PROFESSIONAL SUMMARY

During my PhD, I was trained in Molecular Biology and Neuroscience. I then worked as a postdoctoral researcher at the University of Edinburgh (UoE), mainly on the role of the transcription factor Gli3 in forebrain development (2002–2009). In 2009–2012, I worked as a senior postdoc on the function of the transcription factor Foxg1 in the formation of the developing eye.

In 2012, I obtained independent funding from the Medical Research Council (MRC), UK that allowed me establishing my own research team. My research was focused on the molecules and signalling pathways that lead to a fully formed eye during mammalian embryogenesis. Other aspects of my work, related to the study of novel signalling centres in the developing forebrain. The project was finalised successfully with several outputs, including a paper in the *Journal of Neuroscience* (Smith *et al.* 2017).

In addition to my extensive research experience, I have taught and mentored 15 undergraduate and postgraduate students and have supervised two PhD students.

Since 2017, I have been working as a Scientific and Medical Writer, Editor, and Communicator.

RESEARCH EXPERTISE AND TECHNICAL SKILLS

Developmental Neurobiology	Immunohistochemistry	DNA, RNA, Protein extraction
Neuroscience	In situ hybridization	Cloning, PCR, qPCR
Transgenic mouse models	Microscopy	Western blotting
Molecular Biology	Mouse breeding, handling, phenotyping	*In utero* electroporation

EDUCATION

PhD in Biology: University of Barcelona, Spain – Excellent *Cum Laude*.
Thesis title: Generation and characterization of a murine knockout for *Dyrk1A*, a gene highly expressed in the central nervous system.

BSc (Hons) in Biology: National and Kapodestrian University of Athens, Greece – First Class Honours.

GRANTS

- Principal investigator (PI) on a research grant from the Medical Research Council (MRC), UK (£598,396, 2012–2016); “Deciphering molecular pathways and cellular events in uveal coloboma”.
- PI on a seedcorn grant from the Patrick Wild Centre, UoE (£3,000, Sept 2016); "The study of the retinal phenotype of the *Foxg1*$^{+/-}$ mouse: Insight(s) into the visual acuity defects observed in FOXG1-syndrome patients."
- PI on a summer scholarship placement funded by Medical Research Scotland (£2000, summer 2015) “Elucidating the role of the transcription factor Foxg1 in mouse eye development - insights into ocular coloboma.”
- PI on a summer scholarship placement from WR Henderson scholarship funds, UoE (£1,000 - summer 2014) "Expression analysis of molecules in control and *Foxg1*$^{-/-}$ mutant eyes during embryonic development."
- Co-investigator on a research grant from the Biotechnology and Biological Sciences Research Council (BBSRC) (£464,863 – 2005–2008) "The role of Gli3 in development of the telencephalon."

AWARDS AND PERSONAL FELLOWSHIPS

- Company of Biologists (CoB) award for best presentation (oral and poster) of early career researcher for the ZING conference "Genes, Epigenetics and Evolution in Eye Development and Disease", Oropesa de Toledo, Spain, 28/09-01/10/2014 (£1,000).
- BSDB/CoB Travel Grant to attend the EMBO workshop "Frontiers in Sensory Development", Barcelona, Spain, 03-06/05/2011 (£250).

- BSDB/CoB Travel Grant and Guarantors of Brain Travel Grant to attend the 18th Biennial Conference of the ISDN in Estoril, Portugal, 16-20/06/ 2010 (£250 & £500).
- FEBS Travel Fellowship for the workshop "Generating neural diversity in the brain", Capri, Italy, 13-16/10/2007.
- FEBS Travel Fellowship for the 27th meeting of the FEBS in Lisbon, 30/06-05/07/2001.
- Award for best oral presentation at the II International Conference on Chromosome 21 and Medical Research on Down syndrome in Barcelona, 06-07/04/2001**.**
- Fellowship for the VI Spanish National Course in Neurosciences, International University of Andalucía, La Rábida, Huelva, Spain, 08-15/04/2000.
- Doctoral *Marie Curie* Research Training Grant under the Training and Mobility Research Program (TMR - Category 20 – 4th Framework program); Barcelona, Oct 1997-Sept 2000.
- Postgraduate studentship from the Ministry of Foreign Affairs of Spain; Barcelona, Oct 1996-June 1997.
- Undergraduate *Erasmus* European Union studentship; Madrid, Nov 1994-June 1995.

MEMBERSHIP OF PROFESSIONAL AND LEARNED SOCIETIES

- British Society for Developmental Biology (2006–to date)
- Genetics Society (2013–2018)
- International Society for Transgenic Technologies (2013–2016)
- Physiological Society (2013–2015)
- Society for Neuroscience (2006–2007)
- Spanish Society of Biochemistry and Molecular Biology (SEBBM) (2002–2018)

PUBLICATIONS

- Smith R, Huang YT, Tian T, Vojtasova D, Mesalles-Naranjo O, Pratt T, Price D, **Fotaki V**.***** The transcription factor Foxg1 promotes optic fissure closure in the mouse by suppressing Wnt8b in the nasal optic stalk. **J Neurosci.** 2017 Aug 16;37(33):7975-7993 (*****corresponding author).
- Bulstrode H, Johnstone E, Marques MA, Ferguson K, Bressan R, Blin C, Grant V, Gogolok S, Gagrica S, Ender C, **Fotaki V**, Bertone P, Pollard SM. Elevated FOXG1 in glioblastoma enforces neural stem cell identity through transcriptional control of cell cycle and epigenetic regulators. **Genes Dev**. 2017 Apr 15;31(8):757-773.
- Adutwum-Ofosu KK, Magnani D, Theil T, Price DJ, **Fotaki V**.***** The molecular and cellular signatures of the mouse eminentia thalami support its role as a signalling centre in the developing forebrain. **Brain Struct Funct.** 2016 Sep;221(7):3709-27 (*****corresponding author).
- Nowakowski TJ, Mysiak KS, O'Leary T, **Fotaki V**, Pratt T, Price DJ. Loss of functional Dicer in mouse radial glia cell-autonomously prolongs cortical neurogenesis. **Dev Biol.** 2013 Oct 15;382(2):530-7.
- **Fotaki V*,** Smith R, Pratt T, Price DJ. Foxg1 is required to limit the formation of ciliary margin tissue and Wnt/□-catenin signalling in the developing nasal retina of the mouse. **Dev Biol**. 2013 Aug 15;380(2):299-313 (*****corresponding author).
- Nowakowski TJ, **Fotaki V**, Pollock A, Sun T, Pratt T, Price DJ. MicroRNA-92b regulates the development of intermediate cortical progenitors in embryonic mouse brain. **Proc Natl Acad Sci U S A.** 2013 Apr 23;110(17):7056-61.
- **Fotaki V***, Price DJ, Mason JO. Wnt/β-catenin signalling is disrupted in the *extra-toes* (*Gli3*$^{Xt/Xt}$) mutant from early stages of forebrain development, concomitant with anterior neural plate patterning defects. **J Comp Neurol.** 2011 Jun 15;519(9):1640-57 (*****corresponding author).
- **Fotaki V**[&], Larralde O[&], Zeng S[&], McLaughlin D, Nichols J, Price DJ, Theil T, Mason JO. Loss of Wnt8b has no overt effect on hippocampus development but leads to altered Wnt gene expression levels in dorsomedial telencephalon. **Dev Dyn.** 2010 Jan;239(1):284-96 ([&]equal contribution).
- Yu T, **Fotaki V**, Mason JO, Price DJ. Analysis of early ventral telencephalic defects in mice lacking functional Gli3 protein. **J Comp Neurol.** 2009 Feb 10;512(5):613-27.
- Laguna A, Aranda S, Barallobre MJ, Barhoum R, Fernández E, **Fotaki V**, Delabar JM, de la Luna S, de la Villa P, Arbonés ML. The protein kinase DYRK1A regulates caspase-9-mediated apoptosis during retina development. **Dev Cell.** 2008 Dec;15(6):841-53.
- **Fotaki V***, Price DJ, Mason JO. Newly identified patterns of Pax2 expression in the developing mouse forebrain. **BMC Dev Biol.** 2008 Aug 13;8:79 (*****corresponding author)
- Arqué G[&], **Fotaki V**[&], Fernández D, Martínez de Lagrán M, Arbonés ML, Dierssen M. Impaired spatial learning strategies and novel object recognition in mice haploinsufficient for the dual specificity tyrosine-regulated kinase-1A (Dyrk1A). **PLoS One.** 2008 Jul 2;3(7):e2575. ([&]equal contribution).
- Fenby BT, **Fotaki V**, Mason JO. Pax3 regulates Wnt1 expression via a conserved binding site in the 5' proximal promoter. **Biochim Biophys Acta.** 2008 Feb;1779(2):115-21.
- **Fotaki V***, Yu T, Zaki PA, Mason JO, Price DJ. Abnormal positioning of diencephalic cell types in neocortical tissue in the dorsal telencephalon of mice lacking functional Gli3. **J Neurosci**. 2006 Sep: 6;26(36):9282-92. (*****corresponding author).
- Zaki PA, Martynoga B, Delafield-Butt JT, **Fotaki V**, Yu T, Price DJ. Loss of Gli3 enhances the viability of embryonic telencephalic cells in vitro. **Eur J Neurosci.** 2005 Sep;22(6):1547-51.
- Benavides-Piccione R, Dierssen M, Ballesteros-Yanez I, Martinez de Lagrán M, Arbonés ML, **Fotaki V**, DeFelipe J, Elston GN. Alterations in the phenotype of neocortical pyramidal cells in the Dyrk1A+/- mouse. **Neurobiol Dis.** 2005 Oct;20(1):115-22.
- **Fotaki V**, Martínez de Lagrán M, Estivill X, Arbonés M, Dierssen M. Haploinsufficiency of *Dyrk1A* in mice leads to specific alterations in the development and regulation of motor activity. **Behav Neurosci.** 2004 Aug;118(4):815-21.

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- **Fotaki V**, Dierssen M, Alcántara S, Martínez S, Martí E, Casas C, Visa J, Soriano E, Estivill X, Arbonés M. Dyrk1A haploinsufficiency affects viability and causes developmental delay and abnormal brain morphology in mice. **Mol Cell Biol.** 2002 Sep;22(18):6636-47.
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- Dierssen M, Martí E, Pucharcós C, **Fotaki V**, Altafaj X, Casas K, Solans A, Arbonés ML, Fillat C, Estivill X. Functional genomics of Down syndrome: a multidisciplinary approach. **J Neural Transm Suppl.** 2001 (61):131-48, *Review*.