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Education & Training

B.S.	Immunology	2004	Pontificia Universidade Catolica de Campinas, Campinas, Brazil
Ph.D.	Bioinformatics	2010	University of São Paulo, Cidade Universitaria São Paulo, Brazil
Ph.D.	Thesis title: Application of computational and statistical methods for the study of Cis gene regulation		

Research Focus

I am a bioinformatics specialist born in Brazil where I started my studies on genetics and molecular biology. My scientific career started on the Heart Institute in Brazil where I started working on human genome data and especially with genomic annotation using public repositories. Using those tools, I developed my Ph.D. thesis in Brazil where I published my first 3 scientific manuscripts. I move to USA to complete my studies in 2011 and I was hired by the Texas Biomedical Research Institute, one of world leaders in methodological advances to study large human families with projects focused on diabetes and cardiovascular disease. Originally, my PhD training was focused on genomic annotation with the aid of public resources and the computational prediction of functional DNA elements by the application of a trained Hidden Markov Model (HHM) algorithm. During the past seven years, I was one of the main analysts working with the San Antonio Family Studies (SAFS) project whole genome sequencing data. I started to work at UTRGV in 2015 where we successfully continued our scientific investigations. In 2018, I was appointed as an assistant professor in the Department of Human Genetics at the UTRGV's school of medicine. During my scientific career, I have published a total of 49 scientific manuscripts.

Publications

1. Kim D., Justice A.E., Chittoor G., Blanco E., Burrows R., Graff M., Howard A.G., Wang Y., Rohde R., Buchanan V.L., Voruganti V.S., **Almeida M.**, Peralta J., Lehman D.M., Curran J.E., Comuzzie A.G., Duggirala R., Blangero J., Albala C., Santos J.L., Angel B., Lozoff B., Gahagan S., North K.E.. **Genetic determinants of metabolic biomarkers and their associations with cardiometabolic traits in Hispanic/Latino adolescents**. *Pediatric Research*, 2021 Oct 13. doi: 10.1038/s41390-021-01729-7.

2. Goyal S., Tanigawa Y., Zhang W., Chai J., **Almeida M.**, Sim X., Lerner M., Chainakul J., Ramiu J.G., Seraphin C., Apple B., Vaughan A., Muniu J., Peralta J., Lehman D.M., Ralhan S., Wander G.S., Singh J.R., Mehra N.K., Sidorov E., Peyton M.D., Blackett P.R., Curran J.E., Tai E.S., Dam R.V., Cheng C., Duggirala R., Blangero J., Chambers J.C., Sabanayagam C., Kooner J.S., Rivas M.A., Aston C.E., Sanghera D.K.. **APOC3 genetic variation, serum triglycerides, and risk of coronary artery disease in Asian Indians, Europeans, and other ethnic groups.** *Lipids in Health and Disease,* 2021 Sep 21;20(1):113. doi: 10.1186/s12944-021-01531-8.

3. Arya R., Lopez-Alvarenga J.C., **Almeida M.**, Kumar S., Peralta J., Diaz-Badillo A., Diego V.P., Resendez R.G., Fowler S.P., Jenkinson C.P., Lehman D., Curran J., Lynch J.L., Hale D.E., DeFronzo R.A., Mummidi S., Blangero J., Duggirala R.. **Exome-chip-wide Association Study of Biomarkers of Liver Function and Metabolic Dysfunction-Associated Fatty Liver Disease (MAFLD) in Mexican Americans**. *Frontiers in Medicine*, 2022 (Accepted for publication).

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6. Blackburn N.B., Michael L.F., Meikle P.J., Peralta J.M., Mosior M., McAhren S., Bui H.H., Bellinger M.A., Giles C., Kumar S., Leandro A.C., **Almeida M**., Weir J.M., Mahaney M.C., Dyer T.D., Almasy L., VandeBerg J.L., Williams-Blangero S., Glahn D.C., Duggirala R., Kowala M., Blangero J., Curran J.E. **Rare *DEGS1* variant significantly alters de novo ceramide synthesis pathway.** *Journal of Lipid Research***.** 2019 Jun 21. pii: jlr.P094433. doi: 10.1194/jlr.P094433

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8. Haakon E. Nustad, **Marcio Almeida**, Angelo J. Canty, Marissa LeBlanc, Christian M. Page, and Phillip E. Melton. **Epigenetics, heritability and longitudinal analysis**. *BMC Genetics*. 2018 Sep 17;19(Suppl 1):77. doi: 10.1186/s12863-018-0648-1

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