Curriculum Vitae

Salomé de las Nieves Muñoz Sánchez (22 September, 1988)

Contact Information:

Institute of Biology
Biology Department
Science Faculty
Leiden University
Gorlaeus Laboratory, Office GW 3.27
Einsteinweg 55, 2333 CC Leiden, The Netherlands
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Educational Background

2009-2013

Universidad de Chile. Undergrads studies of Molecular Biotechnology Engineering

2014-2015

Universidad de Chile. Development experimental thesis: "Molecular markers associated with differential inflammatory response mechanisms in zebrafish larvae" in the Laboratory of Developmental Biology, led by Dr. Miguel L. Allende.

2016

Universidad de chile. Thesis writing to obtain Professional Tittle of Molecular Biotechnology Engineer.

2017

Presentation Thesis. Defended and approved on January 30Th. Evaluation Commission: Dr. Álvaro Glavic and Dra. Maria Rosa Bono.

2017

PhD Candidate of Graduate School of Science at Leiden University, The Netherlands. Supervisor Prof. Dr. Annemarie Meijer. Co-supervisors Dr. Marcel Schaaf (local), Dr. Michiel van der Vaart (local), Dr. Jochen Gehrig (external).

Research Experience

2011

- Research rotation: "Molecular approaches to study the role of *DcLCYB2* genes involved in the carotenoid pathway in *Daucus carota*" in the Laboratory of Plant Physiology and Genetics, led by Dr. Claudia Stange. Universidad de Chile.

2012

- Research rotation: "Project Management Innovation + Development: A Perspective from the university entrepreneurship" in the Laboratory of Plant Physiology and Genetics, led by Dr. Claudia Stange. Universidad de Chile.

2013

- Research rotation: "Selection of transgenic zebrafish carriers of brainbow system for the *in vivo* study of the immune system" in the Laboratory of Developmental Biology, led by Dr. Miguel Allende C. Universidad de Chile.

2014-2015

- Bachelor thesis: "Molecular markers associated with differential inflammatory response mechanisms in zebrafish larvae" in the Laboratory of Developmental Biology, led by Dr. Miguel L. Allende. Universidad de Chile.

2016

- Research assistant. FONDECYT Project 1140702: "Molecular characterisation of neutrophils during inflammation and resolution *in vivo*". in the Laboratory of Developmental Biology, led by Dr. Miguel L. Allende. Universidad de Chile.

- PhD Thesis. Project part of ImageInLife, a European Union Horizon 2020, Marie Sklodowska-Curie European Training Network (ETN) initative. "Correlative light and

electron microscopy in the mycobacteria-infected zebrafish embryo". Prof. Dr. Annemarie Meijer' Laboratory. Leiden University.

Scholarships

2009-2013

- Scholarship Bicentenario by Ministry of Education, Government of Chile.

2014-2015

- Scholarship at the Antares Project.

Meetings

2013

- Poster in the Encuentros 2013, Inspiring Innovation, Media Lab MIT Boston, United States of America**. Rosas C**, Quiroz L, López F, Muñoz S and Stange C. *"DcLcyb2* gene of carrot (*Daucus carota)* as a biotechnological tool to obtain a high-carotenoid content in tobacco (*Nicotiana tabacum)* and kiwi (*Actinidia deliciosa)".* Laboratory of Plant Physiology and Genetics. Universidad de Chile.

- Poster presented in Chilean Society for Cell Biology XXV annual meeting, Puerto Varas, Chile. Nicole Reynaert[1], **Salomé Muñoz[1]**, Lázaro Centanin[2], Joachim Wittbrodt[2], Miguel L. Allende[1]. "The Brainbow strategy: a lineage tracing tool for live single cell tracking in zebrafish". [1]FONDAP Center for Genome Regulation. Universidad de Chile. [2] Center for Organismal Studies, University of Heidelberg, Germany.

2014

- Poster Presented in Chilean Society foe Cell Biology XXVIII annual meeting, Puerto Varas, Chile. Salomé Muñoz S[1], **Carlos Muñoz M[1]**, Rodrigo Morales C[1], Mario Sánchez R[1], Margarita Parada K[1], Pablo Maturana V[2], Miguel L Allende[1]. "Olfm4 as a Molecular Marker for Differential Inflammatory Response". [1]FONDAP Center for Genome Regulation. [2] Biochemistry and Molecular Biology Laboratory. Science Faculty. Universidad de Chile.

- Poster in 3th Latin American Zebrafish Network (LAZEN) Course and Meeting, Valparaiso, Chile 2014. Oscar Peña, **Susana Paredes**, Salomé Muñoz, Margarita Parada, Carlos Rubilar, Miguel Allende. "SDF1a/CXCR4b axis mediates neutrophil retention during development and inflammatory response". FONDAP Center for Genome Regulation. Science Faculty. Universidad de Chile, Chile.

- Poster in 11Th International Conference on Zebrafish Development and Genetics, Madison, Wisconsin, United States of America. Oscar Peña, **Margarita Parada,** Salomé Muñoz, Susana Paredes, Carlor Rubilar, Karina Tapia, Carlos Muñoz, Miguel L. Allende. "SDF1/CXCR4b axis mediates neutrophil retention during development and inflammation". FONDAP Center for Genome Regulation. Science Faculty. Universidad de Chile, Chile

- Poster in 3Th National Nanotechnology Congress, CNN 2014, Puerto Varas, Chile. **E. Salas-Huenuleo**, S. Muñoz Sánchez, L. Valenzuela, D. Rojas-Benitez, O. Peña, F. Morales-Zavala, A. Glvic, M. Allende, M.J. Kogan. "Assesing in vivo Gold Nanospheres toxicity using Drosophila melanogaster and Danio rerio as a development models". Department of Toxicological and Pharmacological Chemistry. Faculty of Chemical and Pharmaceutical Sciences. Universidad de Chile. Advanced Center for Chronic Diseases ACCDiS, Santiago, Chile. FONDAP Center for Genome Regulation. Science Faculty. Universidad de Chile, Chile.

2015

- Poster Presented in The ^{9Th} European Zebrafish Meeting. Oslo, Norway. **Salomé Muñoz Sánchez[1]**, M Parada K[1], C. Muñoz M[1], P. Maturana V[2], R Cabrera[2], M. Allende C[1]. "Olfm4 as a Molecular Marker for Differential Inflammatory Response". [1]FONDAP Center for Genome Regulation. [2] Biochemistry and Molecular Biology Laboratory. Science Faculty. Universidad de Chile.

- Poster presented in Chilean Society for Cell Biology XXIX annual meeting, Puerto Varas, Chile. **Carlos Muñoz**, Margarita Parada, Salomé Muñoz, Andrea Arros, Verónica Palma, Miguel Allende. "Xenotransplantation Assays With Tumor Cell Lines in Zebrafis". FONDAP Center for Genome Regulation. Science Faculty. Universidad de Chile, Chile.

- Poster presented in Chilean Society for Cell Biology XXIX annual meeting, Puerto Varas, Chile. **Rodrigo A. Morales**, Mario Sánchez, Salomé Muñoz, Emiliano Molina, Miguel L. Allende. "Gene-Specific Blockade of Macrophage Recruitment after Tissue Damage in Zebrafish and its Consequences in Regeneration". FONDAP Center for Genome Regulation. Science Faculty. Universidad de Chile**,** Chile.

- Poster Presented in Chilean Society for Cell Biology XXIX annual meeting, Puerto Varas, Chile. **Salomé Muñoz S[1]**, Margarita Parada[1], Carlos Muñoz[1], Luis Solano[1], Pablo Maturana V[2], Ricardo Cabrera[2], Miguel L Allende[1]. "Differential expression of Olfactomedin 4 in neutrophils depends on inflammatory signals". [1]FONDAP Center for Genome Regulation. [2] Biochemistry and Molecular Biology Laboratory. Science Faculty. Universidad de Chile.

2016

- Poster Presented in Cell Symposia. 100 Years of Phagocytes. Giardini Naxos, Sicily, Italy. **Salomé Muñoz Sánchez[1]**, Anguita-Salinas C[1], Cumplido N[1], Muñoz-Montecinos C[1], Solano L[1], Parada K. M, Allende M[1]. "Olfm4 is a contextual specific inflammation marker in neutrophils". [1]FONDAP Center for Genome Regulation. Science Faculty. Universidad de Chile.

- Poster presented in The [9Th] Zebrafish Disease Models Conference, Marina Bay Sands, Singapore. "Differentiation and Immune Function of Human Myeloid Progenitor Cells Xenotransplanted into Zebrafish". **Muñoz-Montecinos C**, Parada K. M, Muñoz-Sánchez S, Allende C. M. FONDAP Center for Genome Regulation. Science Faculty. Universidad de Chile.

- Poster Presented in Chilean Society for Cell Biology XXX annual meeting, Puerto Varas, Chile. "The Hox code and the identity of the teleostean caudal fin". **Nicolás Cumplido[1]**, Salomé Muñoz-Sánchez[1], Gloria Arratia[2], Miguel L. Allende[1]. [1]FONDAP Center for Genome Regulation. Facultad de Ciencias, Universidad de Chile. [2]University of Kansas, Biodiversity Institute, Lawrence, KS, USA.

- Poster Presented at Zebrafish Disease Model Conference 11[Th]. July 10-13, 2018. Leiden University, Leiden, The Netherlands. "The subcellular dynamics of autophagic defenses during early TB pathogenesis. Salomé Muñoz Sánchez, Michiel van der Vaart, Marcel J.M. Schaaf, Annemarie H. Meijer".

Publications

- Carrillo S. A., Anguita-Salinas C., Pena O. A., Morales R. A., **Munoz-Sanchez S**., Munoz-Montecinos C., Paredes-Zuniga S., Tapia K. y Allende M. L. (2016). "Macrophage Recruitment Contributes to Regeneration of Mechanosensory Hair Cells in the Zebrafish Lateral Line." J Cell Biochem.

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Teaching Experience

2012

- Teaching Assistant. Molecular Biology course. Science Faculty, Universidad de Chile, Chile.

2013

- Assistant in Schools and Science: Students from South of Chile at the Chilean Society for Cell Biology in Chilean Society for Cell Biology XXV annual meeting, Puerto Varas, Chile.

2017

- PhD and Post Docs. Course Assistant IB/LACDR Microscopy Course. Institute Biology Leiden University.

2018

- MiFoBio 2018 Functional Microscopy for Biology Workshop, Proposer/Coanimator: Radoslaw Jakub Gora/ Salomé Muñoz Sánchez. "The zebrafish as a model to study dynamics of single membrane proteins". National Center of the Scientific Research (CNRS) thematic School, Seignosses France.

Qualifications

- Microinjections
- Drug treatments
- Molecular biology
- Molecular cloning
- CRISPR Cas9 system
- Microscopy (live imaging)
- Microbiology. Basics
- Whole mount immunohistochemistry
- Whole mount in situ hibridization
- Flow Cytometry and cell sorter. Basics
- Advance knowledge in Zebrafish facilities management.

Languages

- Spanish (Mother language)
- English (Advanced)