Curriculum Vitae

PERSONAL DATA

Name: Pedro Pablo Hernández Cerda
Date of Birth: August 7th, 1976, Santiago, Chile.

EDUCATION AND RESEARCH EXPERIENCE

04/2016 – present Postdoctoral Fellow. Macrophages and Development of Immunity Laboratory, Philippe Herbomel, Ph.D. Stem Cell and Developmental Biology Department, Institut Pasteur, Paris, France.

04/2014 – 03/2015 Postdoctoral Fellow. Innate Immunity Laboratory, Andreas Diefenbach, M.D., Ph.D. Institute of Medical Microbiology and Hygiene, Uniklinikum, Freiburg

10/2007 – 03/2014 Ph.D. at International Max Planck Research School for Molecular and Cellular Biology, Max-Planck-Institute of Immunobiology & Epigenetics, Freiburg, Germany. Thesis “Role of Innate Lymphocytes in Promoting Intestinal Epithelial Integrity”. Supervisor: Andreas Diefenbach, M.D., Ph.D. Institute of Medical Microbiology and Hygiene, Uniklinikum, Freiburg

02/2007 – 04/2007 Research stay in the laboratory of Jochen Wittbrodt, Ph.D. Developmental Biology Unit, EMBL-Heidelberg

03/2006 – 09/2007 Student of the Ph.D. Program in Biomedicine of the Faculty of Medicine, University of Chile

03/2003 – 12/2005 M.Sc. Molecular Biotechnology Engineer. Research thesis “Copper Induction of stress-response genes and its effect on the lateral line system of zebrafish”. Supervisor: Miguel Allende, Ph.D., Millennium Nucleus in Developmental Biology, Facultad de Ciencias,Universidad de Chile

03/2002 – 12/2002 Research Rotation in Developmental Biology Laboratory, “Cloning and characterization of genes participating in copper homeostasis”. Supervisor: Miguel Allende, Ph.D., Millennium Nucleus in Developmental Biology, Facultad de Ciencias,Universidad de Chile

03/1999 – 11/1999 Research Rotation “Phenotypic caracterization of E. Coli mutants not producing microcin E492 in a host”. Supervisor: Rosalba Lagos, Ph.D. Microbiology Laboratory, University of Chile

03/1998 – 12/2002 B.S. Bachelor in Molecular Biotechnology, University of Chile

03/1996 – 12/1997 "Bachillerato” degree (equivalent to an associate degree in the U.S.) in Natural and Exact Sciences, University of Chile

FUNDING AND FELLOWSHIPS

04/2015 – present: Postdoctoral Felloswhip Roux-Cantarini, Institut Pasteur, Paris, France
2014 – 03/20015: Academic employee DFG project "Reciprocal Interactions Between the Intestinal Microbiota" at University Medical Center of the University of Freiburg, Germany
2013: Academic employee at University Medical Center of the University of Freiburg, Germany
02/2013 Travel grant to assist to the Developmental Biology and Regenerative Medicine: From tissue generation to re-generation". Santiago, Chile
2008-2012: Ph.D. fellowship IMPRS (International Max Planck Research School for Molecular and Cellular Biology)
02/2007 – 03/2007: Travelling and stay fellowship International Cooperation Program CONICYT/DFG (National Committee of Scientific and Technologic Research (Chile) / German Research Foundation) for a research stay in the laboratory of Jochen Wittbrodt, EMBL-Heidelberg
2007: Ph.D. Fellowship CONICYT
2006: Ph.D. Fellowship ICBM (Biomedical Sciences Institute, University of Chile)

HONORS/PRIZES

2015 Featured Paper of the Month of July, 2015. Society for Mucosal Immunology.
2015 Research highlight *Nature Reviews Immunology* 15, 402–403 (2015). Original Research Paper: Hernandez et al, *Nat Immunol* 2015
2006 Second best work, XX Annual Meeting of The Chilean Society of Cell Biology, PucoÏn, Chile. Institution: Latin American Society of Developmental Biology.
2006 Third prize at scientific photography competition in the XX Annual Meeting of The Chilean Society of Cell Biology. Nikon

PRACTICAL, MANAGEMENT AND SOFT SKILLS TRAINING

2012 Team Work and Leadership Competencies. Dr. Simon Golin, golin wissenschaftsmanagement, Hamburg. Max-Planck-Institute of Immunobiology and Epigenetics
2012 Project Management for Young Scientists. Dr. Simon Golin, golin wissenschaftsmanagement, Hamburg. Max-Planck-Institute of Immunobiology and Epigenetics
2009 Scientific Communication Workshop (poster and oral presentations, writing scientific articles) Silyn-Roberts Heather. Auckland University, New Zealand. Max-Planck-Institute of Immunobiology and Epigenetics, Freiburg, June 2009
2008 Advanced Techniques in Microscopy. Dr. Roland Nitschke. Life Imaging Center, ZBSA, University of Freiburg, Germany, August 2008
2007 3D-Microscopic Imaging: Quantification of Biological Objects Through Image Processing. Dr. Steffen Härtel, Laboratory of Scientific Image Analysis (SCIAN), Faculty of Medicine, University of Chile

TEACHING ACTIVITIES

Participation in courses:

2010 Lecturer in the IMPRS (International Max Planck Research School for Molecular and Cellular Biology) course “Epitope tagging”

2006 Assistantship FCM (Scientific Foundations of Medicine) course for Medicine students at the Faculty of Medicine, University of Chile

Thesis tutoring:

2012 – 2013 Nam Nguyen, M.D., University of Freiburg. Title: “Cooperation of IL-22 and IFN-λ for the induction of antiviral Interferon Stimulated Genes”

2011 Lukas Amman, B.S. in Biology, University of Freiburg. Title: “Establishment of a Method to Isolate Intestinal Stem Cells”

2009 – 2010 Jakob Zimermann, Ms.Sc. in Molecular Medicine, University of Freiburg. Title: “The Role of Interleukin 22 in the Development of Colitis-Associated Cancer”

2005 – 2007 Francisco Olivari. Ms.Sc. in Molecular Biotechnology Engineering. University of Chile. Title: “Mechanisms of hair cell death in the lateral line system of zebrafish”

LANGUAGE SKILLS

Spanish: native
English: fluent
German: intermediate
French: basic

PEER-REVIEWED PUBLICATIONS

Average citation per article: 38.67; h-index: 6; Sum of the times cited: 348. Based on 9 articles, source: WEB OF SCIENCE

Research articles

1. **Hernandez PP,** Mahlakoiv T, Nguyen N, Guendel F, Ryffel B, Hoelscher C, Dumoutier L, Renauld JC, Staeheli P and Diefenbach A. Interleukin-22 produced by group 3 innate lymphoid cells restricts viral replication in intestinal epithelial cells. *Nature Immunology,* 2015 Jul;16(7):698-707. Times Cited: 0

2. Mahlakoiv T*, **Hernandez PP*,** Diefenbach A and Staeheli P. Leukocyte-derived IFN-α/β and epithelial IFN-λ constitute a compartmentalized mucosal defense system that restricts enteric virus infections. **(*) Equally contribution**. *Plos Pathogens*, 2015 Apr 7;11(4):e1004782. Times Cited: 1

3. Klose CS, Blatz K, d'Hargues Y, **Hernandez PP**, Kofoed-Nielsen M, Ripka JF, Ebert K, Arnold SJ, Diefenbach A, Palmer E, Tanriver Y. The transcription factor T-bet is induced by IL-15 and thymic agonist selection and controls CD8αα(+) intraepithelial lymphocyte development. *Immunity*. 2014 Aug 21;41(2):230-43. Times Cited: 2

4. **Hernandez PP,** Undurraga CA, Gallardo V, Mackenzie N, Allende ML. Sublethal concentrations of waterborne copper induce cellular stress and cell death in zebrafish embryos and larvae. *Biol Res.* 2011;44(1):7-15. Times Cited: 7

5. Vonarbourg C, Mortha A, Bui VL, **Hernandez PP**, Kiss EA, Hoyler T, Flach M, Bengsch B, Thimme R, Hölscher C, Hönig M, Pannicke U, Schwarz K, Ware CF, Finke D, Diefenbach A. Regulated expression of nuclear receptor RORγt confers distinct functional fates to NK cell receptor-expressing RORγt(+) innate lymphocytes. *Immunity*. 2010 Nov 24;33(5):736-51. Times Cited: 163

6. Olivari, FA, **Hernández, PP**, Allende, ML. Acute copper exposure induces oxidative stress and necrosis in lateral line hair cells of zebrafish. *Brain res.* 2008 dec;1244:1-12. Times Cited: 28

7. **Hernández PP**, Olivari FA, Sarrazin AF, Sandoval PC, Allende ML. Regeneration in zebrafish lateral line neuromasts: expression of the neural progenitor cell marker sox2 and proliferation-dependent and –independent mechanisms of hair cell renewal. *Dev Neurobiol.* 2007 Apr;67(5):637-54. Cover image authorship. Times Cited: 71

8. **Hernández, P**., Moreno V., Olivari, F., Allende, M.L. Sub-lethal concentrations of waterborne copper are toxic to lateral line neuromasts in zebrafish (Danio rerio). *Hearing Res.* 2006 Mar;213(1-2):1-10. Times Cited: 54

Reviews

1. **Hernández PP**, Allende ML. The zebrafish as a discovery model for copper metabolism genes and markers. Review. *Am. J. Clin. Nutr*. 2008 Sep;88(3):835S-9S. Times Cited: 11