ÁNGEL GARCÍA DE LA GARZA

Columbia Mailman School of Public Health
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EDUCATION

Columbia University Mailman School of Public Health, New York, NY **August 2017 - Present**
Doctor of Philosophy (Ph.D.) in Biostatistics **Cumulative GPA:** 4.09/4.00

University of Pennsylvania, College of Arts and Sciences, Philadelphia, PA **May 2015**
Bachelor of Arts in Mathematics, Statistics Minor (cum laude) **Major GPA:** 3.68/4.00

RESEARCH EXPERIENCE

Neuroimaging Data Analyst **August 2015 - Present**
Neuropsychiatry Program, Penn Medicine *Philadelphia, PA*

- Used generalized additive mixed effects models (GAMM) to analyze multimodal longitudinal neuroimaging data from the Philadelphia Neurodevelopmental Cohort.
- Developed scripts for the mass univariate voxelwise analysis of neuroimaging data using R.
- Assisted in the management, processing, and quality assurance of neuroimaging, and clinical data.

Undergraduate Research Assistant **January 2015 - July 2015**
Department of Statistics, the Wharton School of the University of Pennsylvania *Philadelphia, PA*

- Completed an independent study under the supervision of Professors Linda Zhao and Lawrence Brown on the applications of data mining to healthcare.
- Analyzed clinician efficiency and appointment scheduling in the Neurology Department at the Hospital of the University of Pennsylvania using appointments data from the Penn Health System.

AWARDS & HONORS

Allan Rosenfield Scholarship, Mailman School of Public Health **2017**
Initiative for Maximizing Student Development Fellowship, Mailman School of Public Health **2017**
Joint Statistical Meetings Diversity Workshop and Mentoring Program Travel Award **2016**
Eastern North American Region of the International Biometric Society Diversity Workshop Travel Award **2016**
Dean's List, University of Pennsylvania **2014-2015**
Cipactli Latino Honor Society Inductee, University of Pennsylvania **2013**
State Department Summer Science Camp Scholarship, Institute of the Americas, San Diego **2010**

PUBLICATIONS

Garcia de la Garza, Angel., Vandekar, S.N., Roalf, D.R., Ruparel, K., Gur, R.E., Gur, R.C., Satterthwaite, T.D., Shinohara, R.S. *Voxel: Software for Voxelwise Analysis of Brain Images Using Linear, Nonlinear and Mixed-Effects Models*. (Manuscript in preparation for *Neuroinformatics*)

Xia, C.H., Ma, Z., Ciric, R., Gu, S., Betzel, F.R., Kaczkurkin A.N., Calkins, M.E., Cook, P.A., **Garcia de la Garza, A.**, Vandekar, S.N., Moore, T.M., Roalf, D.R., Ruparel, K., Wolf, D.H., Davatzikos, C., Gur, R.C., Gur, R.E., Shinohara, R.T., Bassett, D.S., Satterthwaite, T.D. *Linked dimensions of psychopathology and connectivity in functional brain networks. (Submitted to Nature Neuroscience).*

Rosen A*, Roalf DR*, Garcia **de la Garza A**, Elliott MA, Blake J, Villa P, Seelaus K, Ruparel K, Quarmley M, Davatzikos C, Schmitt JE, Shinohara RT, Gur RE, , Craddock C, Gur RC, Satterthwate TD. *Data-driven measures of structural image quality. (*Submitted to *Neuroimage)*

Pehlivanova M, Wolf DH, **Garcia de La Garza A**, Ciric R, Rosen A, Kaczkurkin A, Gur RC, Gur RE, Kable J, Satterthwaite TD. *Cortical thinning is associated with impulsive choice in adolescence*. (submitted to *Journal of Neuroscience*)

Roalf, D.R., **Garcia de la Garza, A.**, Calkins, M.E., Moore, T.M., Quarmley, M., Ruparel, K., Rupert, P., Elliott, M.A., Satterthwaite, T.D., Gur, R.C., Gur, R.E. *Microstructural White Matter Abnormalities in Youth with Psychosis Spectrum Symptoms: A longitudinal perspective*. (Manuscript in preparation for *JAMA Psychiatry*)

Kaczkurkin, A.N., Moore, T.M., Calkins, M.E., Ruparel, K., Rosen, A., Ciric R., **Garcia de la Garza, A.**, Shinohara, R.T., Vandekar, S.N., Pine, D.S., Leibenluft, E., Scott, C., Foa, E.B., Elliot, A.M., Gennatas, E.D., Roalf, D.R., Wolf, D.H., Detre, J.A., Gur, R.E., Gur, R.C., Satterthwaite, T.D. *Common and Dissociable Regional Cerebral Blood Flow Differences Associate with Dimensions of Psychopathology Across Categorical Diagnoses*. (Submitted to *Molecular Psychiatry*)

Nassar, R., **Garcia de la Garza, A.**, Moore, T.M., Ruparel, K., Lorch, S., Gur, R.E., Gur, R.C., Satterthwaite, T.D., *Imaging Patterns in Late Preterm Youth Mediate Cognitive Development*. (Submitted to *Pediatrics*)

CONFERENCE ABSTRACTS

Roalf, D.R., **Garcia de la Garza, A.**, Calkins, M.E., Moore, T.M., Quarmley, M., Ruparel, K., Rupert, P., Elliott, M.A., Satterthwaite, T.D., Gur, R.C., Gur, R.E. *Microstructural White Matter Abnormalities in Youth with Psychosis Spectrum Symptoms: A longitudinal perspective*. Annual Meeting of the American College of Neuropsychopharmacology. Accepted for presentation December 2016.

Kaczkurkin, A.N., Moore, T.M., Calkins, M.E., Ruparel, K., Rosen, A., Ciric R., **Garcia de la Garza, A.**, Shinohara, R.T., Vandekar, S.N., Pine, D.S., Leibenluft, E., Scott, C., Foa, E.B., Elliot, A.M., Gennatas, E.D., Roalf, D.R., Wolf, D.H., Detre, J.A., Gur, R.E., Gur, R.C., Satterthwaite, T.D. *Common and Dissociable Regional Cerebral Blood Flow Differences Associate with Dimensions of Psychopathology*

Across Categorical Diagnoses. Annual Meeting of the American College of Neuropsychopharmacology. Accepted for presentation December 2016.

Nassar, R., **Garcia de la Garza, A.**, Moore, T.M., Ruparel, K., Lorch, S., Gur, R.E., Gur, R.C., Satterthwaite, T.D., *Imaging Patterns in Late Preterm Youth Mediate Cognitive Development*. American Academy of Pediatrics National Conference. October, 2016.

Garcia de la Garza, A., Roalf, D.R., Ruparel, K., Satterthwaite, T.D., Bilker, W.B., Gur, R.C., Gur, R.E. *A quantitative comparison of linear and non-linear models to detect white matter differences in psychosis spectrum*. Thomas R. Ten Have Symposium on Statistics in Mental Health. June 2016

García de la Garza, A., Olea López, J.R., Esquer Glaros, N., Astorga Paliza, J.F. *Climatic Change and its Relationship with Volcanic Dust and Aerosols*. 41º Congreso de Investigación y Desarrollo. Monterrey, México, January 2011.

SOFTWARE

voxel: R package for the mass-univariate voxelwise analysis of imaging NIfTI data, available at https://cran.r-project.org/web/packages/voxel/ (with S.N. Vandekar, T.D Satterthwaite, R.T. Shinohara)

ADDITIONAL INFORMATION

Languages: Spanish (native fluency), French (limited proficiency), Portuguese (limited proficiency)

Programing Languages: Proficient programming in R and Bash, intermediate experience programming in Java, basic experience programing in SQL.

Other Tools: FMRIB Software Library (FSL), git, LaTex, Adobe Photoshop.