CURRICULUM VITAE

PERSONAL DETAILS

Given name(s): Paula Carolina  
Surname: Díaz Rodríguez  
Date of Birth: 21/09/1979  
Place of Birth: Santiago, Chile  
Citizenship: Chilean, Italian  
E-mail: Paula.Diaz@postgrad.manchester.ac.uk, pdiaztm@gmail.com

UNDERGRADUATE AND GRADUATE EDUCATION

PhD student (Medicine): University of Manchester - UK (2009 - present)  
MSc (Cell Biology): Universidad de Chile - Chile (2005 - 2007)  
Medical Technologist (Professional degree): Universidad de Chile - Chile (1998 - 2004)  
BSc (Medical Technology): Universidad de Chile - Chile (1998 - 2002)

FELLOWSHIPS AND AWARDS

2011:  -Research award funded by the Giorgio Pardi Foundation, Society for Gynecologic Investigation (SGI); 18 March, Miami, USA.  
-Travel Grant from the Physiological Society to attend the Society for Gynecologic Investigation (SGI) Annual Meeting; 16-19 March, Miami, USA.

2009:  -Comisión Nacional de Investigación Científica y Tecnológica (CONICYT) Postgraduate (PhD) Scholarship 72090593; September 2009-renewed each year up to four years, Gobierno de Chile, Chile.

2007:  -Travel Grant from Centro de Investigaciones Médicas (CIM)/Laboratorio de Fisiología Celular y Molecular (CMPL), Pontificia Universidad Católica de Chile to attend International Postgraduate Workshop (IPW): Feto-Placenta: Función y Disfunción, 8-10 November; Chillán, Chile.

2006:  -Comisión Nacional de Investigación Científica y Tecnológica (CONICYT) Postgraduate Scholarship (Master) 22060222; March 2006-February 2007, Gobierno de Chile, Chile.

2005:  -Travel Grant from Sociedad Chilena de Ciencias Fisiológicas to attend I Latin American Symposium on Maternal-Fetal Interaction; 6-9 November, Santiago, Chile.  
-Best Graduate from Medical Technology (Professional degree, year 2004); Escuela de Tecnología Médica, Facultad de Medicina, Universidad de Chile, Santiago, Chile.

PUBLICATIONS

Peer reviewed papers


Abstracts


CONGRESS COMMUNICATIONS

1. **P. Diaz**, G. Riquelme “Sodium-sensitive potassium conductances are present in the apical syncytiotrophoblast membrane”. In: International Postgraduate Workshop 2007. 8-10 November 2007; Chillán, Chile.

2. **P. Diaz**, B. Campos, G. Riquelme “Differential expression of Annexins in purified syncytiotrophoblast membranes from normal and pre-eclamptic placentas”. In: XVII Reunión Anual de la Sociedad de Reproducción y Desarrollo. 10-12 August 2006; Reñaca, Chile.

PRESENTATIONS AND ATTENDANCE AT CONFERENCES


3. The Physiological Society: Cardiac & Respiratory Physiology Themed Meeting, 1-3 September 2010, Birmingham, United Kingdom.

4. Physiology 2011: Main Meeting of the Physiological Society, Manchester, United Kingdom, 30 June - 2 July 2010.


6. XVII Reunión Anual de la Sociedad de Reproducción y Desarrollo. 10-12 August 2006; Reñaca, Chile. Poster presentation.

7. II Latin American Symposium on Maternal-Fetal Interaction. 6-9 November 2005; Santiago, Chile. Poster presentation.

8. Joint Meeting with the Physiological Society. King’s College London. 17-20 December 2004; London, United Kingdom. Poster presentation.


OTHER PRESENTATIONS

1. Regular presentations at departmental laboratory and works in progress meetings.

**RESEARCH EXPERIENCE**

**Past experience:** I graduated from the Universidad de Chile with a BSc in Medical Technology and professional title of Medical Technologist (2004), receiving Best Graduate award. I gained a MSc in Cell Biology in Prof G. Riquelme’s laboratory, Universidad de Chile in 2007. During this time, I received training in placental electrophysiology including unique methods such as voltage clamp technique in *Xenopus laevis* oocytes to record whole cell currents. Part of this work lead to a first author paper “Barium, TEA and sodium sensitive potassium channels are present in the human placental syncytiotrophoblast” published in 2008. I also participated in a variety of projects as an associate researcher and postgraduate student, involving identification of ion transport and regulatory proteins within the placental syncytiotrophoblast membranes and their membrane sub-domains in normal and preeclamptic pregnancies. This work involved techniques such as histology, western blotting and membrane vesicle isolation and purification methods. Over this period I attended and presented my work at several national and international meetings, including the Physiological Society.

**Current PhD studies:** In September 2009 I obtained a 4-year scholarship form CONICYT (Chilean Government) to begin my PhD studies with the Maternal and Fetal Health Research Centre at the University of Manchester, School of Medicine, supervised by Dr. Susan Greenwood and Prof. Colin Sibley. I had an important participation in the design of my current project “The effects of oxidative stress on potassium channels in the term human placental syncytiotrophoblast”, which explores the possibility that reactive oxygen or nitrogen species impair placental syncytiotrophoblast development in pre-eclampsia, a pregnancy disease associated with an increase in free radicals, through an effect on potassium channels. The long term aim is to explore potassium channels as potential therapeutic targets for the treatment of this high-incidence pregnancy pathology.

**Future goals:** My future goals are to establish and lead an independent research group in a position that will allow me to sustain international collaboration. My future research interests will focus on the field of placental ion channel physiology, the importance of ion channels in placental development and function and their modulation by oxidative-nitrative stress in normal pregnancy and in and pregnancy pathology.