

1. Datos personales

Nombre : Iván Marcelo

Apellido : Moya Molina

2. Educación

2008- 2012: *Doctorado (PhD) en Ciencias Biomédicas*

Department of Molecular and Developmental Genetics – VIB11

K.U.Leuven, Belgium.

Directora: Prof. Dr. A. Zwijsen.

Título de disertación: Endothelial Specific Smad1 and Smad5 deficiency reveals a crucial role of BMP Smads in angiogenesis and lymphangiogenesis.

2007-2008: *Estudiante de pregrado, laboratorio de Prof. Dr. G. David*

Department of Molecular and Developmental Genetics – VIB11

K.U.Leuven, Belgium

Título del proyecto: Functional characterization of the role of Glypican5 during zebrafish development.

1999-2005: *Licenciatura en Ciencias Biológicas.*

Directora: Prof. Dr. Eugenia M. del Pino.

Pontificia Universidad Católica del Ecuador (PUCE). Quito, Ecuador.

Título de disertación: Somitogenesis en la rana Colostethus machalilla (Anura: Dendrobatidae)

3. Experiencia laboral e investigación

2018 (Julio)-presente: *Investigador principal en Universidad de las Américas (UDLA) Quito.*

2012 (Mayo)-presente:

Investigador de Post doctorado en: Laboratory of Growth Control and Cancer Research del Prof. Dr. Georg Halder. VIB Center for the Biology of Disease – Center for Human Genetics VIB11 – K.U.Leuven, Belgium

Proyecto 1: Orchestrating tissue repair by Yap: Regulation and mechanisms of organ regeneration

Proyecto 2: Regenerative Cancer Therapy: a novel approach to fight against Cáncer

Proyecto 3: The role of the Hippo pathway in tumor and peritumoral cells

201e (enero) -2012 (Abril):

Investigador de Post doctorado en: Developmental Signaling Laboratory, Prof. Dr. A. Zwijsen. Department of Molecular and Developmental Genetics – VIB11 K.U.Leuven, Belgium

2003-2007: *Asistente de investigación en el laboratorio de Biología del Desarrollo, Dra. Eugenia M. del Pino. Pontificia Universidad Católica del Ecuador (PUCE). Quito, Ecuador.*

2002-2003: *Estudiante voluntario en el laboratorio de Biología del Desarrollo de Dra. Eugenia M. del Pino. Pontificia Universidad Católica del Ecuador (PUCE). Quito, Ecuador.*

4. Experiencia docente

2012-presente:

- *Mentor y supervisor de estudiantes de doctorado (PhD) (5 estudiantes) Laboratory of Growth Control and Cancer Research, Prof. Dr. Georg Halder. VIB-KU Leuven Center for Cancer Biology Department of Oncology – VIB K.U.Leuven, Belgium*
- *Supervisor de estudiantes de rotación (11 estudiantes de 1^{er} año programa de Masterado KULEuven)*

- *Supervisor de estudiantes de Intercambio ERASMUS en KULeuven (3 estudiantes)*
- *Supervisor de tesis de Masterado (3 estudiantes, programa de Masterado KULeuven)*
- *2010-2011: Supervisor de tesis de Masterado (1 estudiante, programa de Masterado KULeuven)*

Developmental Signaling Laboratory, Prof. Dr. A. Zwijsen. Department of Molecular and Developmental Genetics – VIB11 K.U.Leuven, Belgium

5. Becas

2016-2018: FWO Research grant

2013-2014: “PDMK fellowship”, KULeuven para investigación de Postdoctorado

2007-2011: Beca de doctorado (PhD), “Molecular and Developmental Genetics doctoral program. VIB11 - K.U.Leuven, Belgium. VIB International Ph.D. Program 2006”.

9. Dirección profesional

UDLA, Ecuador:

Universidad de Las Américas – Quito, Ecuador

Campus Queri, Bloque 7

José Queri y Granados.

KULeuven, Bélgica:

Laboratory of Growth Control and Cancer Research

VIB-KU Leuven Center for Cancer Biology, Department of Oncology, KU Leuven

Campus Gasthuisberg O&N4 Herestraat 49-B 912, 3000 Leuven

9. Publicaciones

- Wang X, Freire Valls A, Schermann G, Shen Y, **Moya IM**, Castro L, Urban S, Solecki GM, Winkler F, Riedemann L, Jain RK, Mazzone M, Schmidt T, Fischer T, Halder G, Ruiz de Almodóvar C. YAP/TAZ Orchestrates VEGF Signaling during Developmental Angiogenesis. *Dev Cell*. 2017 Sep 11;42(5):462-478.e7
- Stradiot L., Verhulst S., Roosens T., Oie Cl., **Moya IM.**, Halder G., Mannaerts I., van Grunsven LA. Functionality based method for simultaneous isolation of rodent hepatic sinusoidal cells. *Biomaterials* 2017 Sep 131 91-101
- Moya IM**, Halder G. The Hippo pathway in cellular reprogramming and regeneration of different organs. *Curr Opin Cell Biol*. 2016 Sep 1;43:62-68.
- Yang CC, Graves HK, **Moya IM**, Tao C, Hamaratoglu F, Gladden AB, Halder G. Differential regulation of the Hippo pathway by adherens junctions and apical-basal cell polarity modules. *Proc Natl Acad Sci U S A*. 2015. 112(6):1785-90.
- Moya IM** and Halder G. Discovering the Hippo pathway protein-protein interactome. *Cell research*. 2014 Cell Research 24:137–138
- Sansores-Garcia L, Atkins M, **Moya IM**, Shahmoradgoli M, Tao C, Mills GB and Halder G. Mask Is Required for the Activity of the Hippo Pathway Effector Yki/YAP, *Curr Biol*. 2013 Feb 4;23(3):229-35.
- Beets K, Huylebroeck D, **Moya IM**, Umans L, Zwijsen A. Robustness in angiogenesis: Notch and BMP shaping waves. *Trends Genet*. 2013 Mar;29(3):140-9.
- Pereira PN, Dobрева MP, Maas E, Cornelis FM, **Moya IM**, Umans L, Verfaillie CM, Camus A, de Sousa Lopes SM, Huylebroeck D, Zwijsen A Antagonism of Nodal signaling by BMP/Smad5 prevents ectopic primitive streak formation in the mouse amnion. *Development*. 2012 Sep;139 (18):3343-54.
- Moya IM**, Umans L, Maas E, Pereira PN, Beets K, Francis A, Sents W, Robertson EJ, Mummery CL, Huylebroeck D, Zwijsen A. Stalk cell phenotype depends on integration of Notch and Smad1/5 signaling cascades. *Dev Cell*. 2012 Mar 13;22(3):501-14.
- Conidi A, Cazzola S, Beets K, Coddens K, Collart C, Cornelis F, Cox L, Joke D, Dobрева MP, Dries R, Esguerra C, Francis A, Ibrahim A, Kroes R, Lesage F, Maas E, **Moya IM**, Pereira PN, Stappers E, Stryjewska A, van den Berghe V, Vermeire L, Verstappen G, Seuntjens

- E, Umans L, Zwijsen A, Huylebroeck D. Few Smad proteins and many Smad-interacting proteins yield multiple functions and action modes in TGF β /BMP signaling in vivo. Cytokine Growth Factor Rev. 2011 Oct-Dec;22(5-6):287-300.*
- del Pino EM., Venegas M., Romero-Carvajal A., Montenegro-Larrea P., Sáenz-Ponce N., **Moya IM.**, Sudou N., Taira M. A comparative analysis of early frog development. Proc Natl Acad Sci U S A. 2007 Jul 17;104(29):11882-8.*
- Moya IM.**, Alarcón I., del Pino EM. Gastrulation of *Gastrotheca riobambae* in comparison with other frogs. Dev Biol. 2007 Apr 15;304(2):467-78.*
- Moya IM.**, del Pino EM. Somitogenesis de *Colostethus machalilla* (Anura: Dendrobatidae). Proceedings of the First Science and Technology Meeting, Quito, Ecuador.2005.*
- del Pino EM., Ávila ME., Pérez OD., Benítez MS., Alarcón I., Noboa V., **Moya IM.** Development of the dendrobatid frog *Colostethus machalilla*. Int J Dev Biol. 2004 Sep;48(7):663-70.*

10. Participación en congresos

Presentaciones orales

- Advances in Microcirculation 2013 BMS Early Career Investigator Symposium, University of Warwick, UK. (Abril, 2013)
Keynote speaker: "Orchestrating endothelial plasticity by BMP and NOTCH signaling: a game of musical chairs"
- VIB Seminar. Blankenberge, Belgium, Abril, 2012
Presentación oral: "Regulation of endothelial stalk cell identity by Notch and BMP-Smad1/5 signaling"
- HHT/Angiogenesis meeting, K.U.Leuven, Leuven, Belgium. 20 de Septiembre, 2011
Presentación oral: "BMP-Smad1/5 signaling orchestrates stalk cell identity, tip cell polarity and directed cell migration"
- Internal Seminar from the Department of Human Genetics, K.U. Leuven, Belgium, 18
Noviembre, 2010
Presentación oral: "Stalk cell identity depends on integration of Notch and Smad1/5"

mediated signaling”

- *HHT meeting, LUMC, Leiden, Netherlands. 27 Abril, 2010*

Presentación oral: *“Endothelial specific Smad1/Smad5 deficiency reveals a crucial role for Bmp-Smads in angiogenesis“*

- *IUAP/PAI meeting, Leuven. 27 de Noviembre 2009*

Presentación oral: *Endothelial specific Smad1 and Smad5 deficiency reveals a crucial role of BMP Smads in angiogenesis and lymphangiogenesis.*

- *Jornadas Nacionales de Biología 2005, Universidad Laica Eloy Alfaro, Manabí, Ecuador, 24-28 de Noviembre 2005.*

Presentación oral: *Formación del Labio Dorsal del Blastoporo y Gastrulación en la Rana Marsupial *Gastrotheca riobambae*.*

Presentación oral: *Gastrulación en la Rana Marsupial *Gastrotheca riobambae*.*

- *Jornadas Nacionales de Biología 2004, Universidad Central del Ecuador, Quito, Ecuador, Diciembre 2004.*

Presentación oral: *Expresión de proteínas musculares y morfología de los somitas de *Colostethus machalilla*.*

- *Jornadas Nacionales de Biología 2003, Universidad Central del Ecuador, Quito, Ecuador, 22-26 de Diciembre 2003.*

Presentación oral: *Expresión de proteínas musculares durante la somitogénesis de *Colostethus machalilla*.*

Presentación de poster u oyente

- *FASEB Science Research Conference Liver Biology: Fundamental Mechanisms and Translational Applications. 26 de Junio, 2016, West Palm Beach, Florida. USA.*
- *Keystone Symposia Stem Cells and Regeneration in the Digestive Organs. 13 – 17 de marzo, 2016, Keystone, Colorado, USA.*
- *EMBO/EMBL Symposium: Enabling Technologies for Eukaryotic Synthetic Biology. 21-23 Junio 2015. EMBL Heidelberg, Germany.*

- *EMBO/EMBL Epithelia Symposium Epithelia: The Building Blocks of Multicellularity. 27-30 de Agosto 2014, EMBL Heidelberg, Germany.*
- *Cold-blooded Cancer: Non-mammalian Models for Oncology Research, Septiembre 2-4, 2012*
- *Gordon Research Conference: Angiogenesis, Agosto 21-26, 2011*
Poster: "Stalk cell identity depends on integration of Notch and Smad1/5 mediated signaling"
- *Angiogenesis Gordon-Kenan Research Seminar: Endothelial Heterogeneity in Disease, Agosto 20-21, 2011*
Poster: "Stalk cell identity depends on integration of Notch and Smad1/5 mediated signaling"
- *EMBO Workshop, Lineage Commitments: Emphasis on Extraembryonic-Embryonic Interfaces, 25-27 Mayo 2011*
- *IUAP-meeting, Brussels, Belgium, 30 Abril, 2010*
- *8th International Conference on Bone Morphogenetic Proteins, Leuven, Belgium, 15-18 Septiembre, 2010*
Poster: "Stalk cell identity depends on integration of Notch and Smad 1/5 mediated signaling"
- *VIB Seminar 2010, Blankenberge, 4 Marzo 2010*
Poster: BMP-SMADS are novel regulators of tip cell - stalk cell formation and function during angiogenesis.
- *16th International Society of Developmental Biologists Congress, Edinburgh. 6 – 10 Septiembre 2009*
Poster: Endothelial specific Smad1 and Smad5 deficiency reveals a crucial role of BMP Smads in angiogenesis and lymphangiogenesis. Moya IM., Umans L., Sents W., Huylebroek D., Zwijsen A.
- *BSCDB, FWO-Fladers, FEDRA meeting "Cell fate determination in the Embryo", Leuven, Belgium. 30-31 Marzo 2009.*
Poster: Essential role for Smad1 and Smad5 in angiogenesis and lymphangiogenesis. Moya IM., Umans L., Sents W., Huylebroek D., Zwijsen A.
- *BSCDB-meeting "The adult stem/progenitor cell niche", Brussels, Belgium, 13-15 Mar 2008*
- *IUAP-meeting, Luik, 8 Jun 2007*
Poster: The role of GPC5 in BMP4 signaling pathway during Dopaminergic (DA) Neuron specification. Moya IM., DeCat B, Verstappen G., Umans L., David G.