Curriculum Vitae

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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		

Work Experience

2006-2010	PhD Student – Bioinformatics- Heart Institute (InCor), Laboratory of Genetic and Molecular Cardiology (LGCM), Sao Paulo, SP,Brazil
2010-2014	Post Doc – Bioinformatics- Heart Institute (InCor), Laboratory of Genetic and Molecular Cardiology (LGCM), Sao Paulo, SP, Brazil
2011-2014	Post Doc -- Department of Genetics, Texas Biomedical Research Institute, San Antonio, TX, USA
2015-2018	Associate Research Scientist, South Texas Diabetes and Obesity Institute, School of Medicine, UTRGV, Brownsville, TX, USA
2019-Present	Assistant Professor of Human Genetics, South Texas Diabetes and Obesity Institute and Department of Human Genetics, School of Medicine, UTRGV, Brownsville, TX, USA

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).

4. Grasby KL, Jahanshad N, Painter JN, Colodro-Conde L, Bralten J, Hibar DP, Lind PA, Pizzagalli F, Ching CRK, McMahon MAB, Shatokhina N, Zsembik LCP, Thomopoulos SI, Zhu AH, Strike LT, Agartz I, Alhusaini S, **Almeida MAA**, Alnæs D, Amlien IK, Andersson M, Ard T, Armstrong NJ, Ashley-Koch A, Atkins JR, Bernard M, Brouwer RM, Buimer EEL, Bülow R, Bürger C, Cannon DM, Chakravarty M, Chen Q, Cheung JW, Couvy-Duchesne B, Dale AM, Dalvie S, de Araujo TK, de Zubicaray GI, de Zwarte SMC, den Braber A, Doan NT, Dohm K, Ehrlich S, Engelbrecht HR, Erk S, Fan CC, Fedko IO, Foley SF, Ford JM, Fukunaga M, Garrett ME, Ge T, Giddaluru S, Goldman AL, Green MJ, Groenewold NA, Grotegerd D, Gurholt TP, Gutman BA, Hansell NK, Harris MA, Harrison MB, Haswell

CC, Hauser M, Herms S, Heslenfeld DJ, Ho NF, Hoehn D, Hoffmann P, Holleran L, Hoogman M, Hottenga JJ, Ikeda M, Janowitz D, Jansen IE, Jia T, Jockwitz C, Kanai R, Karama S, Kasperaviciute D, Kaufmann T, Kelly S, Kikuchi M, Klein M, Knapp M, Knodt AR, Krämer B, Lam M, Lancaster TM, Lee PH, Lett TA, Lewis LB, Lopes-Cendes I, Luciano M, Macciardi F, Marquand AF, Mathias SR, Melzer TR, Milaneschi Y, Mirza-Schreiber N, Moreira JCV, Mühleisen TW, Müller-Myhsok B, Najt P, Nakahara S, Nho K, Olde Loohuis LM, Orfanos DP, Pearson JF, Pitcher TL, Pütz B, Quidé Y, Ragothaman A, Rashid FM, Reay WR, Redlich R, Reinbold CS, Repple J, Richard G, Riedel BC, Risacher SL, Rocha CS, Mota NR, Salminen L, Saremi A, Saykin AJ, Schlag F, Schmaal L, Schofield PR, Secolin R, Shapland CY, Shen L, Shin J, Shumskaya E, Sønderby IE, Sprooten E, Tansey KE, Teumer A, Thalamuthu A, Tordesillas-Gutiérrez D, Turner JA, Uhlmann A, Vallerga CL, van der Meer D, van Donkelaar MMJ, van Eijk L, van Erp TGM, van Haren NEM, van Rooij D, van Tol MJ, Veldink JH, Verhoef E, Walton E, Wang M, Wang Y, Wardlaw JM, Wen W, Westlye LT, Whelan CD, Witt SH, Wittfeld K, Wolf C, Wolfers T, Wu JQ, Yasuda CL, Zaremba D, Zhang Z, Zwiers MP, Artiges E, Assareh AA, Ayesa-Arriola R, Belger A, Brandt CL, Brown GG, Cichon S, Curran JE, Davies GE, Degenhardt F, Dennis MF, Dietsche B, Djurovic S, Doherty CP, Espiritu R, Garijo D, Gil Y, Gowland PA, Green RC, Häusler AN, Heindel W, Ho BC, Hoffmann WU, Holsboer F, Homuth G, Hosten N, Jack CR Jr, Jang M, Jansen A, Kimbrel NA, Kolskår K, Koops S, Krug A, Lim KO, Luykx JJ, Mathalon DH, Mather KA, Mattay VS, Matthews S, Mayoral Van Son J, McEwen SC, Melle I, Morris DW, Mueller BA, Nauck M, Nordvik JE, Nöthen MM, O'Leary DS, Opel N, Martinot MP, Pike GB, Preda A, Quinlan EB, Rasser PE, Ratnakar V, Reppermund S, Steen VM, Tooney PA, Torres FR, Veltman DJ, Voyvodic JT, Whelan R, White T, Yamamori H, Adams HHH, Bis JC, Debette S, Decarli C, Fornage M, Gudnason V, Hofer E, Ikram MA, Launer L, Longstreth WT, Lopez OL, Mazoyer B, Mosley TH, Roshchupkin GV, Satizabal CL, Schmidt R, Seshadri S, Yang Q; Alzheimer's Disease Neuroimaging Initiative; CHARGE Consortium; EPIGEN Consortium; IMAGEN Consortium; SYS Consortium; Parkinson's Progression Markers Initiative, Alvim MKM, Ames D, Anderson TJ, Andreassen OA, Arias-Vasquez A, Bastin ME, Baune BT, Beckham JC, Blangero J, Boomsma DI, Brodaty H, Brunner HG, Buckner RL, Buitelaar JK, Bustillo JR, Cahn W, Cairns MJ, Calhoun V, Carr VJ, Caseras X, Caspers S, Cavalleri GL, Cendes F, Corvin A, Crespo-Facorro B, Dalrymple-Alford JC, Dannlowski U, de Geus EJC, Deary IJ, Delanty N, Depondt C, Desrivières S, Donohoe G, Espeseth T, Fernández G, Fisher SE, Flor H, Forstner AJ, Francks C, Franke B, Glahn DC, Gollub RL, Grabe HJ, Gruber O, Håberg AK, Hariri AR, Hartman CA, Hashimoto R, Heinz A, Henskens FA, Hillegers MHJ, Hoekstra PJ, Holmes AJ, Hong LE, Hopkins WD, Hulshoff Pol HE, Jernigan TL, Jönsson EG, Kahn RS, Kennedy MA, Kircher TTJ, Kochunov P, Kwok JBJ, Le Hellard S, Loughland CM, Martin NG, Martinot JL, McDonald C, McMahon KL, Meyer-Lindenberg A, Michie PT, Morey RA, Mowry B, Nyberg L, Oosterlaan J, Ophoff RA, Pantelis C, Paus T, Pausova Z, Penninx BWJH, Polderman TJC, Posthuma D, Rietschel M, Roffman JL, Rowland LM, Sachdev PS, Sämann PG, Schall U, Schumann G, Scott RJ, Sim K, Sisodiya SM, Smoller JW, Sommer IE, St Pourcain B, Stein DJ, Toga AW, Trollor JN, Van der Wee NJA, van 't Ent D, Völzke H, Walter H, Weber B, Weinberger DR, Wright MJ, Zhou J, Stein JL#, Thompson PM#, Medland SE#; Enhancing NeuroImaging Genetics through Meta-Analysis Consortium (ENIGMA)—Genetics working group. **The genetic architecture of the human cerebral cortex.** *Science.* 2020 Mar 20;367(6484). pii: eaay6690. doi: 10.1126/science.aay6690

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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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11. Arya R, Escalante A, Farook VS, Restrepo JF, Battafarano DF, **Almeida** M, Kos MZ, Fourcaudot MJ, Mummidi S, Kumar S, Curran JE, Jenkinson CP, Blangero J, Duggirala R, Del Rincon I. **A genetic association study of carotid intima-media thickness (CIMT) and plaque in Mexican Americans and European Americans with rheumatoid arthritis.** *Atherosclerosis*. 2018 Apr; 271:92-101. doi: 10.1016/j.atherosclerosis.2017.11.024. Epub 2017 Nov 26.

12. Jun G, Manning A, **Almeida** M, Zawistowski M, Wood AR, Teslovich TM, Fuchsberger C, Feng S, Cingolani P, Gaulton KJ, Dyer T, Blackwell TW, Chen H, Chines PS, Choi S, Churchhouse C, Fontanillas P, King R, Lee S, Lincoln SE, Trubetskoy V, DePristo M, Fingerlin T, Grossman R, Grundstad J, Heath A, Kim J, Kim YJ, Laramie J, Lee J, Li H, Liu X, Livne O, Locke AE, Maller J, Mazur A, Morris AP, Pollin TI, Ragona D, Reich D, Rivas MA, Scott LJ, Sim X, Tearle RG, Teo YY, Williams AL, Zöllner S, Curran JE, Peralta J, Akolkar B, Bell GI, Burtt NP, Cox NJ, Florez JC, Hanis CL, McKeon C, Mohlke KL, Seielstad M, Wilson JG, Atzmon G, Below JE, Dupuis J, Nicolae DL, Lehman D, Park T, Won S, Sladek R, Altshuler D, McCarthy MI, Duggirala R, Boehnke M, Frayling TM, Abecasis GR, Blangero J. **Evaluating the contribution of rare variants to type 2 diabetes and related traits using pedigrees.** *PNAS (Proceeding National Academy of Science)- USA.* 2018 Jan 9;115(2):379-384. doi: 10.1073/pnas.1705859115. Epub 2017

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13. Cadby G, Melton PE, McCarthy NS, **Almeida M**, Williams-Blangero S, Curran JE, VandeBerg JL, Hui J, Beilby J, Musk AW, James AL, Hung J, Blangero J, Moses EK. **Pleiotropy of cardiometabolic syndrome with obesity-related anthropometric traits determined using empirically derived kinships from the Busselton Health Study.** *Human Genetics*. 2017 Nov 27. doi: 10.1007/s00439-017-1856-x. [Epub ahead of print]

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16. Arya R, Escalante A, Farook VS, Restrepo JF, Battafarano DF, **Almeida M**, Kos MZ, Fourcaudot MJ, Mummidi S, Kumar S, Curran JE, Jenkinson, Blangero J, Duggirala R, Rincon ID. **A genetic association study of carotid intima-media thickness (CIMT) and plaque in Mexican Americans and European Americans with rheumatoid arthritis.** *Journal of atherosclerosis***.** In press: DOI: http://dx.doi.org/10.1016/j.atherosclerosis.2017.11.024

17. Nicholson AM, Finch NA, **Almeida M**, Perkerson RB, van Blitterswijk M, Wojtas A, Cenik B, Rotondo S, Inskeep V, Almasy L, Dyer T, Peralta J, Jun G, Wood AR, Frayling TM, Fuchsberger C, Fowler S, Teslovich TM, Manning AK, Kumar S, Curran J, Lehman D, Abecasis G, Duggirala R,Pottier C, Zahir HA, Crook JE, Karydas A, Mitic L, Sun Y, Dickson DW, Bu G, Herz J, Yu G, Miller BL, Ferguson S, Petersen RC, Graff-Radford N, Blangero J and Rademakers R. **Prosaposin is a regulator of progranulin levels and oligomerization**. *Nature Communication*. 2016 Jun 30;7:11992. doi: 10.1038/ncomms11992

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