2017

PERSONAL DATA

Name	Patricio Olguín
Place of birth	Santiago, Chile
Title and Degree:	Biochemist, Ph.D. in Biomedical Sciences
Work Address:	Programa de Genética Humana, Instituto de Ciencias Biomédicas, Instituto de Neuciencia Biomédica, Departamento de Neurociencia, Facultad de Medicina, Universidad de Chile, Av. Independencia 1027, Santiago, Chile.
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Current Position:	Assistant Professor, Program of Human Genetics, Institute of Biomedical Sciences, Faculty of Medicine, Universidad de Chile.

EDUCATION-ACADEMIC POSITIONS

2017-	Universidad de Chile ***Assistant Professor and Principal Investigator*** *Department of Neuroscience, Faculty of Medicine*	SANTIAGO, CHILE
2012-	Universidad de Chile ***Assistant Professor and Principal Investigator*** *Program in Human Genetics, Institute of Biomedical Sciences, Faculty of Medicine*	SANTIAGO, CHILE
2007-2011	Mount Sinai School of Medicine ***Postdoctoral Position*** *Dr. Marek Mlodzik Laboratory.*	NEW YORK, USA
2006-2007	Universidad de Chile, Faculty of Sciences ***Postdoctoral Position*** *Dr. Alvaro Glavic Laboratory.*	SANTIAGO, CHILE
2001-2006	Universidad de Chile, Faculty of Medicine ***PhD. Program in Biomedical Sciences***	SANTIAGO, CHILE
1994-2000	Universidad de Chile, ***Undergraduate studies: Biochemistry.***	SANTIAGO, CHILE

NATIONAL AND INTERNATIONAL RECOGNITION

Honors, Awards and Fellowships

2014	Excellence in Investigation Award, Facultad de Medicina, Universidad de Chile
2007-2011	Pew Fellowship, Latin-American Program for Biomedical Sciences.
2002-2004	Scholarship for Ph.D. studies, National Council of Science and Technology (CONICYT).
2001-2002	Scholarship for Ph.D. studies, Biomedical Sciences Institute (ICBM), Facultad de Medicina, Universidad de Chile.

Research Support

National

2016-2021	Millenium Initiative ICM P09015F, Biomedical Neuroscience Institute, Adjunct Investigator
2015-2018	Anillo de Ciencia y Tecnología PIA ACT 1401, Main Researcher: *Drosophila* Ring in Developmental Adaptations to Nutritional Stress (DRiDANS)
2015-2017	Principal Investigator Ecos-Conicyt C14B04. Understanding the roles of tissue-tissue interactions in morphogenesis.
2013-2016	Co-Investigator Grant: CONICYT USA20130020: The cell biology of hereditary spastic paraplegias using Drosophila as a model organism", Responsible investigator: Dr. Andrés Couve Correa.
2013-2016	FONDECYT Regular Grant Nº 1120253. Principal Investigator: Mechanisms of cell adaptation to inter-tissue mechanical stress during morphogenesis, the role of *Drosophila* Filamin(Jitterbug) and Chascon.
2003-2004	CONICYT postgraduate research Grant AT-403023

PUBLICATIONS IN MEDIA WITH EDITORIAL COMMITTEE

Research papers (*corresponding author)

1. Vega-Macaya F, Manieu C, Valdivia M, Mlodzik M, Olguín P*. (2016)**.** "Establishment of the Muscle-Tendon Junction During Thorax Morphogenesis in Drosophila Requires the Rho-Kinase". Genetics. 204(3):1139-1149

2. Astorga C, Jorquera R, Ramírez M, Kohler A, López E, Delgado R, Cordova A, Olguin P, and Sierralta J*. (2016). Presynaptic DLG regulates synaptic function through the localization of voltage-activated Ca2+ Channels. Sci Rep. 6:32132

3. Oliva C, Molina-Fernandez C, Maureira M, Candia N, López E, Hassan B, Aerts S, Cánovas J, Olguín P*, Sierralta J*. (2015). Hindsight regulates photoreceptor axon targeting through transcriptional control of jitterbug/Filamin and multiple genes involved in axon guidance in Drosophila. Dev Neurobiol. [Epub ahead of print].

4. Ibar C, Cataldo V, Vásquez-Doorman C, Olguín P and Glavic A*. (2013) Drosophila p53-related protein kinase (Prpk) is required for PI3K/TOR pathway-dependent growth. Development 140 (6):1282-91.

5. Weber U, Gault W, Olguín P, Serysheva E, Mlodzik M*. (2012). Novel Regulators of Planar Cell Polarity: A Genetic Analysis in Drosophila. Genetics 191(1): 145-162.

6. Gault W, Olguín P, Weber U, Mlodzik M*. (2012) Drosophila CK1-γ, gilgamesh, controls PCP-mediated morphogenesis through regulation of vesicle trafficking. J Cell Biol. 5;196(5):605-21.

7. Olguín P, Glavic A, Mlodzik M*. (2011). Intertissue mechanical stress affects frizzled-mediated planar cell polarity in the Drosophila notum epidermis. Curr Biol. 21(3):236-42.

8. Albornoz V, Mendoza-Topaz C, Oliva C, Tello J, Olguín P, Sierralta J*. (2008). Temporal and spatial expression of Drosophila DLGS97 during neural development. Gene Expr Patterns 8(6):443-51.

9. Olguín P*, Oteiza P, Gamboa E, Gomez-Skarmeta J, Kukuljan M*. (2006). REST/NRSF modulates ectodermal patterning during Xenopus development. J. Neuroscience, 26(10): 2820-2829.

10. Olguín P, Armisen R, Kukuljan M*. (2006). Developmental regulation of the expression of sodium currents in Xenopus primary neurons. Biol Res 39: 483-491.

11. Kukuljan M, Taylor A, Chouinard H, Olguín P, Rojas CV, Ribera AB*. (2003). "Selective regulation of xSlo splice variants during Xenopus embryogenesis. J Neurophysiology 90(5):3352-60".

12. Mendoza C, Olguín P, Lafferte G, Thomas G, Ebitsch S, Gundelfinger ED, Kukuljan M, Sierralta J*. (2003). "Novel isoforms of Dlg are fundamental for neuronal development in Drosophila. J. Neuroscience. 23(6): 2093-2101".

13. Armisen R, Fuentes R, Olguín P, Cabrejos ME, Kukuljan M*. (2002). "Repressor element-1 silencing transcription/neuron-restrictive silencer factor is required for neural sodium channel expression during development of Xenopus. J Neuroscience. 22(19):8347-51".

Book chapters and reviews

1. Valdivia M, Vega-Macaya F, Olguin P. (2017). Mechanical control of myotendinous junction formation and tendon differentiation during development. Front cell Dev Biol. Mar 23; 5:26.

2. Olguín P, Mlodzik M. (2010). A new spin on planar cell polarity. Cell. 142(5):674-6.

3. Olguin P. Developmental Genetics (Chapter). Human Genetics. Edited by Soledad Berrios. Editorial Mediterraneo, ISBN9789562203647. (2014). Pags. 145-158.

Grad Student Mentorship

Master Students:

1) Nolberto Zúñiga. **2017**. Estudio del efecto de la interacción genético-nutricional prenatal sobre los patrones de sueño de *Drosophila melanogaster.* Programa de Magister en Genética. Facultad de Medicina. Universidad de Chile. (Co-tutor: Dr Ricardo Verdugo)

2) Franco Vega Macaya. **2017** Caracterización de la proteína Drok en células epiteliales de tipo tendón durante la interacción músculo tendón en *Drosophila melanogaster*. Magister en Bioquímica. Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.

3) Gerardo Ortiz. **2016**. Rastreo de genes implicados en las paraplejias espásticas hereditaria asociadas a atlastina en *Drosophila melanogaster*. Programa de Magister en Genética. Facultad de Medicina. Universidad de Chile.

4) Mauricio Valdivia. **2016**. Identificación de posibles complejos de mecanotransducción asociados a las filaminas Jbug de *Drosophila melanogaster.* Magister en Bioquímica. Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.

PhD Students:

1) Catalina Manieu Seguel. 2015-present. The role of Chas, Jbug/Filamin, Myo II and RPTP69D in the tendon cell adaptation to mechanical stress during *Drosophila melanogaster* development. Doctorado en Ciencias Biomédicas. Facultad de Medicina. Universidad de Chile. (Co-tutor: Alvaro Glavic)

2) Claudia Molina Pelayo. 2016-present. La proteína Pelado regula la polimerización de actina durante la formación de tricomas en *Drosophila melanogaster*. Doctorado en Biología Molecular Celular y Neurociencias, Facultad de Ciencias, Universidad de Chile. (Co-tutor: Alvaro Glavic)