

CURRICULUM VITAE

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RESEARCH INTERESTS AND EXPERTISE

- Autism
- Psychosis
- Visual perception
- Differential diagnosis
- Replicability
- Task and resting state fMRI
- Eye-tracking
- Psychophysics
- Brain connectivity
- Interpretable Machine Learning

EMPLOYMENT

JANUARY 2024 – : Research Assitant Professor, department of Psychology, Virginia Tech, Blacksburg, VA, USA.

OCTOBER 2020 – December 2023: [Post Doctoral Associate](#) in the group of Dr. Michal Assaf, Olin Neuropsychiatry Research Center, Institute of Living, Hartford Healthcare and Yale School of Medicine, Hartford, CT, USA.

EDUCATION

SEPTEMBER – DECEMBER 2017 & APRIL – JULY 2018: research internship at the University of East Anglia, Norwich, United Kingdom, working with Prof. Thomas FitzGerald.

OCTOBER 2015 – AUGUST 2020: full-time PhD candidate, working on a thesis titled “Connectivity in Mental Disorders”, under the supervision of Dr. Martin Kronbichler, “Imaging the Mind” Doctoral College, Paris-Lodron University, Salzburg, Austria.

2013 – 2015: MSc in “Neuro-Cognitive Psychology”, Ludwig-Maximilian University, Munich, Germany.

2010 – 2012: MA in “Psychological Techniques for Controlling Human Behavior and Human Potential Development”, Faculty of Psychology and Educational Sciences, Babeş-Bolyai University, Cluj-Napoca, Romania.

2007 – 2010: BA in Psychology, Faculty of Psychology and Educational Sciences, Babeş-Bolyai University, Cluj-Napoca, Romania.

TEACHING

OCTOBER 2023 - : I teach (remotely, in English) Introduction to Neuroscience to 1st semester undergraduate psychology students enrolled in the Psychology - Cognitive Science BSc program, at Babeş-Bolyai University, Cluj-Napoca, Romania. [My lecture plan and recordings are also open access.](#)

MAY 2023: invited lecturer (remotely, in Romanian) for one course on fMRI and one on pupillometry for the Legal Psychology MA program at Babeş-Bolyai University, Cluj-Napoca, Romania.

APRIL 2023 – JUNE 2023: invited lecturer (remotely, in English) for the following lectures: (1) Structural and functional neuroimaging; (2) Emotions; (3) Social cognition; (4) Attention; (5) Spatial orienting; (6) Eyetracking and Pupillometry, for the 2nd semester undergraduate students enrolled in the Psychology - Cognitive Science BSc program, at Babeş-Bolyai University, Cluj-Napoca, Romania.

MENTORING AND ADVOCACY

2022 – PRESENT: [member](#) of the Women’s Neuronetwork, a platform dedicated to enhance the visibility of and collaboration among female neuroscientists.

JANUARY 2020 – PRESENT: member and mentor with [Biomentorhub](#), promoting research careers and opportunities to Romanian youth.

2018 – 2019: co-supervised the [MSc thesis](#) of student Franziska Kinskofer, titled “Exploring Sex Differences in the Functional Connectivity of Schizotypal Traits, Psychopathy and Alexithymia.” She is currently a PhD student of Dr. Martin Kronbichler, at Paris-Lodron University, Salzburg, Austria, and I continue to guide her work.

GRANTS, HONORS AND SCHOLARSHIPS

JULY 2021: Research Grant worth \$13,278 awarded by Hartford Hospital - Med Staff RC for conducting a one-year eye-tracking pilot study titled “Implicit Learning Strategies in Autism Spectrum Disorders and their Relevance for Belief Updating”

FEBRUARY 2018: Travel grant worth € 5,000 from the Elite Network of Bavaria for attending the Lindau Nobel Laureate Meeting for Physiology or Medicine, 2018, Lindau, Germany.

AUGUST 2013 – SEPTEMBER 2015: Study Scholarship worth € 18,750 awarded by the Deutscher Akademischer Austausch Dienst (DAAD; Eng: German Academic Exchange Service) – for studying in the “Neuro-Cognitive Psychology” MSc program at Ludwig-Maximilian University, Munich; (7% success rate).

SELECTED PUBLICATIONS

USCĂTESCU, L. C., Kronbichler, M., Said-Yürekli, S., Kronbichler, L., Calhoun, V., Corbera, S., Bell, M., Pelphrey, K., Pearlson, G., & Assaf, M. (2023). Intrinsic neural timescales in autism spectrum disorder and schizophrenia. A replication and direct comparison study. *NPJ schizophrenia*, 9(1). <https://doi.org/10.1038/s41537-023-00344-1>

USCĂTESCU, L. C., Hyatt, C. J., Dunn, J., Kronbichler, M., Calhoun, V., Corbera, S., Pelphrey, K., Pittman, B., Pearlson, G., & Assaf, M. (2023). Using the Excitation/Inhibition Ratio to Optimize the classification of Autism and Schizophrenia. *Medrxiv*. <https://www.medrxiv.org/content/10.1101/2022.05.24.22275531v2>

USCĂTESCU, L. C., Said-Yürekli, S., Kronbichler, L., Stelzig-Schöler, R., Pearce, B. G., Reich, L. A., Weber, S., Aichhorn, W., & Kronbichler, M. (2021). Reduced intrinsic neural timescales in schizophrenia along posterior parietal and occipital areas. *NPJ schizophrenia*, 7(1), 55. <https://doi.org/10.1038/s41537-021-00184-x>

USCĂTESCU, L. C., Kronbichler, L., Stelzig-Schöler, R., Pearce, B-G., Said-Yürekli, S., Reich, L-A, Weber, S., Aichhorn, W., Kronbichler, M. (2021). Effective connectivity of the hippocampus can differentiate patients with schizophrenia from healthy controls: a spectral DCM approach. *Brain Topogr*, 34, 762–778. <https://doi.org/10.1007/s10548-021-00868-8>

Kronbichler, L., Stelzig-Schöler, R., Pearce, B. G., Tschernegg, M., Said-Yürekli, S., Crone, J. S., USCĂTESCU, L. C., Reich, L. A., Weber, S., Aichhorn, W., Perner, J., & Kronbichler, M. (2019). Reduced spontaneous perspective taking in schizophrenia. *Psychiatry research. Neuroimaging*, 292, 5–12. <https://doi.org/10.1016/j.psychresns.2019.08.007>

INVITED PRESENTATIONS

April 2nd 2019: “Effective connectivity as a biomarker for the extended autistic and schizotypal phenotypes”, invited presentation at the UNT Clinical Psychology Series, University of North Texas, hosted by Prof. Craig Neumann, Denton, Texas, USA.

SELECTED CONFERENCE PRESENTATIONS AND POSTERS

USCĂTESCU, L. C., Kronbichler, M., Said-Yürekli, S., Kronbichler, L., Calhoun, V., Corbera, S., Bell, M., Pelphrey, K., Pearlson, G., & Assaf, M. The replicability of intrinsic neural timescales in autism spectrum and schizophrenia. Poster presented at OHBM 2023, 22 – 26 July 2023, Montreal, Canada.

USCĂTESCU, L.C., Hyatt, C., Kronbichler, M., Calhoun, M., Corbera, S., Pelphrey, K., Pittman, B., Pearlson, B., & Assaf, M. Differential diagnosis of autism and schizophrenia with the help of the excitation/inhibition ratio and interpretable machine learning. Poster presented at the AI Neuro Summer School, 25 – 30 June 2023, Lipari, Sicily, Italy.

USCĂTESCU, L.C., Hyatt, C., Kronbichler, M., Calhoun, M., Corbera, S., Pelphrey, K., Pittman, B., Pearlson, B., & Assaf, M. Using Optimal Classification Trees to disentangle the overlap between ASD and SZ. Presentation given at the International Society for Autism Research (INSAR), 11 – 14 May 2022, Austin, Texas.

USCĂTESCU, L.C., Hyatt, C., Kronbichler, M., Calhoun, M., Corbera, S., Pelphrey, K., Pittman, B., Pearlson, B., & Assaf, M (2022). Using Excitation/Inhibition Ratio to Optimize the Classification of Autism Spectrum Disorder and Schizophrenia. Online poster presented at the Society for Biological Psychiatry, 28 – 30 April 2022, New Orleans, Louisiana.

USCĂTESCU, L.C., Kronbichler, M. Directed connectivity via Dynamic Causal Modelling (DCM) tells the story of how autistic and schizotypal traits differentially modulate the repetition suppression effect. Presentation given at the Young Scientist Symposium, The Salzburg MindBrain Annual Meeting, 11 – 12 July 2019, Salzburg, Austria.

USCĂTESCU, L.C., Kronbichler, M. Effective connectivity of large-scale resting state networks as well as of individual network nodes can differentiate patients with schizophrenia from controls; a spectral DCM application on resting state fMRI data. Poster presented at The Salzburg Mind-Brain Annual Meeting, 11 – 12 July 2019, Salzburg, Austria.

USCĂTESCU, L. C., Kronbichler, M., FitzGerald, T., & Rangelov, D. (2018). The unitary percept of object orientation is achieved through conjoint, not separate processing of horizontal and vertical axes. *Journal of Vision*, 18(10), 622. <https://doi.org/10.1167/18.10.622>. Poster presented at the 18th Annual Vision Sciences Society Meeting, 18 – 23 May 2018, St. Petersburg Beach, Florida, USA.

USCĂTESCU, L.C., Kronbichler, L., Tschernegg, M., Nawara, L.A., Schurz, M., Pearce, B.G., Stelzig-Schöler, R., Kronbichler, M. Increased Between-Network Connectivity Can Differentiate Schizophrenia Patients from Healthy Controls. Poster presented at the International Conference “Coupling and Causality in Complex Systems (C3S)”, 25 – 27 September 2017, Cologne, Germany.

PUBLIC ENGAGEMENT AND SCIENCE COMMUNICATION

MARCH 14TH 2023: online talk on the underlying neural processing of shared phenotypes in autism and schizophrenia, as part of the Brain Awareness Week event series organized online/in Bucharest, for the Romanian public, by Dr. Ioana Podină. My presentation (in Romanian) can be found [here](#).

SEPTEMBER 2022 – PRESENT: member of the blog team of the Organisation for Human Brain Mapping (OHBM) Communications Committee, assisting with interviewing keynote speakers of OHBM meetings and writing or redacting blog posts for the OHBM platform. For the 2023 OHBM meeting, I interviewed keynote speakers [Dr. Xujun Duan](#) and [Dr. Emma Robinson](#).

JANUARY 2021 – PRESENT: contributor to the [BMH Magazine](#), with articles designed to increase the scientific literacy of the Romanian public, covering topics such as the neurodiversity movement and the replicability crisis.