

Asst. Prof. Andres Octavio ARAVENA DUARTE

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAD-9182-2020

ScopusID: 35197949100

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Education Information

Doctorate, Université Rennes I, Informatics, INRIA/Irisa, France 2011 - 2013

Doctorate, Universidad De Chile, Ciencias Físicas Y Matemáticas, Ingeniería Matemática, Chile 2009 - 2013

Undergraduate Double Major, Universidad De Chile, Ciencias Físicas Y Matemáticas, Ingeniería Matemática, Chile 1986 - 1993

Foreign Languages

Spanish, C2 Mastery

French, C1 Advanced

Portuguese, A2 Elementary

English, C1 Advanced

Turkish, A1 Beginner

Italian, A2 Elementary

Dissertations

Doctorate, Probabilistic and Constraint Based Modelling to Determine Regulation Events from Heterogeneous Biological Data, Université Rennes I, Informatics, Irisa, 2013

Doctorate, Probabilistic and Constraint Based Modelling to Determine Regulation Events from Heterogeneous Biological Data, Universidad De Chile, Ciencias Físicas Y Matemáticas, Ingeniería Matemática, 2013

Research Areas

Computer Sciences, bioinformatics, Mathematics, Computer Science, Statistics, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Istanbul University, Faculty of Science, Molekular Biyoloji Ve Genetik, 2018 - Continues

Assistant Professor, Istanbul University, Faculty of Science, Molekular Biyoloji Ve Genetik, 2014 - 2018

Academic and Administrative Experience

Research Engineer, Universidad de Chile, FCFM, CMM, 2003 - 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Genetic diversity at the Dhn3 locus in Turkish Hordeum spontaneum populations with comparative structural analyses**
Ucarli C., Mcguffin L. J., Caputlu S., Aravena A., Guerl F.
SCIENTIFIC REPORTS, vol.6, 2016 (SCI-Expanded)
- II. **Deciphering transcriptional regulations coordinating the response to environmental changes**
ACUNA V., Aravena A. O., GUZIOLOWSKI C., EVEILLARD D., SIEGEL A., MAASS A.
BMC BIOINFORMATICS, vol.17, 2016 (SCI-Expanded)
- III. **Global transcriptional responses of Acidithiobacillus ferrooxidans Wenelen under different sulfide minerals**
LATORRE M., EHRENFELD N., PAZ CORTES M., TRAVISANY D., BUDINICH M., Aravena A. O., GONZALEZ M., BOBADILLA-FAZZINI R. A., PARADA P., MAASS A.
BIORESOURTE TECHNOLOGY, vol.200, pp.29-34, 2016 (SCI-Expanded)
- IV. **Array CGH genomic profile of hereditary breast cancer tumors: Identification of tumor suppressor genes in deleted regions, determination of promoter hypermethylation and their protein expression in tumor biopsies**
Alvarez C., Tapia T., Cornejo V., ARAVENA DUARTE A. O., Fernandez W., Alvarez M., Camus M., Maass A., Carvallo P.
CANCER RESEARCH, vol.72, 2012 (SCI-Expanded)
- V. **SalmonDB: a bioinformatics resource for Salmo salar and Oncorhynchus mykiss**
DI GENOVA A., Aravena A. O., ZAPATA L., GONZALEZ M., MAASS A., ITURRA P.
DATABASE-THE JOURNAL OF BIOLOGICAL DATABASES AND CURATION, 2011 (SCI-Expanded)
- VI. **Genome-wide identification of new Wnt/beta-catenin target genes in the human genome using CART method**
HODAR C., ASSAR R., COLOMBRES M., Aravena A. O., PAVEZ L., GONZALEZ M., MARTINEZ S., INESTROSA N. C., MAASS A.
BMC GENOMICS, vol.11, 2010 (SCI-Expanded)
- VII. **Calcium/Calmodulin-Dependent Protein Kinase Type IV Is a Target Gene of the Wnt/beta-Catenin Signaling Pathway**
ARRAZOLA M. S., VARELA-NALLAR L., COLOMBRES M., TOLEDO E. M., CRUZAT F., PAVEZ L., ASSAR R., Aravena A. O., GONZALEZ M., MONTECINO M., et al.
JOURNAL OF CELLULAR PHYSIOLOGY, vol.221, no.3, pp.658-667, 2009 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Expression analysis of F-box/WD40 genes in legumes**
Çelik H., Aravena Duarte A. O., Turgut Kara N.
Friend or Foe: Transcription and RNA Meet DNA Replication and Repair, EMBO-EMBL Symposium, 9 - 12 March 2021, pp.1-111
- II. **Modeling Parsimonious Putative Regulatory Networks: Complexity and Heuristic Approach**
ACUNA V., Aravena A. O., MAASS A., SIEGEL A.
15th International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI), California, United States Of America, 19 - 21 January 2014, vol.8318, pp.322-336
- III. **Vitis vinifera Genome Annotation Improvement Using Next-Generation Sequencing Technologies and NCBI Public Data**

MUNOZ C., DI GENOVA A., MAASS A., ORELLANA A., HINRICHSEN P., Aravena A. O.

10th International Conference on Grapevine Breeding and Genetics, New-York, United States Of America, 1 - 05 August 2010, vol.1046, pp.349-356

IV. Identification of genes with asymmetric expression in the zebrafish brain

COLOMBO A., MIONE M., SIGNORE I., OLIVARES F., PEREZ R., GONZALEZ M., Aravena A. O., Wilson S., CONCHA M. 16th Annual Conference of the International-Society-of-Development-Biologists, Edinburgh, Saint Helena, 6 - 10 September 2009, vol.126

V. Design and use of oligonucleotide microarrays for identification of biomining microorganisms

EHRENFELD N., Aravena A. O., REYES-JARA A., BARRETO M., ASSAR R., MAASS A., PARADA P.

18th International Biohydrometallurgy Symposium, Bariloche, Argentina, 13 - 17 September 2009, pp.155-156

Patent

Aravena Duarte A. O., Ehrenfeld Stolzenbach K. N., Badilla Ohlbaum R., Loira N., Ugalde J., Parada Valdecantos P. A., Maass Sepulveda A. E., Array of nucleotidic sequences for the detection and identification of genes that codify proteins with activities relevant in biotechnology present in a microbiological sample, and method for using this array, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: US8207324 B2 , Registration in Multiple Countries, 2012, 2008, 2013

Aravena Duarte A. O., Badilla Ohlbaum R., Ehrenfeld Stolzenbach K. N., Gonzalez Canales M. A., Maass Sepulveda A. E., Martinez Aguilera S., Moreno Cortes P. A., Parada Valdecantos P. A., DNA fragments array from biomining microorganisms and method for detection of them, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: AU2006241345 , Registration in Multiple Countries, 2013, 2010, 2011, 2007

Aravena Duarte A. O., Ehrenfeld Stolzenbach K. N., Gonzalez Canales M. A., Maass Sepulveda A. E., Martinez Aguilera S., Parada Valdecantos P. A., Method for the design of oligonucleotides for molecular biology techniques, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: AR054923A1 , Registration in Multiple Countries, 2007, 2011, 2012, 2008, 2010

Metrics

Publication: 12

Citation (WoS): 131

Citation (Scopus): 135

H-Index (WoS): 5

H-Index (Scopus): 5