



## Curriculum Vitae

Personal information **Sara Ambrosino**

### Work experience

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Employer: College ter Beoordeling van Geneesmiddelen – Medicines Evaluation Board (CBG-MEB)

- Start date: Sept 2022
- End date: Present
- Position: Clinical assessor
- Activities: Clinical assessment of registration applications and scientific advices for human medicinal products at the Dutch MEB, pharmacotherapeutic group 1, with focus on medicinal products for Neurology and Psychiatry.
- Country: NL

Employer: University Medical Center Utrecht (UMCU)

- Start date: Nov 2013
- End date: Aug 2022
- Position: PhD researcher
- Activities: PhD researcher in Clinical and Experimental Neuroscience at the NICHE lab (Dept of Psychiatry, UMCU), while coordinating locally the EU-AIMS Longitudinal European Autism Project, international multicenter multi-disciplinary longitudinal study on Autism Spectrum Disorder (<https://www.eu-aims.eu/en/the-leap-study/>). Promoter: Prof. Dr. S Durston. Co-promoter: Dr. B Oranje.
- Country: NL

Employer: University Medical Center Utrecht (UMCU)

- Start date: Sept 2012
- End date: Oct 2013
- Position: Research Assistant
- Activities: Scientific researcher at the NICHE lab, working on a project investigating functional MRI correlates of rigid behavior in children with Autism. Supervisor: Prof. Dr. S Durston.
- Country: NL

Employer: University of Modena and Reggio Emilia (UNIMORE)

- Start date: Aug 2011
- End date: Jul 2012
- Position: Resident in Child Neurology and Psychiatry – Research Fellow
- Activities: Research internship at the NICHE lab, with a project focused on structural brain MRI aspects in children with ADHD. Supervisors: Dr. Patrick de Zeeuw, Prof. Dr. S Durston.
- Country: NL

Employer: University of Modena and Reggio Emilia (UNIMORE)

- Start date: Aug 2007
- End date: July 2011

- Position: Resident in Child Neurology and Psychiatry

Activities: Residency trainings as a Child Neurologist and Psychiatrist in the Departments of:

- Neonatology (Sept 2007– Jan 2008), University Hospital Policlinico of Modena: Nursery, Neonatal Intensive Therapy Unit and out-patient clinic for the follow-up of newborns exposed to neurologic risk, with special focus on cranial ultrasonography. Supervisor: Prof. F Ferrari.
- Pediatric Neurology (Feb 2008 – Oct 2008), University Hospital Policlinico of Modena. Supervisor: Dr. A Guerra.
- Child Neurology (Nov 2008 – May 2009), Santa Maria Nuova Hospital, Reggio Emilia: out-patient clinic for neurometabolic disorders, neuromuscular disorders, and brain malformations; active frequency of the Neuroradiology Unit (sMRI/MRS). Supervisor: Dr. E Della Giustina.
- Child Neuropsychiatry (Jun 2009 – Nov 2009), Modena: Autism Spectrum Disorder, Down syndrome, Language and Learning disorders. Supervisor: Dr. P Stagi.
- Child Neuropsychiatry (Dec 2009 – May 2010), Ospedale Maggiore, Bologna: out-patient clinic for Epilepsy, Neuromuscular disorders, and Clinical Genetics. Supervisor: Dr. G Gobbi.
- Pharmacology Department of Biomedical Sciences (Jun 2010 – Dec 2010), UNIMORE: Molecular Neurobiology methods applied to developmental neuropsychiatry. Supervisor: Dr. Johanna Blom.
- Child Rehabilitation (Jan 2011 – Jun 2011), Santa Maria Nuova Hospital, Reggio Emilia: rehabilitation for neuromuscular disorders, infantile cerebral palsy, and skeletal malformations. Supervisor: Prof. A Ferrari.
- Country: IT

## Education and training

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### Doctoral degree

- Start date: Jan 2013
- End date: Aug 2022
- Qualification: PhD in Clinical and Experimental Neuroscience
- Organization: Utrecht University / University Medical Center Utrecht Brain Center
- Country: NL

### Medical specialization

- Start date: July 2007
- End date: July 2012
- Qualification: Child Neurology and Psychiatry (cum laude)
- Organization: University of Modena and Reggio Emilia (UNIMORE)
- Country: IT

### Medical degree

- Start date: Sept 1997
- End date: Jul 2006
- Qualification: MD (full marks)
- Organization: University of Ferrara
- Country: IT

### Medical training exchange program

- Start date: Sept 2002

- End date: July 2003
- Qualification: Medical student
- Organization: Bordeaux Segalen University
- Country: FR

## Additional information

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### Publications

#### First authored:

Ambrosino S, Elbendary H, Lequin M, Rijkkelijkhuizen D, Banaschewski T, Baron-Cohen S, Bast N, Baumeister S, Buitelaar J, Charman T, Crawley D, Dell'Acqua F, Hayward H, Holt R, Moessnang C, Persico AM, Sacco R, San José Cáceres A, Tillmann J; EU-AIMS LEAP Group; Loth E, Ecker C, Oranje B, Murphy D, Durston S. **2022**. In-depth characterization of neuroradiological findings in a large sample of individuals with autism spectrum disorder and controls. *Neuroimage Clin.* 35:103118.

Ambrosino S, de Zeeuw P, Wierenga LM, van Dijk S, Durston S. **2017**. What can Cortical Development in Attention-Deficit/Hyperactivity Disorder Teach us About the Early Developmental Mechanisms Involved? *Cereb Cortex.* Sep 1;27(9):4624-4634.

Ambrosino S, Bos DJ, van Raalten TR, Kobussen NA, van Belle J, Oranje B, Durston S. **2014**. Functional connectivity during cognitive control in children with autism spectrum disorder: an independent component analysis. *J Neural Transm.* Sep;121(9):1145-55.

Ambrosino S, Bos D, van Hulst B, Oranje B, Durston S. Convergence in the neuroanatomical developmental trajectories of orbitofrontal cortex between attention-deficit/hyperactivity disorder (ADHD) and autism spectrum disorder with elevated ADHD symptoms. Under review in *Cereb Cortex*.

#### Co-authored:

Leyhausen J, Schäfer T, Gurr C, Berg LM, Seelemeyer H, Pretzsch CM, Loth E, Oakley B, Buitelaar JK, Beckmann CF, [...]; EU-AIMS LEAP Group; Murphy DG, Ecker C. **2023**. Differences in Intrinsic Gray Matter Connectivity and Their Genomic Underpinnings in Autism Spectrum Disorder. *Biol Psychiatry.* Jun 20:S0006-3223(23)01363-X.

Baumeister S, Moessnang C, Bast N, Hohmann S, Aggensteiner P, Kaiser A, Tillmann J, Goyard D, Charman T, Ambrosino S, [...]; EU-AIMS LEAP Group. **2023**. Processing of social and monetary rewards in autism spectrum disorders. *Br J Psychiatry.* Mar;222(3):100-111.

Hollestein V, Poelmans G, Forde NJ, Beckmann CF, Ecker C, Mann C, Schäfer T, Moessnang C, Baumeister S, Banaschewski T, [...], Ambrosino S, [...], Naaijen J. **2023**. Excitatory/inhibitory imbalance in autism: the role of glutamate and GABA gene-sets in symptoms and cortical brain structure. *Transl Psychiatry.* Jan 21;13(1):18.

Looden T, Floris DL, Llera A, Chauvin RJ, Charman T, Banaschewski T, Murphy D, Marquand AF, Buitelaar JK, Beckmann CF; AIMS-2-TRIALS group. **2022**. Patterns of connectome variability in autism across five functional

activation tasks: findings from the LEAP project. *Mol Autism*. Dec 27;13(1):53.

Pretzsch CM, Floris DL, Schäfer T, Bletsch A, Gurr C, Lombardo MV, Chatham CH, Tillmann J, Charman T, Arenella M, Jones E, [Ambrosino S](#), [...], Ecker C. **2023**. Cross-sectional and longitudinal neuroanatomical profiles of distinct clinical (adaptive) outcomes in autism. *Mol Psychiatry*. Mar 29.

Haartsen R, Mason L, Garces P, Gui A, Charman T, Tillmann J, Johnson MH, Buitelaar JK, Loth E, Murphy D, Jones E, [EU-AIMS LEAP group](#). **2022**. Qualitative differences in the spatiotemporal brain states supporting configural face processing emerge in adolescence in autism. *Cortex*. Oct;155:13-29.

Laidi C, Floris DL, Tillmann J, Elandaloussi Y, Zabihi M, Charman T, Wolfers T, Durston S, Moessnang C, Dell'Acqua F, [...]; [EU-AIMS LEAP Group](#). **2022**. Cerebellar Atypicalities in Autism? *Biol Psychiatry*. Oct 15;92(8):674-682.

Mei T, Forde NJ, Floris DL, Dell'Acqua F, Stones R, Ilioska I, Durston S, Moessnang C, Banaschewski T, Holt RJ, [...]; [EU-AIMS LEAP group](#); Beckmann CF, Llera A, Buitelaar JK. **2022**. Autism Is Associated With Interindividual Variations of Gray and White Matter Morphology. *Biol Psychiatry Cogn Neurosci Neuroimaging*. Sep 6:S2451-9022(22)00212-9.

Pretzsch CM, Schäfer T, Lombardo MV, Warrier V, Mann C, Bletsch A, Chatham CH, Floris DL, Tillmann J, Yousaf A, Jones E, Charman T, [Ambrosino S](#), [...], Murphy DGM, Ecker C. **2022**. Neurobiological Correlates of Change in Adaptive Behavior in Autism. *Am J Psychiatry*. May;179(5):336-349.

Vann SD, Zachiu C, Meys KME, [Ambrosino S](#), Durston S, de Vries LS, Groenendaal F, Lequin MH. **2022**. Normative mammillary body volumes: From the neonatal period to young adult. *Neuroimage Rep*. Dec;2(4):None.

Bast N, Mason L, Freitag CM, Smith T, Portugal AM, Poustka L, Banaschewski T, Johnson M; [EU-AIMS LEAP Group](#). **2021**. Saccade dysmetria indicates attenuated visual exploration in autism spectrum disorder. *J Child Psychol Psychiatry*. Feb;62(2):149-159.

Del Bianco T, Mason L, Charman T, Tillman J, Loth E, Hayward H, Shic F, Buitelaar J, Johnson MH, Jones E, [EU-AIMS LEAP Group](#). **2021**. Temporal Profiles of Social Attention Are Different Across Development in Autistic and Neurotypical People. *Biol Psychiatry Cogn Neurosci Neuroimaging*. Aug;6(8):813-824.

Ecker C, Pretzsch CM, Bletsch A, Mann C, Schaefer T, [Ambrosino S](#), Tillmann J, Yousaf A, Chiocchetti A, Lombardo MV, [...], Murphy DGM. **2021**. Interindividual Differences in Cortical Thickness and Their Genomic Underpinnings in Autism Spectrum Disorder. *Am J Psychiatry*. Sep 10:appiajp202120050630.

Floris DL, Wolfers T, Zabihi M, Holz NE, Zwiers MP, Charman T, Tillmann J, Ecker C, Dell'Acqua F, Banaschewski T, [...]; [EU-AIMS Longitudinal European Autism Project Group](#). **2021**. Atypical Brain Asymmetry in Autism-A

Candidate for Clinically Meaningful Stratification. *Biol Psychiatry Cogn Neurosci Neuroimaging*. Aug;6(8):802-812.

Li T, van Rooij D, Roth Mota N, Buitelaar JK; ENIGMA ADHD Working Group; Hoogman M, Arias Vasquez A, Franke B. **2021**. Characterizing neuroanatomic heterogeneity in people with and without ADHD based on subcortical brain volumes. *J Child Psychol Psychiatry*. Sep;62(9):1140-1149.

Postema MC, Hoogman M, Ambrosino S, Asherson P, Banaschewski T, Bandeira CE, Baranov A, Bau CHD, Baumeister S, Baur-Streubel R, [...], Francks C. **2021**. Analysis of structural brain asymmetries in attention-deficit/hyperactivity disorder in 39 datasets. *J Child Psychol Psychiatry*. Oct;62(10):1202-1219.

Zhang-James Y, Helminen EC, Liu J; ENIGMA-ADHD Working Group; Franke B, Hoogman M, Faraone SV. **2021**. Evidence for similar structural brain anomalies in youth and adult attention-deficit/hyperactivity disorder: a machine learning analysis. *Transl Psychiatry*. Feb 1;11(1):82.

Moessnang C, Baumeister S, Tillmann J, Goyard D, Charman T, Ambrosino S, Baron-Cohen S, Beckmann C, Bölte S, Bours C, [...]; EU-AIMS LEAP group. **2020**. Social brain activation during mentalizing in a large autism cohort: the Longitudinal European Autism Project. *Mol Autism*. Feb 22;11(1):17.

Tillmann J, Uljarevic M, Crawley D, Dumas G, Loth E, Murphy D, Buitelaar J, Charman T; AIMS-2-TRIALS LEAP group. **2020**. Dissecting the phenotypic heterogeneity in sensory features in autism spectrum disorder: a factor mixture modelling approach. *Mol Autism*. Aug 31;11(1):67. doi: 10.1186/s13229-020-00367-w. PMID: 32867850; PMCID: PMC7457751.

Hoogman M, Muetzel R, Guimaraes JP, Shumskaya E, Mennes M, Zwiers MP, Jahanshad N, Sudre G, Wolfers T, Earl EA, [...], Ambrosino S, [...], Franke B. **2019**. Brain Imaging of the Cortex in ADHD: A Coordinated Analysis of Large-Scale Clinical and Population-Based Samples. *Am J Psychiatry*. Jul 1;176(7):531-542.

Oldehinkel M, Mennes M, Marquand A, Charman T, Tillmann J, Ecker C, Dell'Acqua F, Brandeis D, Banaschewski T, Baumeister S, [...]; EU-AIMS LEAP group. **2019**. Altered Connectivity Between Cerebellum, Visual, and Sensory-Motor Networks in Autism Spectrum Disorder: Results from the EU-AIMS Longitudinal European Autism Project. *Biol Psychiatry Cogn Neurosci Neuroimaging*. Mar;4(3):260-270.

Tillmann J, San José Cáceres A, Chatham CH, Crawley D, Holt R, Oakley B, Banaschewski T, Baron-Cohen S, Bölte S, Buitelaar JK, Durston S, [...]; EU-AIMS LEAP group. **2019**. Investigating the factors underlying adaptive functioning in autism in the EU-AIMS Longitudinal European Autism Project. *Autism Res*. Apr;12(4):645-657.

Bos DJ, Oranje B, Achterberg M, Vlaskamp C, Ambrosino S, de Reus MA, van den Heuvel MP, Rombouts SAR, Durston S. **2017**. Structural and functional

connectivity in children and adolescents with and without attention deficit/hyperactivity disorder. *J Child Psychol Psychiatry*. Jul;58(7):810-818.

Charman T, Loth E, Tillmann J, Crawley D, Wooldridge C, Goyard D, Ahmad J, Auyeung B, [Ambrosino S](#), Banaschewski T, [...], Buitelaar JK. **2017**. The EU-AIMS Longitudinal European Autism Project (LEAP): clinical characterisation. *Mol Autism*. Jun 23;8:27.

Hoogman M, Bralten J, Hibar DP, Mennes M, Zwiers MP, Schweren LSJ, van Hulzen KJE, Medland SE, Shumskaya E, Jahanshad N, , [...], [Ambrosino S](#), [...], Franke B. **2017**. Subcortical brain volume differences in participants with attention deficit hyperactivity disorder in children and adults: a cross-sectional mega-analysis. *Lancet Psychiatry*. Apr;4(4):310-319.

Loth E, Charman T, Mason L, Tillmann J, Jones EJH, Wooldridge C, Ahmad J, Auyeung B, Brogna C, [Ambrosino S](#), [...], Buitelaar JK. **2017**. The EU-AIMS Longitudinal European Autism Project (LEAP): design and methodologies to identify and validate stratification biomarkers for autism spectrum disorders. *Mol Autism*. Jun 23;8:24.

Wierenga L, Langen M, [Ambrosino S](#), van Dijk S, Oranje B, Durston S. **2014**. Typical development of basal ganglia, hippocampus, amygdala and cerebellum from age 7 to 24. *Neuroimage*. Aug 1;96:67-72.

[Projects](#)

[Memberships](#)

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