



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4644

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Clinical and Community Sciences**.

Scientist- in - charge: Prof. Dra. Eleonora Tobaldini

Department of Clinical and Community Sciences

Juan Alberto PEREZ VALENCIA

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Pérez-Valencia
Name	Juan Alberto
Date of birth	24/06/1983

PRESENT OCCUPATION

Appointment	Structure
Unemployed	

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Biology	University of Antioquia	2007
Specialization			
PhD	Biological Chemistry	Federal University of Rio de Janeiro	2017
Master	Biological Chemistry	Federal University of Rio de Janeiro	2012
Degree of medical specialization			
Degree of European specialization			
Other			



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
Spanish	Native
English	Well
Portuguese	Proficient

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2017 - 2018	Post-doctoral scholarship, Ministry of Health, Brazil
2012 - 2017	Doctoral scholarship, Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq).
2010 - 2012	Masters scholarship, Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq).
2004-2006	Bachelor scholarship, Museo Universitario Universidad de Antioquia (MUA).
2014	Award poster in graduate degree as best work in Genomics and Bioinformatics, Brazilian Society of Genetics, 60th Congress of the Brazilian Society of Genetics, Guarujá, São Paulo, Brazil.
2014	Honoric Mention, VIII Symposia of Oncobiology, Federal University of Rio de Janeiro.

TRAINING OR RESEARCH ACTIVITY

description of activity

2018- 31.03. 2020 **Post-doctoral researcher (last position)**

Research: CMMRD likelihood as an alternative diagnosis in suspected NF1/LS patients. Prevalence of CMMRD in NF1/SPRED1 mutation negatives (paper accepted).

Summary: Constitutional mismatch repair deficiency (CMMR) is a recessively inherited childhood cancer syndrome caused by biallelic mutations in one of the mismatch repair (MMR) genes: MLH1, MSH2, MSH6 and PMS2. CMMRD is associated with an extraordinarily high risk for a broad spectrum of cancers, including primarily hematological, brain and colorectal. CMMRD shows remarkable phenotypic overlap with neurofibromatosis 1 (NF1), and Legius syndrome (LS), which are caused by mutations in NF1 and SPRED1, respectively. The aim of this project was determine the likelihood of CMMRD to be an alternative diagnosis in suspected NF1/LS patients in a well selected and large retrospective cohort of patients using simple and reliable assays for CMMRD screening that allow to analyze a large cohort of samples.

Supervisor: Prof. Dr. Katharina Wimmer.



2017 - 2018

Post-doctoral researcher

Research: Transcriptional profile of esophageal cancer patients, based on the subtype and the aggressiveness stages.

Summary: Esophageal cancer (EC) is one of the most lethal owing to late diagnosis and lack of efficient treatment. Esophageal squamous cell carcinoma (ESCC) and esophageal adenocarcinoma (EAC) are the main histopathological subtypes. They are distinct diseases in terms of cell of origin, epidemiology, and molecular architecture of tumor cells. Past efforts aimed at translating potential molecular candidates into clinical practice proved to be challenging, underscoring the need for identifying novel candidates for early diagnosis and therapy of EC. Using public transcriptomic data, we found that expression of ribosomal proteins could be used as biomarkers for EAC, while in ESCC, expression of collagens could be related to aggressiveness.

Supervisor: Prof. Dr. Luis Felipe Ribeiro Pinto

2012 - 2017

Doctoral degree in Biological Chemistry (PhD)

Thesis: Molecular mechanisms of metastasis in oral tongue cancer: contributions of the hallmarks of cancer to the invasive process.

Advisors: Prof. Dr. Franklin David Rumjanek, Prof. Dr. Francisco Prosdocimi

2010 - 2012

Master's degree in Biological Chemistry (MSc)

Thesis: Role of glucose and glutamine over the energetic metabolism of non-small cell lung cancer.

Advisors: Prof. Dr. Franklin David Rumjanek, Dra. Nivea Amoedo.

2001 - 2007

Bachelor degree in Biology (BSc)

Thesis: Genotoxic and mutagenic potential of drinking water treated by a treatment plant that provides the municipalities of Envigado and El Poblado (Antioquia, Colombia).

Advisors: MSc. Luz Yaneth Orozco, MSc. Margarita Zuleta Bustamante.

PROJECT ACTIVITY

Year	Project

PATENTS

Patent



CONGRESSES AND SEMINARS

Date	Title	Place
2016	Perez, J. A.; Prosdocimi, F.; Costa, I. R.; Agostini, M.; Furtado, C.; Cesari, I. M.; Rumjanek, F. D. Molecular profile of a metastatic progression model of tongue cancer.	XVI Latin-American congress of genetics - ALAG 2016. Montevideo, Uruguay.
2015	Perez-Valencia J.A.; Agostini, M.; Furtado, C.; Prosdocimi, F.; Rumjanek, F. D. RNA-seq of tongue cancer cells: the gene expression profile during progression towards metastasis.	X Symposium of oncobiology, 2015. Rio de Janeiro, Brazil.
2014	Perez-Valencia J.A.; Agostini, M.; Furtado, C.; Prosdocimi, F.; Rumjanek, F. D. RNA-Seq analysis of a metastatic tongue cancer progression via Illumina HiSeq sequencing.	IX Symposium of oncobiology, 2014. Rio de Janeiro, Brazil.
2014	Perez-Valencia J.A.; Agostini, M.; Furtado, C.; Prosdocimi, F.; Rumjanek, F. D. RNA-seq analyses of a metastatic tongue cancer progression model reveals loss of tumoral potential and gain of immune system characteristics.	60th Congress of the Brazilian society of genetics, 2014. Guarujá, Brazil.
2013	Perez-Valencia J.A.; Baptista, M. G.; Silva, E. C.; Agostini, M.; Prosdocimi, F.; Rumjanek, F. D. Tongue carcinoma: studies of glutamine metabolism in the metastatic progression.	VIII Symposium of oncobiology, 2013. Rio de Janeiro, Brazil.
2013	Perez-Valencia J.A.; Rodrigues, M. F.; Silva, E. C.; Amoedo, N. D.; Rumjanek, F. D. Metabolic Role of Glucose and Glutamine in Lung Cancer Cells.	XLII Annual meeting of the Brazilian society of biochemistry and molecular biology, 2013. Foz de Iguaçu, Brazil.
2010	Perez, J. A.; Silva, E. C.; Rodrigues, M. F.; Amoedo, N. D.; Rumjanek, F. D. Effect of glutamine on the energetic metabolism of lung cancer cells.	III Mitomeeting, 2010. Guapé, Brazil.
2008	Perez, J. A.; Hamedt, A. L.; Melendez, I; Zuleta, M; Orozco, L.Y.; Ortiz, I.C. Genotoxic potential of tap water in the south of the Valle de Aburrá-Medellín.	I Latin-American congress of human genetics and IX Colombian congress of genetics, 2008. Cartagena, Colombia.
2007	Perez, J. A.; Hamedt, A. L.; Melendez, I; Zuleta, M; Orozco, L.Y.; Ortiz, I.C. Genotoxicity and mutagenicity of tap water in El Poblado and Envigado, supplied by a water treatment plant.	VII Latin-American congress of mutagenesis, carcinogenesis and environmental teratogenesis: genes, environment, cancer, prevention and health, 2007. Cartagena, Colombia.
2005	Perez, J. A; Cuberos, V.; Lopez, C. J.; Castro, F.; Gonzalez, L.V.; Correa, L. A.; Sanclemente, G.; Gaviria, A; Müller, M.; Sanchez, G. I. Association of human	IV Scientific meeting of students of biology, 2005. Bogotá, Colombia.



	papillomavirus 13 with focal epithelial hyperplasia of the native indigenous population Embera-Chamí of Jardín, Antioquia.	
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PUBLICATIONS

Books

Humberto De Vitto, **Juan P. Valencia**, James A. Radosevich. General View of the Cytoplasmic and Nuclear Features of Apoptosis. Apoptosis and Beyond: The Many Ways Cells Die. 2018 John Wiley & Sons, Ltd. All rights reserved. <https://doi.org/10.1002/9781119432463.ch1>.

Articles in reviews

Sant'Anna-Silva ACB, Santos GC, Campos SPC, Oliveira Gomes AM, **Pérez-Valencia JA**, Rumjanek FD. Metabolic profile of oral squamous carcinoma cell lines relies on a higher demand of lipid metabolism in metastatic cells. *Front Oncol.* 2018 Feb 2;8:13. doi: 10.3389/fonc.2018.00013.

Pérez-Valencia JA, Prosdocimi F, Cesari IM, da Costa IR, Furtado C, Agostini M, Rumjanek FD. Angiogenesis and evading immune destruction are the main related transcriptomic characteristics to the invasive process of oral tongue cancer. *Sci Rep.* 2018 Jan 31;8(1):2007. doi: 10.1038/s41598-017-19010-5.

Santos GC, Zeidler JD, **Pérez-Valencia JA**, Sant'Anna-Silva ACB, Da Poian AT, El-Bacha T, Almeida FCL. Metabolomic Analysis Reveals Vitamin D-induced Decrease in Polyol Pathway and Subtle Modulation of Glycolysis in HEK293T Cells. *Sci Rep.* 2017 Aug 25;7(1):9510. doi: 10.1038/s41598-017-10006-9.

De Vitto H, **Pérez-Valencia J**, Radosevich JA. Glutamine at focus: versatile roles in cancer. *Tumour Biol.* 2016 Feb;37(2):1541-58. doi: 10.1007/s13277-015-4671-9.

Nívea Dias Amoêdo, **Juan Perez Valencia**, Mariana Figueiredo Rodrigues, Antonio Galina, and Franklin David Rumjanek. How does the metabolism of tumour cells differ from that of normal cells. *Biosci Rep.* 2013; 33(6). doi: 10.1042/BSR20130066.

Cuberos V, **Perez J**, Lopez CJ, Castro F, Gonzalez LV, Correa LA, Sanclemente G, Gaviria A, Müller M, Sanchez GI. Molecular and serological evidence of the epidemiological association of HPV 13 with focal epithelial hyperplasia: a case-control study. *J Clin Virol.* 2006 Sep;37(1):21-6. <https://doi.org/10.1016/j.jcv.2006.04.003>.

Juan A. Perez-Valencia, Richard Gallon, Yunjia Chen, Jakob Koch, Markus Keller, Klaus Oberhuber, Alicia Gomes, Johannes Zschocke, John Burn, Michael Jackson, Mauro Santibanez-Koref, Ludwine Messiaen, Katharina Wimmer. Constitutional mismatch repair deficiency is the differential diagnosis in 0.41% of NF1/SPRED1-mutation negative children suspected of sporadic neurofibromatosis type 1. (**ACCEPTED**)



Erich Gnaiger, **Juan A. Perez-Valencia**, +611 authors. Mitochondrial respiratory states and rates. **(SUBMITTED)**

Congress proceedings
[title, structure, place, year]
[title, structure, place, year]
[title, structure, place, year]

OTHER INFORMATION

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Innsbruck (Austria), 20/07/2020

SIGNATURE