

# Claudio A. Toro-Serey

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## EDUCATION

- 2016 – Present    Ph.D. Student in Psychology  
                         Cognition & Decision Lab  
                         Boston University  
                         Brain, Behavior and Cognition Program
- 2016-2019        Master of Arts in Psychology  
                         Boston University
- 2008-2013        Bachelor of Science  
                         Northern Kentucky University  
                         Major: Psychology  
                         Minors: Neuroscience, Honors, & Philosophy  
                         Honors: Magna Cum Laude, University Honors Scholar

## RESEARCH/RELEVANT WORK- EXPERIENCE

- Fall 2013-2016  
                         Clinical Research Coordinator III  
                         Pediatric Neuroimaging Research Consortium & Reading and Literacy Discovery Center  
                         Cincinnati Children's Hospital
- Fall 2012-Spring 2013  
                         Undergraduate Senior Honors Thesis  
                         Supervisor: Mark Bardgett, Ph.D.  
                         Department of Psychological Science  
                         Northern Kentucky University

## PUBLICATIONS AND CONFERENCE PAPERS

1. **Toro-Serey, C.**, Tobyne, S.M., & McGuire, J.T. (2020) Spectral partitioning identifies individual heterogeneity in the functional network topography of ventral and anterior medial prefrontal cortex. *NeuroImage*, 205, <https://doi.org/10.1016/j.neuroimage.2019.116305>
2. **Toro-Serey, C.**, Bright, I.M., Wyble, B.P., & Howard, M.W. (2019). Rapid Presentation Rate Negatively Impacts the Contiguity Effect in Free Recall. *Proceedings of the 41<sup>st</sup> Annual Meeting of the Cognitive Science Society*.
3. Barnes-Davis, M.E., Merhar, S.L., Laue, C., **Toro Serey, C.**, Holland, S.K., & Kadis, D.S. (2017). Extremely preterm children exhibit increased interhemispheric language connectivity in fMRI and MEG. *Paper presented at the Annual meeting of the Organization for Human Brain Mapping (OHBM)*, Vancouver, Canada.
4. Kadis, D., Dimitrijevic, A., **Toro Serey, C.**, Holland, S.K. (2016). Characterizing information flux within the distributed pediatric expressive language network – a core region mapped through fMRI-constrained MEG effective connectivity analyses. *Brain Connectivity*, 6(1)
5. Horowitz-Kraus, T., **Toro Serey, C.**, & Di Francesco, M. (2015). Increased resting-state functional connectivity in the cingulo-opercular cognitive-control network after intervention in children with reading difficulties. *PLoS ONE*, 10(7)

## **CONFERENCE AND INVITED TALKS**

1. April, 2019. *Invited to give a talk to the Gabrieli lab*, MIT. Individual heterogeneity in the functional topography of the default network in medial prefrontal cortex.
2. November, 2018. *BBC Colloquium Student Talk*, Boston University. Stability and heterogeneity in the functional organization of mPFC.
3. October, 2018. Poster Spotlight. *Annual Meeting of the Society for Neuroeconomics (SNE)*, Philadelphia, USA. Parsing medial prefrontal cortex: A joint meta-analytic and graph-theoretic approach.
4. June, 2018. Data Blitz talk. *New England Research on Decision Making (NERD)*, Harvard University. Parsing medial prefrontal cortex: A joint meta-analytic and graph-theoretic approach.
5. November, 2017. *BBC Colloquium Student Talk*, Boston University. Effort and Delay Discounting in a Foraging Environment.
6. May, 2017. *New England Research on Decision Making (NERD)*, Brown University. Neural Networks of Effort and Time as a Measure of Cost.

## **POSTER PRESENTATIONS**

1. **Toro Serey, C., & McGuire, J.T.** (2019). Apparent preferences for cognitive effort fade when multiple forms of effort and delay are interleaved in a foraging environment. *Annual Meeting of the Society for Neuroeconomics (SNE)*, Dublin, Ireland.
2. **Toro Serey, C., Tobyne, S.M., & McGuire, J.T.** (2019). Individual heterogeneity in the functional topography of the DMN in medial prefrontal cortex. *Annual meeting of the Organization for Human Brain Mapping (OHBM)*, Rome, Italy.
3. **Toro Serey, C., Tobyne, S.M., & McGuire, J.T.** (2019). Unsupervised Topographical Clustering of Resting Brain Activity using Spectral Network Partitioning. *Boston University Data Science day*, Boston, MA.
4. **Toro Serey, C., & McGuire, J.T.** (2018). Parsing medial prefrontal cortex: A joint meta-analytic and graph-theoretic approach. *Annual Meeting of the Society for Neuroeconomics (SNE)*, Philadelphia, PA.
5. **Toro Serey, C., & McGuire, J.T.** (2017). Effort and Delay Discounting in a Foraging Environment. *Annual Meeting of the Society for Neuroeconomics (SNE)*, Toronto, CA.
6. Tenney, J., Kadis, D., Agler, W., **Toro Serey, C.**, Vannest, J., & Glauser, T. (2016). Defining epileptic network pathways: A combined MEG and fMRI approach. *Annual Meeting of the American Epilepsy Society (AES)*, Houston, TX.
7. Tenney, J., Agler, W., **Toro Serey, C.**, & Kadis, D. (2016). Defining epileptic network pathways – A combined MEG and fMRI approach. *International Conference on Biomagnetism (BIOMAG)*, Seoul, South Korea.
8. Barnes-Davis, M.E., Merhar, S.L., **Toro Serey, C.**, Holland, S.K., & Kadis, D.S. (2016). School-aged children born extremely preterm have altered patterns of activation in language regions during a functional MRI stories listening task compared to term counterparts. *Joint Irish Paediatric Association (IPA) & American Pediatric Society Meeting*, Stillorgan, Dublin.
9. **Toro Serey, C., & Kadis, D.** (2016). Connectivity changes suggest children and adolescents use different strategies for verb generation. *Annual meeting of the Organization for Human Brain Mapping (OHBM)*, Geneva, Switzerland.

10. Horowitz-Kraus, T., & **Toro Serey, C.** (2015). Reading-related neural-circuits disruption in children with dyslexia at a familial-risk for dyslexia. *Annual meeting of the Organization for Human Brain Mapping (OHBM)*, Honolulu, Hawaii.
11. Horowitz-Kraus, T., **Toro Serey, C.**, & Holland, S. K. (2015). Decreased rsfMRI in the fronto-parietal network in children with emotional disorders. *Annual meeting of the Organization of Human Brain Mapping (OHBM)*, Honolulu, Hawaii.
12. Horowitz-Kraus, T., DiFrancesco, M., **Toro Serey, C.**, & Holland, S.K. (2015, March). Increased functional connectivity in the cingulo-opercular network during rest in children with dyslexia following intervention. *Annual Meeting of the Cognitive Neuroscience Society (CNS)*, San Francisco, CA.
13. Kraus, D., Arya, R., Tenney, J., Greiner, H., Leach, J., Toro-Serey, C., Vannest, J., & Horowitz-Kraus, T. (2014). Reading and language lateralization in pediatric temporal lobe epilepsy: and fMRI study. *Annual Meeting of the American Epilepsy Society (AES)*, Seattle, WA.
14. Kadis, D. S., Dimitrijevic, A., **Toro Serey, C.**, & Holland, S. K. (2014, June). Pediatric Expressive Language Network Connectivity – Findings from fMRI-Constrained MEG. *Annual Meeting of the Organization for Human Brain Mapping (OHBM)*, Hamburg, Germany.
15. **Toro Serey, C.**, Stevens, R., and Gannon, M. (Faculty Sponsor Mark E. Bardgett) (2013). The Effects of Zolpidem on Regional Neuronal Activity and Behavior. *Celebration of Student Research and Creativity*, Northern Kentucky University, Highland Heights, KY.
16. **Toro Serey, C.**, Stevens, R., Gannon, M., and Bardgett, M. (2013). Effects of zolpidem on regional neuronal activity. *Annual Meeting of the Midwestern Psychological Association*, Chicago, IL.
17. **Toro Serey, C.**, Stevens, R., and Gannon, M. (Faculty Sponsor Mark E. Bardgett) (2012). Effects of zolpidem on regional neuronal activity and behavior. *Celebration of Student Research and Creativity*, Northern Kentucky University, Highland Heights, KY.

## **HONORS AND AWARDS**

Hariri Center for Computing at BU “Brilliant Bud Award” (2019)  
 Student Travel Award from the Society for Neuroeconomics (2018)  
 Dean’s Scholarship (2012)  
 Selected to participate as a senior mentor for PSY 100 classes (Fall 2012)  
 Sheldon B. and Fern H. Storer Endowed Scholarship (2010)  
 President’s Honor List (Spring 2009, Fall 2010, Fall 2011, Spring 2012, Fall 2012, Spring 2013)  
 Dean’s List (Fall 2009)

## **TEACHING EXPERIENCE**

Fall 2016 – Spring 2018  
 Teaching Fellow  
 Boston University, department of Psychological and Brain Sciences  
 Courses: Introduction to Psychology (PS101), Introduction to Cognitive Psychology (PS336), Experiments in Psychology: Memory & Cognition (PS328), Laboratory in Perception (PS327).

Fall 2012  
 Senior Mentor  
 Northern Kentucky University  
 Supervisor: Perilou Goddard, Ph.D.

## **SKILLS**

Programming (R, Python, Bash shell, Matlab)

fMRI data processing (AFNI, FSL, FreeSurfer, HCP, Python packages)

Administration and scoring of standardized psychological tests

CONN toolbox (attended a three-day workshop in Cincinnati organized by CCHMC and MIT, July 2015)

## **ASSOCIATION MEMBERSHIPS**

Organization for Human Brain Mapping (2019)

Society for Neuroeconomics (2017 – Present)

Honors in Psychology (Fall 2012, Spring 2013)

Alpha Chi International Honors Society, (inducted Spring 2012)

Psi Chi: The National Honor Society in Psychology (inducted Fall 2011)

NKU Psychology Club (Fall 2010-Spring 2013)

NKU Honors Program (Fall 2008-Spring 2013)

NKU Presidential Ambassadors (Fall 2008- Spring 2013)