities in mice expressing T cell-targeted human tumour necrosis factor transgenes. *J. of Immunol.* 151, p. 1894-1906.
10. **E. Patsavoudi**, E. Merkouri, D. Thomaidou, F. Sandillon, G. Alonso and R. Matsas (1995) Biochemical characterization and immunocytochemical localization of the BM88 antigen in the developing and adult rat brain. *J. Neurosci. Res.* 40, 506-518
11. D. Thomaidou, I. Dori and **E. Patsavoudi**. (1995) Developmental expression and functional characterization of the 4C5 antigen in the post-natal cerebellar cortex. *J. Neurochem.* 64, p. 1937-1944
12. A. Mamalaki, E. Boutou, C. Hurel, **E. Patsavoudi**, S. Tzartos and R. Matsas. (1995) The BM88 antigen, a novel neuron specific molecule, enhances the differentiation of mouse neuroblastoma cells. *J. Biol. Chem.* 270, p. 14201-14208
13. D. Thomaidou, E. Yfanti and **E. Patsavoudi**. (1996) Expression of the 4C5 antigen during development and after injury of the rat sciatic nerve. *J. Neurosci. Res.* 46:24-33.
14. E. Yfanti, I. Nagata and **E. Patsavoudi**. (1998) "Migration behavior of rodent granule neurons the presence of antibody to the 4C5 antigen", *J. Neurochem.* 71: 1381-1389
15. E. Yfanti, K. Sidera, L. Margaritis and **E. Patsavoudi** (2004) "The 4C5 antigen is associated with Schwann cell migration in vitro" *Glia* 45: 89-53
16. K. Sidera, M. Samiotaki, E. Yfanti, G. Panayotou and **E. Patsavoudi** (2004) Involvement of cell surface HSP90 in cell migration reveals a novel role in the developing nervous system *J Biol. Chem.* 279: 45379-45388
17. Y. Koutmani, C. Hurel, **E. Patsavoudi**, M. Haeck, M. Gotz, D. Thomaidou, and R. Matsas (2004) BM88 is a marker of proliferating neuroblasts that will differentiate into the neuronal lineage. *Eur. J Neurosci.* 20: 2509-2523
18. Kontodimopoulos N, Cavouras D, Kandarakis I, Spyropoulos, **Patsavoudi E.**, Ventouras E. (2004) Upgrading the biomedical engineering undergraduate curriculum based on current trends in higher education. *Conf Proc IEEE Eng Med Biol Soc.*
19. D. Stellas, A. Karameris, and **E. Patsavoudi** (2007) MAb 4C5, a monoclonal antibody against HSP90, immunostains human melanomas and inhibits melanoma cell invasion and metastasis " *Clinical Cancer Res* 13 : 1831-1838
20. K. Sidera, M. Gaitanou, D. Stellas, R. Matsas and **E. Patsavoudi** (2008) A critical role for surface HSP90 in cancer cell invasion involves extracellular interaction with HER-2 *J Biol Chem.* 283:2031-2041
21. Sidera K, **Patsavoudi E.** (2008) Extracellular HSP90: conquering the cell surface. *Cell Cycle.* 7:1564

22. Casado JG, Delgado E, **Patsavoudi E**, Durán E, Sanchez-Correa B, Morgado S, Solana R, Tarazona R. (2008) Functional Implications of HNK-1 Expression on Invasive Behaviour of Melanoma Cells. *Tumour Biol.* 29:304-310.
23. Sidera K. and **Patsavoudi E**. (2009) Extracellular HSP90: An emerging target for cancer therapy. *Current Signal Transduction Therapy* 4: 51-58
24. Stellas D., El Hamidieh A. and **Patsavoudi E**. (2010) Monoclonal antibody 4C5 prevents activation of MMP2 and MMP9 by disrupting their interaction with extracellular HSP90 and inhibits formation of metastatic breast cancer cell deposits. *BMC Cell Biol* 11:51
25. Sidera K., El Hamidieh A. Mamalaki A. and **Patsavoudi E**. (2011) The 4C5 cell-impermeable anti-HSP90 antibody with anti-cancer activity, is composed of a single light chain dimer. *PLoS ONE* 6(9) e2390626.
26. Stellas D and **Patsavoudi E**. (2012) Inhibiting matrix metalloproteinases , an old story with new potentials for cancer treatment. *Anticancer Agents Med Chem.* 12(7):707-17
27. El Hamidieh A, Grammatikakis N, **Patsavoudi E** (2012) Cell surface Cdc37 participates in extracellular HSP90 mediated cancer cell invasion. *PLoS One.* 2012;7(8):e42722.
28. Sidera K, **Patsavoudi E**. (2014). HSP90 inhibitors: current development and potential in cancer therapy. *Recent Pat Anticancer Drug Discov.* 9(1):1-20.
29. Stivarou T, **Patsavoudi E**. (2015). Extracellular molecules involved in cancer cell invasion. *Cancers (Basel).* 7(1):238-65. doi: 10.3390/ Cancers7010238.
30. Thomaidou D. and **Patsavoudi E**. (2015) Extracellular HSP90 in cancer invasion and metastasis: from translational research to clinical prospects, *J. Analyt. Oncol.* 4(4):178-190.
31. Stivarou T, Stellas D, Vartzi G, Thomaidou D, **Patsavoudi E**. (2016) Targeting highly expressed extracellular HSP90 in breast cancer stem cells inhibits tumor growth in vitro and in vivo. *Cancer Biol Ther.* 17(8):799-812.

INTERNATIONAL MEETINGS

1. **E. Patsavoudi** and R. Matsas (1988). Neuron and myelin specific monoclonal antibodies to cell surface antigens. (Abstr.) Int. J. of Developmental Neuroscience 6, (Suppl.) A 141.
2. **E. Patsavoudi** and R. Matsas (1989). Neuron specific monoclonal antibody BM88 recognizes a 22 KD membrane protein that may be involved in neuron glia interactions. (Abstr.) J. Neurochem. 52, (Suppl.) S 134A.
3. E. Merkouri, **E. Patsavoudi** and R. Matsas (1990). Neuron specific monoclonal antibody recognizes a 41kD surface antigen in the pig nerves system. 8th Meeting of the European Society for Neurochemistry, Leipzig, Germany.
4. G. Kollias, H. Kaslaris, E. Kaslaris, J. Keffer, **E. Patsavoudi** and L. Probert (1990). Analysis of human tumor necrosis factor gene expression and biological function in transgenic mice. 3rd International Conference on Tumor Necrosis Factor and Related Cytokines. Makuhari, Japan.
5. R. Matsas and **E. Patsavoudi** (1991). Neuron specific antigen defined by monoclonal antibody BM88 is involved in neurite outgrowth in vitro. 3rd IBRO World Congress of Neuroscience, Montreal, Canada.
6. **E. Patsavoudi**, V. Vlazakis and R. Matsas (1991). Monoclonal antibody BM88 defines a neuron specific surface antigen involved in neurite outgrowth Soc. Neurosci. 17 p. 574.
7. D. Thomaidou and **E. Patsavoudi** (1992). Monoclonal antibody 4C5 recognizes a neuron specific surface antigen in the rat developing nervous system. 1st IUBMB Conference, Biochemistry of Diseases, Nagoya, Japan.
8. E. Merkouri, R. Matsas, **E. Patsavoudi**, C. Pavlidis and S. Thanos (1992). Expression of BM88 and BM89 antigens in regenerating sciatic trigeminal and optic nerves. 15th Annual Meeting of the European Neuroscience Association, Munich, Germany.
9. **E. Patsavoudi**, A. Mamalaki, E. Boutou, C. Hurel, S. Tzartos and R. Matsas (1993). Molecular cloning and expression of the BM88 antigen, a novel neuron specific molecule involved in neurite outgrowth. J. Neurochem. (Suppl.) S111C.
10. E. Boutou, A. Mamalaki, C. Hurel, **E. Patsavoudi**, S. Tzartos and R. Matsas (1993). Molecular cloning and expression of the BM88 antigen, a novel neuron-specific molecule involved in neurite outgrowth. European Science Foundation Research Conference on: Molecular Neurobiology, Regulation of Biosynthesis and Function of Neuroreceptors and Ion Channels. Aghia Pelagia, Crete.

11. E. Boutou, A. Mamalaki, C. Hurel, **E.Patsavoudi**, S. Tzartos and R. Matsas.
(1995). "The BM88 antigen, a novel neuron-specific molecule, enhances the differentiation of mouse neuroblastoma cells". European Science Foundation International Workshop on: "The Genetic Control of Vertebrate Development"
Kolymbari, Crete.
12. E. Yfanti and **E. Patsavoudi**. (1997). The 4C5 antigen is involved in cell migration events during development of the central and peripheral nervous system. J. Neurochem. (Suppl.) S 128B
13. **E. Patsavoudi**, E. Yfanti and S. Tzartos (1997). The 4C5 antigen is involved in cell migration events during development of the central and peripheral nervous system. 27th Annual Meeting , Society for Neuroscience. New Orleans, USA.
14. E. Yfanti , J. Cohen, L. Margaritis and **E. Patsavoudi** (1998) The 4C5 antigen is involved in Schwann cell migration during development of the peripheral nervous system. 3rd European Meeting on Glial Cell Function in Health and Disease Athens , Greece
15. **E. Patsavoudi** ,E. Yfanti , S. Meintanis, C. Dimas, R. Matsas and L. Margaritis (2000) Changes in cytoskeletal organization of migrating Schwann cells in the presence of monoclonal antibody to the 4C5 antigen . 30th Annual Meeting , Society for Neuroscience. New Orleans, USA.
16. D. Thomaidou, Y. Koutmani, **E. Patsavoudi** and R. Matsas (2000) BM88 is a marker of proliferating neuroblasts in early differentiating cells. 30th Annual Meeting , Society for Neuroscience. New Orleans, USA.
17. Y. Koutmani, D. Thomaidou ,**E. Patsavoudi** and R. Matsas (2001) BM88 is a marker of proliferating neuroblasts that will differentiate into the neuronal lineage. 12th Biochemical and Biophysical Balcan Days . Bucharest, Romania
18. **E. Patsavoudi**, K. Sidera, M. Samiotaki, G. Panayotou, I. Kalatzis and D. Cavouras (2004) Identification of the 4C5 antigen as a member of the heat shock protein family FENS Forum, Lisbon Portugal.
19. Stellas D., E. Villaras, G. Tsiambas , A. Karameris and **E Patsavoudi** (2005) Detection of Heat Shock Protein HSP90 in brai tumors with a new monoclonal antibody, mAb4C5 ECCO13 Paris
20. Sidera K, Gaitanou M., Matsas R. and **Patsavoudi E**. (2006) Cell surface HSP90 interacts with the extracellular domain of HER2 and contributes to ligand-mediated receptor activation in MDAMB453 breast cancer cells. 31st FEBS Congress Istanbul, Turkey.
21. Stellas D and **Patsavoudi E** The monoclonal antibody, mAb 4C5, against heat shock protein 90 (HSP90) inhibits B16F10 melanoma cell invasion and metastasis in C57BL/6 mice. Second International Congress for Cancer Risk Assessment (ICCRA 2) 25-27 May 2007, Santorini, Greece

22. El Hamidie, Sigano A, Grammatikakis N, and **Patsavoudi E.** (2008) Cdc37 is localized at the cell surface and is possibly involved in cancer cell invasion. 33rd FEBS Congress, Athens Greece.
23. Stellas D. and **Patsavoudi E.** (2008) Extracellular HSP90 interacts with MMP2 and MMP9 and contributes to MDAMB453 human breast cancer cell metastasis in vivo. 33rd FEBS Congress, Athens Greece.
24. **E. Patsavoudi** and A. El Hamidie (2010) Monoclonal antibody mAb 4C5 against HSP90, inhibits MDAMB231 breast cancer cell invasion and MMP2 and MMP9 activation The 5th Conference on The HSP90 Chaperone Machine, Les Diablerets, Switzerland.
25. A. El Hamidie, K. Sidera and **E. Patsavoudi** (2011) Cdc37 is expressed on the surface of MDA-MB-231 breast cancer cells and is implicated in extracellular HSP90-driven cancer cell invasion processes. The 3rd EMBO Meeting Vienna, Austria
26. K. Sidera, P. Stamou, A. El Hamidie and **E. Patsavoudi** (2012) Monoclonal antibody mAb 4C5, against HSP90 inhibits colony formation and tumor growth and metastasis of breast cancer cells. The 6th Conference on The HSP90 Chaperone Machine, Les Diablerets, Switzerland.
27. T. Stivarou, D. Stellas, D. Vattis, E. Ventouras, D. Thomaidou and **E. Patsavoudi** (2015) Targeting highly expressed extracellular HSP90 in breast cancer stem cells, inhibits tumor growth in vitro and in vivo. International Conference Science in Technology, Athens, Greece