

MARIA MONASTIRIOTI

CURRICULUM VITAE

PERSONAL DATA

NAME: Maria Monastirioti
PLACE OF BIRTH: Athens, Greece
DATE OF BIRTH: July 25, 1962
CITIZENSHIP: Greek
MARITAL STATUS: Married
ADDRESS: Institute of Molecular Biology and Biotechnology (IMBB)
Foundation of Research and Technology
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EDUCATION

1974-1980 Secondary education in Athens, Greece
1980-1984 **B.Sc in Biology**, University of Patras, Patras, Greece.
1985-1990 **Ph.D. in Molecular Genetics**
Department of Biology, University of Patras and Institute of Molecular
Biology and Biotechnology, Research Center of Crete, Foundation of
Research and Technology-Hellas, Heraklion, Crete, Greece.
2000-2001 Postgraduate training course in "Open and Distant Education"
Hellenic Open University

FELLOWSHIPS

1981-1984 Undergraduate scholarship from the Greek National fellowship foundation
1990-1991 Postdoctoral fellowship from European Molecular Biology Organization (EMBO)

RESEARCH FUNDING

1996-1998 **PENED** grant from General Secretariat for Research and Technology (**GSRT**)
TITLE: "Molecular genetic analysis of the neural specific gene *Tβh* (Tyramine β-hydroxylase) of
D. Melanogaster"

2006-2007 **WHO / TDR** (Special Program for Research and Training in Tropical Diseases)-
TITLE: "Development of transgenic Anopheles strains carrying a dominant female sterilizing
allele"

RESEARCH AND PROFESSIONAL ACTIVITIES

- 1985-1990 Thesis Research, University of Patras and IMBB-FORTH
- 1990-1991 Postdoctoral research in Dr. J. Hirsh laboratory, Harvard Medical School, Boston, Mass, USA
- 1991-1995 Postdoctoral research in Dr. K. White laboratory, Brandeis University Whaltham, Mass, USA.
- 1995-2000 Affiliated Researcher at the Institute of Molecular Biology and Biotechnology (IMBB), Foundation of Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece
- 2001-2008 Staff Scientist (level B) at the Institute of Molecular Biology and Biotechnology (IMBB), Foundation of Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece
- 2009-present Staff Scientist (level A) at the Institute of Molecular Biology and Biotechnology (IMBB), Foundation of Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece.
- 2002-2003 Part-time Academic Staff in the School of Science and Technology-Hellenic Open University.

TEACHING ACTIVITIES

- 1996-2002 Lectures on “Molecular mechanisms in early embryogenesis of Drosophila”
Graduate course “**Molecular mechanisms in development**”.
Graduate program “**Molecular Biology and Biomedicine**” **Depts of Biology, Dept of Medicine, University of Crete and IMBB**
- 2000-2001 Graduate course “**Molecular Genetics of Drosophila behavior**”
Graduate program “**Molecular Biology and Biomedicine**” **Depts of Biology, Dept of Medicine, University of Crete and IMBB**
- 2001-2007 Lectures on “Development and Function of the nervous system”
Graduate program “**Molecular Biology and Biomedicine**” **Depts of Biology, Dept of Medicine, University of Crete and IMBB**
- 2005-present Lectures in the graduate course “Methodology in neurosciences”
Graduate Program in **Neurosciences- Medical School, University of Crete**
- 2008-present Lectures on "Genetics of cognition and behavior, learning and memory"
Graduate course «**Multicellular organization of life** »
Graduate program “**Molecular Biology and Biomedicine**” **Depts of Biology, Dept of Medicine, University of Crete and IMBB**
- 1996-present Member of the Graduate program “**Molecular Biology and Biomedicine**” **Depts of Biology, Dept of Medicine, University of Crete and IMBB**
Supervision of master rotation projects (15), master theses (2), undergraduate (diploma) theses (2),
Member of qualifying exams committees.
Scientific responsible of (1) postdoctoral fellow

INVITED TALKS

1. "Biosynthesis, distribution and function of the neurohormone Octopamine in *Drosophila Melanogaster*". Biology department, University of Thessaloniki March 6th, 1998
2. "Octopamine neurotransmission in insect species. The *Drosophila* paradigm". Bayer AG Monheim, GERMANY April 20th 1999.
3. "Molecular genetics approach to insect neurotransmitters-Potential applications in pest control". Mediterranean Agronomic Institute of Chania. May 17th 2001.
4. "The biogenic amine Octopamine in insect physiology and behavior. The molecular genetics approach in *Drosophila*". Theodor-Boveri-Institut fuer Biowissenschaften Lehrstuhl fuer Genetik und Neurobiologie, University of Wuerzburg, GERMANY. March 28th 2003.
5. "Molecular genetic studies of Octopamine system in a model insect organism. The *Drosophila* paradigm". Institut for Biology, Neurobiology, Frei-Universitat, Berlin GERMANY. June 21st 2006.

SCIENTIFIC MEETINGS

1. **M. Monastirioti**, C. Louis, N. Stamatis and G. Yannopoulos (1989) 11th European Drosophila Research Conference, Marseilles FRANCE.
2. M. Ashburner, D.M. Glover, H. Jaeckle, F.C. Kafatos, C. Louis, **M. Monastirioti**, R. Saunders, C. Savakis, R. Schuh, I. Siden-Kiamos, J. Trencar, and K. Wharton. (1989) 11th European Drosophila Research Conference, Marseilles FRANCE.
3. **M. Monastirioti** and K. White. (1992) 4th European Symposium on Drosophila Neurogenetics, Glasgow U.K.
4. **M. Monastirioti** and K. White. (1993) 34th Annual Drosophila Research Conference, San Diego, California USA.
5. M. Meller, **M. Monastirioti** and J. Hirsh. (1993) 34th Annual Drosophila Research Conference, San Diego, California USA
6. **M. Monastirioti** and K. White (1993) 13th European Drosophila Research Conference, Aghia Pelaghia, Crete, GREECE
7. **M. Monastirioti** and K. White. (1993) Neurobiology of Drosophila, Cold Spring Harbor, New York, USA
8. K. White and **M. Monastirioti**. (1993) Society for Neuroscience Meeting, Washington DC USA,
9. **M. Monastirioti**, C.E. Linn and K. White. (1995) Neurobiology of Drosophila, Cold Spring Harbor, New York, USA.
10. C.E. Linn, **M. Monastirioti** and K. White. (1995) Society for Neuroscience Meeting, Washington DC USA .
11. **M. Monastirioti** and K. White. (1996) 6th European Symposium on Drosophila Neurobiology, Regensburg GERMANY.
12. **M. Monastirioti**. (1998) 20th Panhellenic Meeting of H.S.B.S., Samos, GREECE.
13. **M. Monastirioti**. (2000) 8th European Symposium on Drosophila Neurobiology, San Juan (Alicante) SPAIN
14. **M. Monastirioti** (2003) 10th Panhellenic Entomological Meeting, Heraklion, GREECE

15. **M. Monastirioti** (2005) 2nd EMBO Workshop- Molecular and population biology of Mosquitoes
16. **M. Monastirioti**, N. Giagtzoglou, M. Almeida, S. Bray, K. Koumbanakis and C. Delidakis. (2006) 20th Annual meeting of the Hellenic Society of Neuroscience, Heraklion, Crete, GREECE
17. **Monastirioti M.**, Giagtzoglou N., Zacharioudaki E., Deligianaki M., Almeida M., Koumbanakis K., Wech I., Preiss A., Bray S., Bellen H. and C. Delidakis (2008). 16th EMBO Drosophila Workshop, Kolymbari, Crete, GREECE.

PUBLICATIONS

1. Yannopoulos G., Stamatis N., **Monastirioti M.**, Hatzopoulos P. and C. Louis. (1987). hobo is responsible for the induction of hybrid dysgenesis by strains of *Drosophila melanogaster* bearing the male recombination factor 23.5MRF. **Cell** **49**: 487-495.
2. Hatzopoulos P., **Monastirioti M.**, Yannopoulos G. and C. Louis. (1987). The instability of the TE-like mutation *Dp(2;2)GYL* of *Drosophila melanogaster* is intimately associated with the hobo element. **EMBO J.** **6**: 3091-3096.
3. **Monastirioti M.**, Hatzopoulos P., Stamatis N., Yannopoulos G. and C. Louis. (1988) Cohabitation of KP and full-length P elements in the genome of MR strains inducing P-M -like hybrid dysgenesis in *Drosophila melanogaster*. **MGG** **215**: 94-99.
4. Stamatis N., **Monastirioti M.**, Yannopoulos G. and C. Louis. (1989). The P-M and the 23.5 MRF (hobo) systems of hybrid dysgenesis in *Drosophila melanogaster* are independent of each-other. **Genetics** **123**: 379-387.
5. Saunders R.D., Glover D.M., Ashburner M., Siden-Kiamos I., Louis C., **Monastirioti M.**, Savakis C. and F. Kafatos. (1989). PCR amplification of DNA microdissected from a single polytene chromosome band: a comparison with conventional microcloning. **NAR** **17**: 9027-9037.
6. White K. and **M. Monastirioti**. (1993). Cloning of a *Drosophila* gene candidate for Tyramine β-hydroxylase. **Abstr, Soc. Neurosc.** **19**: 300.
7. White K., Luo L., Aigaki T. and **M. Monastirioti**. (1994) *Drosophila Appl* gene and APPL protein: A model system to study the function of the APP protein family. In: C.L. Masters, K. Beyreuther, M. Trillet and Y. Christen (eds) Amyloid Protein Precursor in Development, Aging and Alzheimer's Disease. Springer-Verlag Berlin Heidelberg. p: 9-20. **(Book chapter)**
8. **Monastirioti M.**, Gorczyca M., Eckert M., Rapus J., White K. and V. Budnik. (1995) Octopamine Immunoreactivity in the fruit fly *Drosophila melanogaster* **Journal of Comparative Neurology** **356**: 275-287.
9. Linn C. E, **M. Monastirioti** and K. White. (1995) Comparison of biogenic amine levels in the nervous system of *Drosophila*: Wild type vs. a mutant for tyramine -hydroxylase. **Abstr, Soc. Neurosc.** **21**: 631.
10. **Monastirioti M.**, Linn C. E and K. White. (1996) Characterization of *Drosophila Tyramine hydroxylase* gene and isolation of mutant flies lacking octopamine. **Journal of Neuroscience** **16**, 3900-3911.
11. **Monastirioti M.** (1999) Biogenic Amine systems in the fruit fly *Drosophila melanogaster*. **Microscopy Research and Techniques**, **45**, 106-121 **(Invited review)**

12. Gruntenko N. E., Wilson T. G., **Monastirioti M.** and I. Yu. Rauschenbach. (2000) Stress reactivity and juvenile hormone degradation in *Drosophila melanogaster* stress related mutations. **Insect Biochem. & Mol.Biol.**, **30**(8-9), 775-783.
13. **Monastirioti M.** (2003) Distinct octopamine cell population residing in the CNS abdominal ganglion controls ovulation in *Drosophila melanogaster*. **Developmental Biology** **264**, 38-49.
14. Schwaerzel M.,**Monastirioti M.**, Scholz H., Friggi-Grelin F., Birman S. and M. Heisenberg. (2003) Dopamine and octopamine differentiate between aversive and appetitive olfactory memories in *Drosophila*. **Journal of Neuroscience** **23**(33) :10495-10502.
15. Gruntenko N.E., Chentsova N.A., Bogomolova E.V., Karpova E.K., Glazko G.V., Faddeeva N.V., **Monastirioti M.**, and I.Yu Rauschenbach. (2004) The effect of mutations altering biogenic amine metabolism in *Drosophila* on viability and the response to heat stress. **Arch. Insect Biochem.Physiol.** **5**, 555-67.
16. **Monastirioti, M.**, Giagtzoglou, N., Koumbanakis, K. A., Zacharioudaki, E., Deligiannaki, M., Wech, I., Almeida, M., Preiss, A., Bray, S., and Delidakis, C. (2010). Drosophila Hey is a target of Notch in asymmetric divisions during embryonic and larval neurogenesis. **Development** **137**, 191-201
17. Douris V. Leptourgidou F. and **M. Monastirioti**. Cloning and molecular characterization of Tyramine β -hydroxylase from *A. gambiae* and *A.stephensi* mosquito species. (manuscript in preparation)