BIOGRAPHICAL SKETCH

Name	Position Title	Birth date (*month/day/year)*
Garyfalia Drossopoulou	Associate Researcher	02/09/1971

EDUCATION			
Institution and Location	Degree	Year Conferred	Field of Study
Department of Physiology, University College London (UCL), London, UK	BSc	1980	Cell Biology
Department of Anatomy and Developmental Biology, University College London (UCL), London, UK	PhD	1994	Developmental Biology

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ACADEMIC ACHIEVEMENTS

1995-1999: PhD at Department of Anatomy and Developmental Biology, University College London.
1991-1994: BSc First Class Honours in Cell Biology, University College London.

PROFESSIONAL EXPERIENCE

2013-present: Associate Researcher: Institute of Biosciences and Applications NCSR "Demokritos".
2009-2013: Assistant Researcher: Institute of Biosciences and Applications NCSR "Demokritos".
2002-2009: Postodoctoral Fellow: Institute of Biology, NCSR "Demokritos".
2001-2002: Research Fellowship (State Scholarship´s Foundation IKY): Department of Pharmacology, University of Athens Medical School.
2000-2001: Postoctoral Researcher (PENED): Department of Pharmacology, University of Athens Medical School and Institute of Radiolabeled compounds and Radioisotopes, NCSR "Demokritos".
1999-2000: Wellcome Trust Postdoctoral Researcher: Department of Anatomy and Developmental Biology, University College London.
1994-1995: MRC Research Assistant: Department of Anatomy and Developmental Biology, University College London.

RESEARCH PROFILE

Dr. Garyfalia Drossopoulou, trained in the UK and received her B.Sc. specialization in Cell Biology from University College London (UCL) in 1994. During her Ph.D she studied the cellular and molecular basis of vertebrate limb patterning by Sonic Hedgehog (Shh), using the chick and mouse embryo as experimental models. She started her scientific carrier as a Wellcome Trust Postdoctoral Researcher at Department of Anatomy and Developmental Biology, University College London, where she investigated Ca^{2+} signalling and early gene activation after in vitro

fertilisation of mammalian oocytes and established culturing techniques for preimplantation embryos. On her return to Greece she worked as a postoctoral researcher at Department of Pharmacology, University of Athens Medical School investigating the molecular and pharmacological properties of novel radiolabeled compounds, synthesized for the *in vivo* and *in vitro* labeling of 5-HT1A receptors in the developing and adult rat brain, as well as the role of neurotrophic factors in hippocampal development: She joined NCSR "Demokritos" by the end of 2002 on the program focusing on the regulation of gene expression in human renal glomerular epithelial cells. Her current main focus is on the study of kidney function in relation to renal diseases: a) Regulation of gene expression and epigenetic mechanisms in glomerular podocytes in physiological and diabetic conditions b) Renoprotective role of Vitamin D3 on glomerular podocytes c) Nephrin signalling: Cross talk between nephrin signalling and insulin survival signalling.
Her research provided evidence that chronic exposure of renal podocytes to high glucose induced a phenotypic conversion resembling dedifferentiation. Maintenance of the differentiated podocytic phenotype does not necessarily involve the transcription factor WT1, which however is crucial for the process of differentiation of podocytic presursors to podocytes. These data prompted the investigation of the role of other transcription factors in preserving and restoring structural and functional integrity of the podocytes. For this purpose the role of activated vitamin D3 (calcitriol), its analogue (paricalcitol) and their receptor VDR were assessed, showing that VDR specifically regulates expression of podocytic markers by bounding to sites upstream of the relevant promoter regions. These findings could be clinically valuable suggesting mechanisms related to preserving and additionally restoring structural and functional integrity of the highly differentiated renal podocyte.

Scientific Collaborations

Dr. A.S. Charonis, Center for Basic Research I, Section of Histology, Biomedical Research Foundation of the Academy of Athens, Greece.
Dr. C. Chatziantoniou, Institut National de la Santé et de la Recherche Médicale Joint Research Unit S 702, Batiment Recherche, Tenon Hospital, Paris, France.
Dr. C. Iatrou, Center for Nephrology, G. Papadakis General Hospital of Nikea-Pireaus, Athens, Greece.
Dr. E. Fragopoulou, Department of Nutrition and Dietetics, Harokopio University, Athens, Greece.
Dr. C.A. Demopoulos, Faculty of Chemistry, National and Kapodistrian University of Athens, Greece.
Dr. Vassilis Pachnis, Division of Molecular Neurobiology, MRC National Institute for Medical Research, London, UK.
Dr. David Berrey Kershaw, Department of Pediatrics, University of Michigan Medical School, Ann Arbor, MI.
Dr. A. McMahon, Division of Cell and Molecular Biology in Harvard University, USA.
Dr. P. Ingham, Developmental Genetics Programme, Krebs Institute, University of Sheffield, UK.
Dr. D. R. Morrice, Roslin Institute Edinburgh, UK.
Dr. C. Hofmann, Institut für Säugetiergenetik, Neuherberg, Germany.
Professor R. Zeller, EMBL, Heidelberg, Germany.
Dr S. Papageorgiou, Institute of Biology NCSR "Demokritos".
Dr. I.Rabias, Institute of Material Science NCSR "Demokritos".

PUBLICATIONS

Total Citations 2007-2013 (without self-citations): 271.

h-factor (according to ISI): 10

1. Tsotakos NE, Sagnou M, Kotsopoulou ES, Tsilibary EC, **Drossopoulou GI**. "Glucose-induced gradual phenotypic modulation of cultured human glomerular epithelial cells may be independent of Wilms' tumor 1 (WT1)." (2013) BMC Cell Biol. 14(1):28.
2. Verouti SN, Tsilibary EC, Fragopoulou E, Iatrou C, Demopoulos CA, Charonis AS, Charonis SA, **Drossopoulou GI**. "Vitamin D receptor activators upregulate and rescue podocalyxin expression in high glucose-treated human podocytes." (2012) Nephron Exp Nephrol. 122(1-2):36-50.
3. Sideratou Z, Kontoyianni C, **Drossopoulou GI**, Paleos CM. "Synthesis of a folate functionalized PEGylated poly(propylene imine) dendrimer as prospective targeted drug delivery system." (2010) Bioorg Med Chem Lett. 20(22):6513-7.
4. Rabias I, Tsitrouli D, Karakosta E, Kehagias T, Diamantopoulos G, Fardis M, Stamopoulos D, Maris TG, Falaras P, Zouridakis N, Diamantis N, Panayotou G, Verganelakis DA, **Drossopoulou GI**, Tsilibari EC, Papavassiliou G. "Rapid magnetic heating treatment by highly charged maghemite nanoparticles on Wistar rats exocranial glioma tumors at microliter volume." (2010) Biomicrofluidics 4(2). pii: 024111.
5. Venieratos PD., **Drossopoulou GI.**, Kapodistria KD., TsilibaryEC. and Kitsiou PV. "High glucose induces suppression of insulin signalling and apoptosis via upregulation of endogenous IL-1β and suppressor of cytokine signalling-1 in mouse pancreatic beta cells". Cell Signal. 2010;22(5): 791-800.
6. **Drossopoulou GI**, Tsotakos NE, Tsilibary EC. Impaired transcription factor interplay in addition to advanced glycation end products suppress podocalyxin expression in high glucose-treated human podocytes. Am J Physiol Renal Physiol. 2009; 297(3): F594-603.
7. Rabias, H. Pratsinis, **G. Drossopoulou**, M. Fardis, T. Maris, N. Boukos, N. Tsotakos, D. Kletsas, E. Tsilibary and G. Papavassiliou. "In vitro studies on ultra small superparamagnetic iron oxide nanoparticles coated with gummic acid for MRI contrast agent." Biomicrofluidics 2007;1:0044104.
8. Dalla C, Antoniou K, Kokras N, **Drossopoulou G**, Papathanasiou G, Bekris S, Daskas S, Papadopoulou-Daifoti Z. "Sex differences in the effects of two stress paradigms on dopaminergic neurotransmission." Physiol Behav. 2007 Oct 30.
9. Moutzouris DA, Kitsiou PV, Talamagas AA, **Drossopoulou GI**, Kassimatis TI, Katsilambros NK. "Chronic exposure of human glomerular epithelial cells to high glucose concentration results in modulation of high-affinity glucose transporters expression." Ren Fail. 2007;29(3):353-8.
10. Dalla C, Antoniou K, **Drossopoulou G**, Xagoraris M, Kokras N, Sfikakis A, Papadopoulou-Daifoti Z. "Chronic mild stress impact: are females more vulnerable?" Neuroscience. 2005;135(3):703-14.

11. **Drossopoulou G**, Antoniou K, Kitraki E, Papathanasiou G, Papalexi E, Dalla C, Papadopoulou-Daifoti Z. "Sex differences in behavioral, neurochemical and neuroendocrine effects induced by the forced swim test in rats." Neuroscience. 2004;126(4):849-57.
12. Papagiannopoulou D, Pirmettis I, Tsoukalas Ch, Nikoladou L, **Drossopoulou G,** Dalla C, Pelecanou M, Papadopoulou-Daifotis Z, Papadopoulos M, Chiotellis E. "Oxotechnetium 99mTcO[SN(R)S][S] complexes as potential 5-HT1A receptor imaging agents". Nucl. Med. Biol. 2002 Nov;29(8):825-32.
13. Vargesson N, Kostakopoulou K, **Drossopoulou G,** Papageorgiou S, Tickle C. "Characterisation of hoxa gene expression in the chick limb bud in response to FGF." Developmental Dynamics 2001 Jan;220(1):87-90.
14. **Drossopoulou G,** Lewis KE, Sanz-Ezquerro JJ, Nikbakht N, McMahon AP, Hofmann C, Tickle C. "A model for anteroposterior patterning of the vertebrate limb based on sequential long- and short-range Shh signalling and Bmp signalling." Development 2000 Apr;127(7):1337-48.
15. Lewis KE, **Drossopoulou G,** Paton IR, Morrice DR, Robertson KE, Burt DW, Ingham PW, Tickle C. "Expression of ptc and gli genes in talpid3 suggests bifurcation in Shh pathway." Development 1999 Jun;126(11):2397-407.
16. Hofmann C, **Drossopoulou G,** McMahon A, Balling R, Tickle C. "Inhibitory action of BMPs on Pax1 expression and on shoulder girdle formation during limb development." Developmental Dynamics 1998 Oct;213(2):199-206.
17. Yang Y, **Drossopoulou G, (joint first authors)** Chuang PT, Duprez D, Marti E, Bumcrot D, Vargesson N, Clarke J, Niswander L, McMahon A, Tickle C. "Relationship between dose, distance and time in Sonic Hedgehog-mediated regulation of anteroposterior polarity in the chick limb." Development 1997 Nov;124(21):4393-404.