

## YANNIS DALEZIOS CURRICULUM VITAE

*Name:* Yannis Dalezios

*Date and Place of Birth:* 3 September 1963, Athens.

*Nationality - Citizenship:* Greek.

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### A. Education

2000: Training in using small animals in experimental procedures, Institute of Biology (UK).

Licence for using experimental animals according to the Animal (Scientific Procedures) Act 1986, Home Office (UK).

1998: European Summer School “Crete Course in Computational Neuroscience”, duration one month, Heraklion, Greece..

1993: Graduate course in Neurophysiology organized by the Hellenic Society for Neuroscience, University of Patras, Greece.

1993: PhD in Biology, Department of Biology, University of Patras, Greece.

1989: Course in Computer Applications and Statistical Methods in Biomedicine, 3 months (10h/week), Greek Institute for statistics, Patras Greece.

1986-1992: Graduate Student, Department of Biology, University of Patras, Greece.

1985: BSc in Biological Sciences, University of Patras, Greece.

1981-1985: Undergraduate, Department of Biology, University of Patras, Greece.

### B. Awards – Scholarships

2000-2001: Wellcome Trust Advanced Training Research Fellowship in the MRC Anatomical Neuropharmacology Unit, University of Oxford, U.K.

1985: State scholarship for studying Biology in the University of Patras, Greece.

### C. Professional History

01/2009 Assistant Professor of Physiology (Tenured), Faculty of Medicine, University of Crete, Greece.

01/2006- Collaborative Researcher, Computational Neuroscience Group, Institute of Applied and Computational, Mathematics, Foundation for Research and Technology – Hellas, Heraklion, Crete.

02/2005- Assistant Professor of Physiology, Faculty of Medicine, University of Crete, Greece.

11/1998-02/2005: Lecturer of Physiology, Faculty of Medicine, University of Crete, Greece.

1997-1998: Special Scientist (According to Decree 473/83), Faculty of Medicine, University of Crete, Greece.

1994-1997: Teaching contract (According to Decree 407/80) for Physiology, Faculty of Medicine, University of Crete, Greece.

1994- Research activity in Physiology, Faculty of Medicine, University of Crete, Greece.

1994-1998: Participant in European Union funded projects:  
α. Human Capital and Mobility Grant ERBCHRXCT 930266 (Greek partner Helen Savaki).

- 1992-1993: β. Human Capital and Mobility Grant ERBCHRXCT 940559 (Greek partner A.K. Moschovakis).  
Military service.
- 1987-1991: Researcher in 2 Projects funded by the General Secretariat for Research and Technology (Greece).  
α. “The GABAergic system: A Biochemical and Pharmacological Study of Benzodiazepine Binding Site in the pathophysiological mouse cerebellum (9703/86).  
β. “Interaction of Benzodiazepines, Thyroid Hormones and Dopamine in the CNS” (87ΕΔ254/88).

#### D. Grants

- 2007-2008: “Development of a High-Resolution Transmission Electron Microscopy Facility” (Source: Region of Crete/EU, €1.000.000). Scientific Coordinator (in collaboration with Professor G. Chalepakis, Faculty of Biology and Dr. P. Trikalitis, Faculty of Chemistry).
- 2005-2007: “Electrophysiological and Immunocytochemical Identification and Classification of Oculomotor Neurons”, funded by the Greek Ministry of Education (Pythagoras II KA 2087, €50.000). Scientific Coordinator.

#### E. Current Research Activity

1. Study of the neuronal networks of the oculomotor system: Identification and classification of single neurons in the superior colliculus of rats employing juxtacellular *in vivo* recordings and labelling, followed by drawing of neurons and testing for their neurochemical identity with the use of immunocytochemistry for light and electron microscopy. Collaborator: Pr. AK Moschovakis, Faculty of Medicine, University of Crete, Greece and IACM-FORTH.
2. Study of the hippocampal and neocortical neuronal networks: We use the above mentioned methods to identify and classify hippocampal and neocortical neurons. Collaborator to Pr. P. Somogyi FRS, MRC Anatomical Neuropharmacology Unit, University of Oxford, UK.
3. Study of FRAS proteins: Ultrastructural localization of FRAS proteins in tissues of mouse embryos using immunocytochemistry for electron microscopy. Collaborator to Pr. G Chalepakis, Faculty of Biology, University of Crete, Greece.

#### F. Supervisor, Advisor and Examiner of Dissertations for Ph.D., M.Sc. and B.Sc. degrees.

19. E. Pasparakis (Advisor, PhD Thesis, Faculty of Medicine).
18. H. Mitsala (**Supervisor**, BSc Thesis, Faculty of Biology).
17. E. Pavlakis (Examiner, PhD Thesis, Faculty of Biology).
16. A. Tzanou (**Supervisor**, PhD Thesis, Faculty of Medicine, *in progress*).
15. E. Pachou (Examiner, PhD Thesis, Faculty of Medicine).
14. K. Ampatzis (Examiner, PhD Thesis, Faculty of Biology).
13. I. Theodorou (**Supervisor**, PhD Thesis, Faculty of Medicine, *in progress*).
12. I. Chiotaki (Advisor, PhD Thesis, Faculty of Biology).
11. V. Kechagias (**Supervisor**, BSc Thesis, Faculty of Biology).
10. DG Krioneriti (**Supervisor**, BSc Thesis, Faculty of Biology).
9. E. Balfousia (**Supervisor**, BSc Thesis, Faculty of Biology).
8. C. Papasozomenos (**Supervisor**, MSc Thesis, Faculty of Biology).
7. MN. Evangeliou (Advisor, PhD Thesis, Faculty of Medicine).
6. S. Bakola (Examiner, PhD Thesis, Faculty of Medicine)
5. K. Hadjidimitrakis (Advisor, PhD Thesis, Faculty of Medicine).
4. S. Erimaki (Examiner, PhD Thesis, Faculty of Medicine).
3. A. Bozis (Examiner, PhD Thesis, Faculty of Medicine).

2. S. Sklavos (Advisor, PhD Thesis, Faculty of Medicine).
1. GG Gregoriou (Examiner, PhD Thesis, Faculty of Medicine).

### G. Societies

- 1998: Society for Neuroscience (USA).  
1986: Hellenic Society for Neuroscience (Founding member).

### H. Reviewer

1. Brain Research Bulletin
2. Journal of Neurochemistry

### I. Papers in peer-reviewed journals.

(Citations found in ISI - Web of Knowledge and Scopus: >420. *h-index*: 13).

27. Kasugai Y, Swinny JD, Roberts JDB, **Dalezios Y**, Fukazawa Y, Sieghart W, Shigemoto R, Somogyi P (*in press*) Quantitative localisation of synaptic and extrasynaptic GABAA receptor subunits on hippocampal pyramidal cells by freeze-fracture replica immunolabelling. *Eur J Neurosci*.
26. Fuentealba P, Tomioka R, **Dalezios Y**, Márton L, Studer M, Rockland K, Klausberger T, Somogyi P. (2008) Rhythmically active enkephalin-expressing GABAergic cells in the CA1 area of the hippocampus project to the subiculum and preferentially innervate interneurons. *J. Neurosci.* **28**, 1017-1022.
25. Petrou P, Pavlakis E, **Dalezios Y**, Chalepakis G (2007) Basement membrane localization of Frem3 is independent of the Fras1/Frem1/Frem2 protein complex within the sublamina densa. *Matrix Biol.* **26**, 652-658.
24. Jinno S, Klausberger T, Marton LF, **Dalezios Y**, Roberts JD, Fuentealba P, Bushong EA, Henze D, Buzsaki G, Somogyi P (2007) Neuronal diversity in GABAergic long-range projections from the hippocampus. *J Neurosci* **27**, 8790-8804.
23. **Dalezios Y**, Pappasozomenos B, Petrou P, Chalepakis G (2007) Ultrastructural localization of Fras1 in the sublamina densa of embryonic epithelial basement membranes. *Arch Dermatol Res* **299**, 337-343.
22. Petrou P, Chiotaki R, **Dalezios Y**, Chalepakis G (2007) Overlapping and divergent localization of Frem1 and Fras1 and its functional implications during mouse embryonic development. *Exp Cell Res* **313**, 910-920.
21. Baude A, Bleasdale C, **Dalezios Y**, Somogyi P, Klausberger T (2007) Immunoreactivity for the GABAA receptor  $\alpha 1$  subunit, somatostatin and connexin36 distinguishes axo-axonic, basket and bistratified interneurons of the rat hippocampus. *Cereb. Cortex* **17**, 2094-2107.
20. Hadjidimitrakis K, Moschovakis AK, **Dalezios Y**, Grantyn A. (2007) Eye position modulates the electromyographic responses of neck muscles to electrical stimulation of the superior colliculus in the alert cat. *Exp Brain Res* **179**, 1-16.
19. Kato R, Grantyn A, **Dalezios Y**, Moschovakis AK. (2006) The local loop of the saccadic system closes downstream of the superior colliculus. *Neuroscience* **143**, 319-337.
18. Ferraguti F, Klausberger T, Cobden P, Baude A, Roberts JDB, Szucs P, Kinoshita A, Shigemoto R, Somogyi P, **Dalezios Y** (2005) Metabotropic glutamate receptor 8 (mGluR8) expressing nerve terminals target subsets of GABAergic neurons in the hippocampus. *J Neurosci* **25**, 10520-10536.
17. Klausberger T, Marton L, O'Neill J, Huck J, **Dalezios Y**, Fuentealba P, Suen W-Y, Papp E, Kaneko T, Watanabe M, Csicsvari J, Somogyi P (2005) Complementary roles of cholecystinin and parvalbumin expressing GABAergic neurons in hippocampal network oscillations. *J Neurosci* **25**, 9782-9793.

**(Selected for "This Week in The Journal" section of October 19<sup>th</sup> issue of the Journal of Neuroscience.)**

16. Petrou P, Pavlakis E, **Dalezios Y**, Galanopoulos VK, Chalepakis G. (2005) Basement membrane distortions impair lung lobation and capillary organization in the mouse model for fraser syndrome. *J Biol Chem* **280**, 10350-10356.
15. Kogo N, **Dalezios Y**, Capogna M, Ferraguti F, Shigemoto R, Somogyi P. (2004) Depression of GABAergic input to identified hippocampal neurons by group III metabotropic glutamate receptors in the rat. *Eur J Neurosci* **19**, 2727-2740.
14. Somogyi P, **Dalezios Y**, Luján R, Roberts JDB, Watanabe M, Shigemoto R (2003) High level of mGluR7 in the presynaptic active zones of select populations of GABAergic terminals innervating interneurons in the rat hippocampus. *Eur J Neurosci* **17**, 2503-2520.
13. **Dalezios Y**, Luján R, Shigemoto R, Roberts JDB, Somogyi P (2002) Enrichment of mGluR7a in the presynaptic active zones of GABAergic and non-GABAergic terminals on interneurons in the rat somatosensory cortex. *Cereb. Cortex* **12**, 961-974.
12. Savaki HE, **Dalezios Y** (1999) <sup>14</sup>C-deoxyglucose mapping of the monkey brain during reaching to visual targets. *Prog Neurobiol* **58**, 473-540.
11. **Dalezios Y**, Gregoriou GG, Savaki HE (1999) Metabolic activity patterns in the monkey visual cortex as revealed by spectral analysis. *J Cereb Blood Flow Metab* **19**, 401-416.
10. Moschovakis AK, **Dalezios Y**, Petit J, Grantyn AA (1998) New mechanism that accounts for position sensitivity of saccades evoked in response to stimulation of superior colliculus. *J Neurophysiol* **80**, 3373-9.
9. **Dalezios Y**, Scudder CA, Highstein SM, Moschovakis AK (1998) Anatomy and physiology of the primate interstitial nucleus of Cajal. II. Discharge pattern of single efferent fibers. *J Neurophysiol* **80**, 3100-3111.
8. Moschovakis AK, Kitama T, **Dalezios Y**, Petit J, Brandi AM, Grantyn AA (1998) An anatomical substrate for the spatiotemporal transformation. *J Neurosci* **18**, 10219-10229.
7. **Dalezios Y**, Matsokis N (1998) Brain benzodiazepine binding in aged rats. *Neurochem Int* **32**, 213-217.
6. Savaki HE, Raos VC, **Dalezios Y** (1997) Spatial cortical patterns of metabolic activity in monkeys performing a visually guided reaching task with one forelimb. *Neuroscience* **76**, 1007-1034.
5. **Dalezios Y**, Raos VC, Savaki HE (1996) Metabolic activity pattern in the motor and somatosensory cortex of monkeys performing a visually guided reaching task with one forelimb. *Neuroscience* **72**, 325-333.
4. Grantyn AA, **Dalezios Y**, Kitama T, Moschovakis AK (1996) Neuronal mechanisms of two-dimensional orienting movements in the cat. I. A quantitative study of saccades and slow drifts produced in response to the electrical stimulation of the superior colliculus. *Brain Res Bull* **41**, 65-82.
3. **Dalezios Y**, Matsokis N, Valcana T (1995) Interaction between [<sup>3</sup>H]flunitrazepam and [<sup>3</sup>H]GABA binding in the cerebellum of reeler mice. *Neurochem Int* **26**, 41-46.
2. **Dalezios Y**, Matsokis N (1993) Nuclear benzodiazepine binding: possible interaction with thyroid hormone receptors. *Neurochem Res* **18**, 305-311.
1. Matsokis N, **Dalezios Y** (1986) Comparative aspects of cerebellar [<sup>3</sup>H]flunitrazepam and [<sup>3</sup>H]GABA binding. *Gen Pharmacol* **17**, 689-93.

## J. Abstracts in International Journals

4. Ferraguti F, Shigemoto R, **Dalezios Y**, Somogyi P (2005) Selective enrichment of group I and III metabotropic glutamate receptors in neurochemically identified synapses of the limbic system. *Neuropharmacology* 49, Abstract 43
3. Ferraguti F, Cobden P, **Dalezios Y**, Roberts JD, Shigemoto R, Watanabe M, Somogyi P (2002) Immunolocalization of group I and III mGluRs in hippocampal microcircuits. 4th International Meeting on Metabotropic Glutamate Receptors, Taormina, Sicily, Italy. *Neuropharmacology* 43, Abstract 46
2. **Dalezios Y**, Gregoriou GG, Savaki HE (1998) Spectral analysis of the metabolic activity pattern in the monkey visual cortex. *Eur J Neurosci* 10 (Suppl), 238.
1. Savaki HE, **Dalezios Y**, Raos VC, Caminiti R (1995) Metabolic activity pattern in the motor and somatosensory cortex of monkeys performing a visually guided arm reaching task. *Eur J Neurosci* 8 (Suppl), 99.

## K. Abstracts in Scientific Conferences

22. Busti D, Geracitano R, **Dalezios Y**, Kaufmann WA, Manko M, Sätzler K, Capogna M Ferraguti F (2009) Distinct neuronal populations of the intercalated cell masses of the amygdala provide novel insight into the intra- and extra-amygdala GABAergic connectivity. In: *Amygdala In Health & Disease: Contributions To Emotional Memories*, Gordon Scientific Conferences, Colby College, Waterville, ME, USA.
21. **Dalezios Y**, Krioneriti D, Theodorou I (2008) Expression of mGluR1a in the superior colliculus of the rat. 6th FENS Forum of European Neuroscience, Geneva, Switzerland.
20. Petrou PP, Chiotaki R, Makrygiannis AK, **Dalezios Y**, Chalepakis G (2008) Cooperative function of Fraser syndrome proteins in embryonic epithelial basement membranes. Gordon Research Conference "BASEMENT MEMBRANES", June 22-27, Biddeford, ME, USA.
19. Márton LF, Klausberger T, Jinno S, Fuentealba P, **Dalezios Y**, Bushong E, Roberts JDB, Bleasdale C, Somogyi P (2006) Firing patterns and synaptic targets of hippocampal GABAergic projection neurons in vivo in the rat. 5th FENS Forum of European Neuroscience, Vienna, Austria.
18. Somogyi P, Klausberger T, Jinno S, Márton L, Fuentealba P, Roberts JDB, Suen WY, **Dalezios Y** (2006) Timing and spacing GABA release onto hippocampal neurons in vivo. 5th FENS Forum of European Neuroscience, Vienna, Austria.
17. Jinno S, Klausberger T, Fuentealba P, Márton L, **Dalezios Y**, Suen WY, Somogyi P (2006) Novel populations of hippocampal GABAergic neurons projecting to the subicular complex and/or the medial septum. 5th FENS Forum of European Neuroscience, Vienna, Austria.
16. Hadjimitsakis K, Moschovakis AK, **Dalezios Y**, Grantyn A (2006) Eye position dependent mapping from the superior colliculus to neck muscles. 5th FENS Forum of European Neuroscience, Vienna, Austria.
15. Moschovakis AK, Kato R, **Dalezios Y**, Grantyn A (2006) Predorsal bundle evoked saccades survive lesions of the superior colliculus. 5th FENS Forum of European Neuroscience, Vienna, Austria.
14. Jinno S, Klausberger T, Marton LF, **Dalezios Y**, Fuentealba P, Suen WY, A. Bushong E, Henze D, Buzsáki G, Somogyi P (2006) Novel long-range GABAergic projections in the hippocampal formation and beyond. 35th SEIRIKEN International Conference, "Recent Advances in Cortical and Hippocampal Microcircuit Studies", Okazaki, Japan.
13. Moschovakis AK, Kato R, **Dalezios Y**, Grantyn A (2005) Saccades evoked in response to microstimulation of the predorsal bundle ( PDB ) in the alert cat. *Soc Neurosci*, 167.9.

12. **Dalezios Y**, Luján R, Shigemoto R, Roberts JDB, Somogyi P (2001) Group III metabotropic glutamate receptors (mGluRs) on GABAergic terminals of hippocampal and neocortical interneurons. Soc Neurosci Abstr 27, 259.5.
11. **Dalezios Y** (2000) The role of the presynaptic glutamate receptors on cortical GABAergic neurons. 15th Meeting of the Hellenic Society for Neuroscience, Patras, Greece. (Invited talk).
10. Moschovakis AK, **Dalezios Y**, Scudder CA, Highstein SM (1997) Quantitative analysis of the discharge pattern of single cells of the primate interstitial nucleus of Cajal (NIC). Soc Neurosci Abstr 23, 922.2.
9. Grantyn AA, **Dalezios Y**, Kitama T, Moschovakis AK (1997) Neuronal mechanisms of two-dimensional orienting movements in the cat. II. An anatomical basis for the spatio-temporal transformation in the saccadic system. Soc Neurosci Abstr 23, 510.2.
8. Savaki HE, Raos VC, **Dalezios Y** (1996) Two dimensional reconstructed patterns of metabolic activity in the primate neocortex during performance of a visually guided reaching task. Soc Neurosci Abstr 22, 796.12
7. **Dalezios Y**, Gregoriou GG, Savaki HE (1996) Modular organization of visual cortical areas as revealed by spectral analysis in monkeys performing a visually guided arm reaching task. 12th Meeting of the Hellenic Society for Neuroscience, Anogia, Crete, Greece.
6. **Δαλέζιος Γ**, Ράος ΒΧ, Caminiti R, Σαββάκη ΕΕ (1995) Ο κινητικός και σωματισθητικός φλοιός του πιθήκου κατά την εκτέλεση μιας απλής κίνησης του βραχίονα. Δισδιάστατη κανονικοποιημένη απεικόνιση και ανάλυση της περιοδικότητας της μεταβολικής δραστηριότητας. 11η Πανελλήνια Συνάντηση για τις Νευροεπιστήμες, Μέτσοβο.
5. **Δαλέζιος Γ**, Ματσώκης Ν. (1995) Μελέτη της δέσμησης των βενζοδιαζεπινών σε μεμβρανικούς υποδοχείς στον εγκέφαλο γέρικων επιμυών. 11η Πανελλήνια Συνάντηση για τις Νευροεπιστήμες, Μέτσοβο.
4. Grantyn AA, **Dalezios Y**, Kitama T, Moschovakis AK (1995) A quantitative study of saccades and slow drifts produced in response to the electrical stimulation of the superior colliculus in the cat. ENA Meeting, Amsterdam, The Netherlands.
3. **Δαλέζιος Γ**, Ματσώκης Ν. (1990) Πυρηνική δέσμηση των βενζοδιαζεπινών και in vitro αλληλεπίδραση με τις θυρεοειδικές ορμόνες. 6η Πανελλήνια Συνάντηση για τις Νευροεπιστήμες, Ιωάννινα.
2. **Dalezios Y**, Matsokis N (1990) *In vitro* interaction of benzodiazepine and triiodothyronine binding to brain nuclei. 8th Meeting of the European Society for Neurochemistry, Leipzig.
1. **Dalezios Y**, Matsokis N, Valcana T (1986) Aspects of the GABAergic system in the hypogranular cerebellum. 6th Meeting of the European Society for Neurochemistry, Prague.

#### L. Chapters in Books

1. **Dalezios Y**, Moschovakis A (2009) Neural Integrator – Vertical. In Binder MD, Hirokawa N, Windhorst U (eds) Encyclopedia of Neuroscience. Springer-Verlag GmbH, Berlin – Heidelberg.