

Curriculum Vitae



PERSONAL DETAILS

Daniel Oyanedel Trigo

Birth date: July 4th, 1990

Nationality: Chilean

Address: Laboratorio de Genética e Inmunología Molecular, Pontificia Universidad Católica de Valparaíso. Av. Universidad 330, Curauma, Valparaíso, Chile

E-mail: daniel.oyanedel.t@gmail.com

AREAS OF EXPERTISE

Invertebrate immunity – Proteomics – Microbiology.

ACADEMIC DEGREES

2014-2016 Magister in Microbiological Sciences
Pontificia Universidad Católica de Valparaíso

2009- 2014 Bachelor in Biology
Pontificia Universidad Católica de Valparaíso

WORK EXPERIENCE

January 2016-to present

Research associate in research project FONDECYT 11150009: "Early warning biomarkers to assess scallop health status: expanding the holobiont concept in marine bivalves".

March 2014- January 2016

Research associate in research project FONDECYT 1140849: "Estimation of the quantitative genetic variation of immune response traits in the abalone *Haliotis rufescens* and scallop *Argopecten purpuratus*: a tool for genetic improvement programs"

Developed skills:

- Protein In-silico analysis for epitope determination
- Chemical peptide synthesis by F-moc strategy.
- Production and purification of recombinant protein.
- Production of polyclonal antibodies in mice.
- Western Blot.
- ELISA.

March 2015 – December 2015

Research associate in Associative Research Project PUCV DI 037.472/2015: "Identification and characterization of molecular markers for assessing the immune response in *Argopecten purpuratus*". Laboratory of Genetics and Molecular Immunology, Institute of Biology, PUCV.

Developed skills:

- PCR/RT-qPCR.
- Molecular Cloning
- Bacterial Transformation.
- Establishment of primary cultures of hemocytes.
- Respiratory burst and immune gene expression analysis of challenged hemocytes.

December 2013 – February 2014

Analysis assistant, project 12CTI-16838 "Consolidación del consorcio Naturalis como puente para la aplicación industrial del conocimiento científico desde Chile para el mundo"

Developed skills:

- Cell line maintenance and experimental designs.
- ELISA.

TEACHING EXPERIENCE

March 2014- to present

Clinical professor at the Institute of Biology, Pontificia Universidad Católica de Valparaíso, Chile for the courses: Lab BIO 1118 Principles of Biology. Lab BIO 131 Cell Biology Lab BIO 1133 Molecular Biology.

March 2012- December 2013

Lab assistant at the Institute of Biology, Pontificia Universidad Católica de Valparaíso, Chile for the courses of BIO 122 Cell Biology, BIO 239 Cell Biology, BIO 456 Principles of Microbiology and Parasitology. BIO 131 Cell Biology, BIO 122 Cell Biology.

PUBLICATIONS

D. Oyanedel, R. Gonzalez, K. Brokordt, P. Schmitt, L. Mercado, Insight into the messenger role of reactive oxygen intermediates in immunostimulated hemocytes from the scallop *Argopecten purpuratus*, Dev. Comp. Immunol. 65 (2016) 226–230. doi:10.1016/j.dci.2016.07.015.

D. Oyanedel, R. Gonzalez, P. Flores-Herrera, K. Brokordt, R.D. Rosa, L. Mercado, et al., Molecular characterization of an inhibitor of NF-κB in the scallop *Argopecten purpuratus*: First insights into its role on antimicrobial peptide regulation in a mollusk, Fish Shellfish Immunol. 52 (2016) 85–93. doi:10.1016/j.fsi.2016.03.021.

CONFERENCES, WORKSHOPS AND MEETINGS.

- Felipe Ramirez, Claudio Alvarez, Daniel Oyanedel, Paula Santana, Nicole Canto, Byron Morales-Lange, Jimena Cortés, Luis Mercado Vianco Pontificia Universidad Católica de Valparaíso, Valparaíso, CL. Caracterización de NLRC5 y su relación con la respuesta inmune antiviral en branquias de salmónidos. XXXIX Congreso de la Sociedad Española de Bioquímica y Biología Molecular, Salamanca, España. 5-8 Septiembre 2016.
- **Oyanedel, D.**, Schmitt, P., González, R., Brokordt, K., Mercado, L. Identificación y caracterización de marcadores moleculares de inmunocompetencia en cultivos primarios de hemocitos de *Argopecten purpuratus*. Reunión Anual Sociedad de Biología de Chile, Puerto Varas, Chile. 24-26 Noviembre 2015.
- **Oyanedel, D.**, Gonzalez, R., Brockordt, K., Mercado, L., Rosa, R.D., Schmitt, P. Caracterización molecular del inhibidor de NF- κ B del ostión del norte *Argopecten purpuratus* y su participación en los mecanismos de respuesta inmune. Reunión Anual Sociedad de Biología de Chile, Puerto Varas, Chile. 24-26 Noviembre 2015.
- **Oyanedel, D.**, Schmitt, P., González, R., Brokordt, K., Mercado, L. Characterization of immune molecular markers to identify traits of immune competence in the northern scallop *Argopecten purpuratus*. 17th International Conference on 'Diseases of Fish and Shellfish' Las Palmas de Gran Canaria, España. 7-11 Septiembre, 2015.

LANGUAGES

Spanish: Native language

English: Advanced oral and written.

REFERENCES

Paulina Schmitt, PhD

Assistant Professor

Laboratorio de Genética e Inmunología Molecular

Instituto de Biología, Facultad de Ciencias

Pontificia Universidad Católica de Valparaíso

Av. Universidad 330 Curauma. Valparaíso, Chile.

paulina.schmitt@pucv.cl

Luis Mercado, PhD

Tenure Professor

Laboratorio de Genética e Inmunología Molecular

Instituto de Biología, Facultad de Ciencias

Pontificia Universidad Católica de Valparaíso

Av. Universidad 330 Curauma. Valparaíso, Chile.

luis.mercado@pucv.cl

Katherina Brokordt, PhD

Tenure Professor

Laboratorio de Fisiología y Genética Marina (FIGEMA),

Centro de Estudios Avanzados en Zonas Áridas

Universidad Católica Del Norte, Coquimbo, Chile.

kbrokord@ucn.cl