DANIEL ANSARI Curriculum Vitae

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EDUCATION

<u>1999 – 2003</u> PhD Neurocognitive Development Unit Institute of Child Health University College London

<u>2000 – 2001</u> MSc in Neuroscience University of Oxford

<u>1995 – 1999</u> BA (Hons) Psychology (1st Class) School of Cognitive and Computing Sciences University of Sussex

POSITIONS

<u>July 2018 – present</u> Professor Jointly appointed between Department of Psychology & Faculty of Education The University of Western Ontario

<u>July 2014 – July 2018</u> Professor Department of Psychology & Brain and Mind Institute The University of Western Ontario

<u>July 2010 – July 2014</u> Associate Professor Department of Psychology & Brain and Mind Institute The University of Western Ontario

2007–2017 (renewed April 2012) Canada Research Chair (Tier II) in Developmental Cognitive Neuroscience The University of Western Ontario

<u>2006 – 2010</u> Assistant Professor Department of Psychology The University of Western Ontario 2003 - 2006Assistant Professor Department of Education Dartmouth College, USA

AWARDS & FELLOWSHIPS

2022 Graduate Excellence in Teaching Award, Faculty of Education, Western University 2022 LEAP Fellow, MIT Solve 2020 Canada Research Chair in Developmental Cognitive Neuroscience & Learning (Tier I) 2019 Fellow, Child & Brain Development Program, Canadian Institute for Advanced Research 2018 Marion Welchman International Award, British Dyslexia Association 2018 Jacobs Foundation Advanced Research Fellowship (2018-2020) 2015 Fellow, Association for Psychological Science (APS) 2015 Postdoctoral Supervisor of the Year Award, Western University 2015 E.W.R Steacie Memorial Fellowship, NSERC, Canada 2014 Member, College of New Scholars, Artists and Scientists, Royal Society of Canada 2014 Marie Curie Visiting Professor, CBCD, Birkbeck College, UK 2012 Transforming Education through Neuroscience Award, IMBES & L&B 2012 Canada Research Chair in Developmental Cognitive Neuroscience (Tier II) Renewal 2011 Faculty Scholar Award, University of Western Ontario 2011 Boyd McCandless Early Career Award, APA Division 7: Developmental Psychology 2009 Early Research Contributions Award, Society for Research in Child Development 2008 Western University Student Council Teaching Honour Roll Award of Excellence. 2008 Research Award of the German Association for Dyslexia and Dyscalculia 2008 NeuroImage: Systems Neuroscience Editors Choice Award (jointly with A. Berkowitz) 2008 Early Researcher Award, Ontario Ministry for Research and Innovation 2007 Canada Research Chair in Developmental Cognitive Neuroscience (Tier II) 2005 Junior Faculty Fellowship, Dartmouth College 2005 Schloessmann Award, Max-Planck Society, Germany 2005 Rockefeller Centre Scholar, Rockefeller Centre, Dartmouth College 2002 Bogue Research Fellowship, University College London 2001 Runner-up, Wellcome Trust/New Scientist, New Millennial Essay Competition

2000 Medical Research Council (UK) 1-year Master's Studentship

1999 Williams Syndrome Foundation (UK) 3-year PhD Studentship

GRANTS

<u>April 2023 – April 2028</u>

Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Operating Grant (Renewal: \$59,000 per year) Role : Principal Investigator

February 2022 – July 2021

Canadian Institute for Advanced Research CIFAR Program Child & Brain Development Catalyst Funding (\$49,150) Role: Co-Principal Investigator (co-PI: Allyson Mackey)

April 2022-March 2027 Klaus J. Jacobs Foundation Creating Impact Science Program (CRISP) (CHF 150,000) Role : Principal Investigator

April 2022-April 2024 Western University Interdisciplinary Development Initiative Grant (\$60, 545) Role: Co-Investigator (PI: Prachi Srivastava)

March 2022-March 2023 Social Sciences and Humanities Research Council Individual Partnership Engage Grant (\$24,923) (with My Oral Village) Role : Principal Investigator

<u>February 2021 – July 2021</u> Canadian Institute for Advanced Research CIFAR Program Child & Brain Development Catalyst Funding (\$50,000) *Role: Co-Principal Investigator (*co-PI: Candice Odgers)

<u>December 2019- November, 2020</u> Social Sciences and Humanities Research Council Individual Partnership Engage Grant (\$24,650) (*with JUMP Math*) *Role : Principal Investigator*

<u>July 2019 – July 2020</u> Children's Health Research Institute Lawson Health Research Institute, London, Ontario Internal Research Grant Fund (\$10,000) *Role : Principal Investigator*

July 2019-July 2020 Faculty Directed Research Fund (\$5,000) Faculty of Education, Western University *Role : Principal Investigator*

<u>July 2018 – July 2019</u> National Institute of Education, Singapore Office of Educational Research Start-up Research Grant (\$16,829) *Role : Collaborator* (PI : Chen Ouhao)

January 2018 – December 2020 Klaus J. Jacobs Foundation Advanced Research Fellowship (CHF 400,000)

<u>April 2017 – April 2023</u> Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Operating Grant (Renewal: \$58,000 per year) *Role : Principal Investigator*

<u>June 2017-October 2022</u> National Research Foundation (NRF) Government of Singapore Science of Learning Visiting Investigatorship (VIP) Grant (S\$4,496,604) *Role : Visiting Investigator & PI*, (Local-PI: Anne Rifkin)

October 2016-October 2023 Canada First Excellence Research Fund (CFREF) BrainsCAN : Brain Health for Life (\$66,000,000) *Role : One of 10 Co-Investigators*

<u>April 2016-March 2019</u> Nuffield Foundation, UK Project Grant (£241,444) Role: *Co-Investigator* (PI: Gaia Scerif)

October 2015-October 2018 Brain Canada Platform Support Grant (\$1,000,000 per year) *Role : One of 10 Co-Investigators* (PI : Ravi Menon) <u>April 2015– April 2017</u> E.W.R. Steacie Fellowship Natural Sciences and Engineering Council of Canada (NSERC) Prize (\$125,000 per year)

<u>February 2015</u> Faculty Directed Research Fund Faculty of Social Science, Western University Travel Grant (\$1106)

<u>April 2014-April 2019</u> Canadian Institutes for Health Research (CIHR) 5-year Operating Grant (Renewal : \$106,506 per year) *Role : Principal Investigator*

<u>August 2013</u> Faculty Directed Research Fund Faculty of Social Science, Western University Small Grants Program (\$5,000) Role : *Principal Investigator*

<u>August 2013-2018</u> Ontario Brain Institute (OBI) Childhood Cerebral Palsy Integrated Discovery Network (\$7,500,000) *Role : One of 30 Research Team Members* (PI : Darcy Fehlings)

<u>April 2013-April 2015</u> Academic Development Fund (ADF), University of Western Ontario Major Grants Competition (\$63,750) *Role: Princial Investigator*

January 2013 Canada Foundation for Innovation (CFI) Leading Edge Fund (\$6,235,244) *Role: One of 10 Co-Investigators* (PI : Ravi Menon)

<u>May 2012-May 2013</u> Children's Health Research Institute Lawson Health Research Institute, London, Ontario Internal Research Grant Fund (\$6692,50) *Role: Principal Investigator*

<u>April 2012-April 2017</u> Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Operating Grant (Renewal: \$47,000 per year) *Role: Principal Investigator*

<u>April 2012</u> Natural Sciences and Engineering Research Council of Canada Research Tools and Instruments – Category 1 (\$109,066) *Role: Co-Investigator* (PI: Derek Mitchell)

October 2010 SSHRC Internal Travel Grant (\$1,085)

<u>April 2010</u> Natural Sciences and Engineering Research Council of Canada (\$97,178) Research Tools and Instruments – Category 1 *Role: Co-Investigator* (PI: Mel Goodale)

<u>April 2009-April 2011</u> Academic Development Fund (ADF), University of Western Ontario Major Grants Competition (\$44, 220) *Role: Co-Investigator* (PI : J. Bruce Morton)

<u>April 2009-April 2014</u> Canadian Institutes for Health Research (CIHR) 5-year Operating Grant (\$ 133,422 per year) Ranked 1st/37 grants reviewed by Behavioural Sciences C Review Committee *Role: Principal Investigator*

<u>July 2008</u> Canadian Institutes for Health Research (CIHR) 1-year Operating Grant (\$84,637) *Role: Principal Investigator*

<u>July 2007</u> Ontario Ministry of Research and Innovation Matching Award to match CFI award (\$104,596) *Role: Principal Investigator*

<u>April 2007-April 2012</u> Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Operating Grant (\$19,487 per year) *Role: Principal Investigator*

<u>March 2007</u> Canada Foundation for Innovation (CFI) Infrastructure Grant (\$104,596) *Role: Principal Investigator*

October 2005-October 2006 The National Science Foundation (NSF) "Centre for Cognitive and Educational Neuroscience" (CCEN) *Role: Senior Personnel*

PUBLICATONS

Journal Articles (149)

Kwok, FY., Wilkey, E.D., Peters, L., Khiu, E., Bull, R., Lee, K. & Ansari, D. (in press) Developmental Dyscalculia is not associated with atypical brain activation: an fMRI study. *Human Brain Mapping*

Alvarez-Rivero, A.A., Odgers, C. & Ansari, D. (in press) Elementary school teachers' perspectives about learning during the COVID-19 pandemic. *NPJ Science of Learning*

Marks, R.A., Pollack, C., Meisler, S., D'Mello, A., Centanni, T., Romeo, R.R., Wade, K., Matejko, A.A., **Ansari, D.**, Gabrieli, J. & Christodoulou, J.A. (in press) Neurocognitive risk factors for co-occuring math difficulties in dyslexia: differences in executive function and visuo-spatial processing. *Developmental Science*

Cross, A.M., Lammert, J.M., Peters, L., Frijters, J.C., **Ansari, D.**, Steinbach, K.A., Lovett, M.W., Archibald, L.M.D & Joanisse, M.F. (2023) White matter correlates of reading subskills in children with and without reading diability. *Brain and Language*, 241, 105270

Srivastava, P., Lau T.T, Ansari, D. & Thampi, N. (2023) Effects of school- and area-level socioeconomic factors on elementary school student COVID-19 infections: a population-based observational study. *BMJ Open*, 13 (3) e065596

Mielicki, M. K., Wilkey, E. D., Scheibe, D. A.*, Fitzsimmons, C. J.*, Sidney, P. G., Bellon, E., Ribner, A. D., Soltanlou, M., Starling-Alves, I., Coolen, I., **Ansari, D., &** Thompson, C. A.

(2023). Task features change the relation between math anxiety and number line estimation performance with rational numbers: Two large-scale online studies. *Journal of Experimental Psychology: General*, 152(7), 2094-2117.

Wilkey, E.D., Gupta, I., Peiris, A. & Ansari, D. (2023) The mathematical brain at rest. *Current Directions in Behavioral Sciences*, 49, 101246

Sokolowski, H.M., Matejko, A.A. & Ansari, D. (2023) The role of the angular gyrus in mathematical cognition: A literature review. *Brain Structure and Function*, 228(1), 293-304.

Lagacé-Cusiac, R., Tremblay, P.F., **Ansari, D.** & Grahn, J.A. (2022) Investigating the relationships between temporal and spatial ratio estimation and magnitude discrimination using SEM: evidence for a common ratio processing system. *Journal of Experimental Psychology: Human Perception and Performance*, 4(1), 108-128.

Sokolowski, H.M., Hawes, Z. & Ansari, D. (2022) The neural correlates of retrieval and procedural strategies in mental arithmetic: a functional neuroimaging meta-analysis. *Human Brain Mapping*, 1-16

Sokolowski, H.M., Hawes, Z., Leibovich, T. & Ansari, D. (2022) Number symbols are processed more automatically than nonsymbolic numerical magnitudes: findings from a symbolic-nonsymbolic stroop task. *Acta Psychologica*, 228, 103644

Bago, B., Kovacs, J., Protzko, J., Nagy, T., Kekecs, Z., Palfi, B., Adamkovic, M., Adamus, S., Albalooshi, S., Albayrak-Aydemir, I., Alper, S., Alvarez-Solas, S., Alves, S., Amaya, S., Andresen, P.K., Anjum, G., **Ansari, D.**,....(2022) Situational factors shape moral judgements in the trolley dilemma in Eastern, Southern and Western countries in a culturally diverse sample. *Nature Human Behaviour*, 6, 880-895.

Lau, N.T.T., Wilkey, E.D., Soltanlou, M., Lagacé Cusiac, R., Peters, L., Tremblay, P., Goffin, C., Alves, I.S., Ribner, A.D., Thompson, C.A., Bahnmueller, J., Alvarez, A., Bellon, E., Coolen, I., Ollivier, F & Ansari, D. (2022) Numeracy and COVID-19: examining interrelationships between numeracy, health numeracy and behaviour. *Royal Society Open Science.* **Registered Report*, 9: 201303

Cheung, P. & Ansari, D. (2022) A million is more than a thousand: Children's acquisition of very large number words. *Developmental Science*, e13246

Hutchison, J.E., Ansari, D., Zheng, S., De Jesus, S. & Lyons, I.M. (2022) Extending ideas of numerical order beyond the count-list from kindergarten to first grade. *Cognition*, 223, 105019

Lau, N.T.T., Hawes, Z., Tremblay, P. & Ansari, D. (2022) Disentangling the Individual and Contextual Effects of Math Anxiety: A Global Perspective. *Proceedings of the National Academy of Sciences*, 119 (7), e2115855119

Sokolowski, H.M., Merkley, R.M., Bray Kingissepp, S.S., Vaikuntharan & Ansari, D. (2022) Children's spontaneous attention to numerical quantities relates to verbal number knowledge: An introduction to the 'Build-A-Train' task. *Developmental Science*, 25(3), e13211

Fehlbaum, L,V., Peters, L., Dimanova, P., Röell, M., Borbás, R., **Ansari D.** & Raschle, N.M. (2022) Mother-child similarity in brain morphology: A comparison of structural characteristics of the brain's reading network. *Developmental Cognitive Neuroscience*, 101058

Wilkey, E.D., Shanley, L., Sabb, F., **Ansari, D.,** Cohen, JC., Men, V., Heller, N.A. & Clarke, B (2021) Sharpening, focusing, and developing: a study of change in nonsymbolic comparison skills and math achievement in 1st grade. *Developmental Science*, 13194

Fias, W., Sahan, M.I., **Ansari, D.** & Lyons, I.M. (2021) From counting to retrieving: neural networks underlying alphabet arithmetic learning. *Journal of Cognitive Neuroscience*, 34(1), 16-33.

Sokolowski, H.M., Hawes, Z., Peters, L. & Ansari, D. (2021) Symbols are special: an fMRI adaptation study of symbolic, non-symbolic and non-numerical magnitude processing in the human brain. *Cerebral Cortex Communications*, 2(3), tgab048

McDonald, J., Merkley, R., Mickle, J., Collimore, L., Hawes, Z. & Ansari, D. (2021) Exploring the implementation of early math assessments in Kindergarten Classrooms: a research-practice collaboration. *Mind, Brain & Education*, 15(4), 311-321.

Wong, B., Bull, R., Ansari, D., Watson, D. & Gregory, A. (2021) Order Processing of Number Symbols is Influenced by Direction, but not Format. *Quarterly Journal of Experimental Psychology*, 75(1), 98-117.

Hawes, Z., Merkley, R., Stager, C.L. & Ansari, D. (2021) Integrating numerical cognition research and mathematics education to strengthen the teach and learning of early number. *British Journal of Educational Psychology*, 91(4), 1073-1109.

Lou, C., Cross, A., Peters, L., Ansari, D. & Joanisse, M.F. (2021) Rich-club structure contributes to individual variance of reading skills via feeder connections in children with reading disabilities. *Developmental Cognitive Neuroscience*, 49, 100957

Roell, M., Cachia, A., Matejko, A.A., Houdé, O., **Ansari, D.** & Borst, G. (2021) Sulcation of the intraparietal sulcus is related to symbolic but not non-symbolic number skills. *Developmental Cognitive Neuroscience*, 51, 100998

Coolen, I., Merkley, R., **Ansari, D.**, Dove, E., Dowker, A., Mills, A., Murphy, V., von Spreckelsen, M. & Scerif, G. (2021) Domain-general and domain-specific influences on emerging numerical cognition: contrasting uni- and bidirectional prediction models. *Cognition*, 215,104816

Matejko, A.A. & **Ansari, D.** (2021) Shared neural circuits for visuo-spatial working memory and arithmetic in children and adults. *Journal of Cognitive Neuroscience*, 33(6), 1003-1019.

Lau, N.T.T., Merkley, R., Tremblay, P., Zheng, S., De Jesus, S. & Ansari, D. (2021) Kindergartners' symbolic number abilities predict non-symbolic number abilities and math achievement in grade 1. *Developmental Psychology*, 57, 471-488

Bugden, S., Peters, L., Nosworthy, N., Archibald, L. & Ansari, D (2021) Identifying children with persistent developmental dyscalculia from a 2-minute test of symbolic and non-symbolic numerical magnitude processing. *Mind, Brain & Education*, 15 (1), 88-102.

Cheung, P., & Ansari, D. (2021). Cracking the code of place value: The relationship between place and value takes years to master. *Developmental Psychology*, *57*(2), 227-240.

Bellon, E., Fias, W., **Ansari, D.** & De Smedt, B. (2020) The neural basis of metacognitive monitoring in the developing brain. *Human Brain Mapping*, 41(16), 4562-4573.

Brault-Foisy, L.M., Matejko, A.A., **Ansari, D**. & Masson, S. (2020) Teachers are orchestrators of neuronal plasticity: effects of teaching practices on the brain. *Mind, Brain & Education*, 14(4), 415-428.

Yeo, D.J., Pollack, C., Merkley, R., **Ansari, D.** & Price, G.R. (2020) The "Inferior Temporal Numeral Area" distinguishes numerals from other character categories during passive viewing: A representational similarity analysis. *NeuroImage*, 241, 116716

Colling LJ, Szűcs D, De Marco D, et.al. (2020) A multilab registered replication of the attentional SNARC effect, *Advances in Methods and Practices in Psychological Science*, (1 of 84 co-authors), 3(2), 143-162

Wilkey, E.D. & Ansari, D. (2020) Challenging the neurobiological link between number sense and symbolic numerical abilities. *Annals of the New York Academy of Sciences*, 1461(1), 76-98

Hawes, Z. & Ansari, D. (2020) What explains the relationship between spatial and mathematical skills? A review of evidence from brain and behavior. *Psychonomic Bulletin & Review*. 27, 465-482

Goffin, C., Vogel., S.E., Slipenkyj, M. & Ansari, D. (2020) A comes before B, like 1 comes before 2. Is the parietal cortex sensitive to ordinal relationships in both numbers and letters? An fMRI-Adaptation study. *Human Brain Mapping*, 41(6), 1591-1610

Hutchison, J.E., **Ansari, D.** Zheng, S., De Jesus, S. & Lyons, I.M. (2020) The relation between subitizable symbolic and non-symbolic number processing over the kindergarten school year. *Developmental Science*, 23(2), e12884

Smyth, R. & Ansari, D. (2020) Do infants have a sense of numerosity? A p-curve analysis of infant numerosity discrimination studies. *Developmental Science*, 23(2) e12897

Goffin, C. & Ansari, D. (2019) How are symbols and non-symbolic numerical magnitudes related? Exploring bidirectional relationships in early numeracy. *Mind, Brain and Education*, 13(3), 143-156

Merkley, R., Conrad, B., Price, G.R. & Ansari, D. (2019) Investigating the visual number form area: a replication study. *Royal Society Open Science*, 6: 182067.

Goffin, C., Slipenkyj, M. & Ansari, D. (2019) Does writing handedness affect neural representation of symbolic number? An fMRI Adaptation Study *Cortex* (Registered Report), 121, 27-43

Peters, L. & Ansari, D. (2019) Are specific learning disorders truly specific, and are they disorders? *Trends in Neuroscience and Education*, 17, 100115

Hawes, Z., Sokolowski, M., Ononye, C. & Ansari, D. (2019) Neural Underpinnings of Numerical and Spatial Cognition: An fMRI Meta-Analysis of Brain Regions Associated with Symbolic Number, Arithmetic, and Mental Rotation. *Neuroscience & Biobehavioral Reviews*, 103: 316-336.

Matejko, A.A. & **Ansari D.** (2019) The neural association between arithmetic and basic numerical processing depends on arithmetic problem size not chronological age. *Developmental Cognitive Neuroscience*, 37:100653.

Archibald, L.M.D., Cardy, J.O., Ansari, D., Olino, T. & Joanisse, M.F. (2019) The consistency and cognitive predictors of children's oral language, reading and math learning profiles. *Learning and Individual Differences*, 70, 130-141.

Hawes, Z., Moss, J., Caswell, B., Seo, J. & Ansari, D. (2019). Relations between numerical, spatial, and executive function skills and mathematics achievement: A latent-variable approach. *Cognitive Psychology*, 109, 68-90.

Matejko, A.A., Hutchison, J. & Ansari, D. (2019) Numerical order and the intraparietal sulcus: Developmental specialization of the left intraparietal sulcus for symbolic ordinal processing. *Cortex*, 114, 41-53.

Thomas, M.S.C., **Ansari, D.** & Knowland, V. (2019) Educational Neuroscience: Progress and prospects. *Journal of Child Psychology and Psychiatry* (Annual Research Review), 60(4), 477-492.

Hawes, Z., Nosworthy, N., Archibald, L. & **Ansari, D.** (2019) Kindergarten children's symbolic comparison skills relate to 1st grade mathematics achievement: evidence from a two minute paper-and-pencil test. *Learning and Instruction*, 59, 21-33.

Wong, B., **Ansari, D.** & Bull, R. (2018) Magnitude Processing of Written Number Words is Influenced by Task, Rather Than Notation. *Acta Psychologica*, 191, 160-170.

Sokolowski, H.M. & Ansari, D. (2018) Understanding the effects of education through the lens of biology. *NPJ Science of Learning*, 3(1), 17

Moshontz, H., Campbell, L., Ebersole, C. R., IJzerman, H., Urry, H. L., Forscher, P. S., ...**Ansari, D**...Chartier, C. R. (2018) The Psychological Science Accelerator: Advancing Psychology through a Distributed Collaborative Network. *Advances in Methods and Practices in Psychological Science* (1 of 84 co-authors), 1(4), 501-515

Matejko, A.A. & Ansari, D. (2018) Contributions of cognitive neuroscience to the study of numerical cognition. *Journal of Numerical Cognition*, 4(3), 505-525.

Leibovich-Raveh, T., Lewis, D., Al-Rubaiey, K-S & Ansari D. (2018) A new method for calculating an Individual Subitizing Range. *Journal of Numerical Cognition*, 4(2), 429-447.

Hutchison, J., Lyons, I.M. & Ansari, D. (2018) More similar than different: Gender differences in basic numeracy are the exception, not the rule. *Child Development*.

Lyons, I.M., Bugden, S., Zheng, S., De Jesus, S. & Ansari, D. (2018) Symbolic Number Skills Predict Growth in Nonsymbolic Number Skills in Kindergarteners. *Developmental Psychology*, 54(3) 440-457.

Sokolowski, H.M., Fias.W., Ononye, C. & Ansari, D. (2017) Are numbers grounded in a general magnitude processing system? A functional neuroimaging meta-analysis. *Neuropsychologia*, 105:50-69.

Leibovich, T. & Ansari D. (2017) Accumulation of non-numerical evidence during nonsymbolic number processing in the brain: an fMRI study. *Human Brain Mapping*, 38(10): 4908-21.

Matejko, A. & Ansari, D. (2017) How do individual differences in children's domain specific and domain general abilities relate to brain activity within the intraparietal sulcus during arithmetic? An fMRI study. *Human Brain Mapping*, 38(8), 3941-56.

Vogel, S.E., Goffin, C., Bohnenberger, J., Koschutnig, G., Reishofer, G., Grabner, R.H. & **Ansari, D.** (2017) The left intraparietal sulcus adapts to symbolic number in both the visual and auditory modalities: evidence from fMRI. *NeuroImage*, 153: 16-27.

Leibovich, T., Alrubaiey, S. & Ansari, D. (2017) Beyond comparison: The influence of physical size on number estimation is modulated by notation, range and spatial arrangement. *Acta Psychologica*, 175: 33-41.

Xenidou-Dervou, I., Molenaar, D., **Ansari, D.**, van der Schoot, M., van Lieshout, E.C.D.M. 2017) Nonsymbolic and symbolic magnitude comparison skills as a longitudinal predictors of mathematical achievement. *Learning and Instruction*, 50, 1-13

Sokolowski, H.M., Fias.W., Mousa, A. & Ansari, D. (2017) Common and distinct brain regions in both parietal and frontal cortex support symbolic and nonsymbolic number processing in humans: A functional neuroimaging meta-analysis. *NeuroImage*, 146, 376-394.

Merkley, R. & Ansari, D. (2016) Why numerical symbols count in the development of mathematical skills: Evidence from brain and behaviour. *Current Opinions in Behavioral Sciences*, 10, 14-20.

Bugden, S. & Ansari, D. (2016) Probing the nature of deficits in the 'Approximate Number System' in children with persistent Developmental Dyscalculia. *Developmental Science*, 19, 817-33.

Alcock, L., **Ansari, D.,** Batchelor, S., Bisson, Marie-J., De Smedt, B., Gilmore, C., Göbel, S., Hannula-Sormunen, M., Hodgen, J., Inglis, M., Jones, I., Mazzocco, M., McNeil, N., Schneider, M., Simms, V. & Weber, K. (2016). Challenges in Mathematical Cognition: A Collaboratively-Derived Research Agenda. *Journal of Numerical Cognition*, 2, 20-41 Vanbinst, K., Ansari, D., Ghesquière, P. & De Smedt, B. (2016) Symbolic numerical magnitude processing is as important to arithmetic as phonological awareness is to reading. *PLoS ONE*, 11(3)e0151045

Matejko, A.A. & **Ansari**, **D** (2016) Trajectories of symbolic and nonsymbolic magnitude processing in the first year of formal schooling. *PLoS ONE*, 11(3)e0149863

Leibovich, T. & **Ansari, D.** (2016) The symbol-grounding problem in numerical cognition: A review of theory, evidence and outstanding questions. *Canadian Journal of Experimental Psychology* (Special Section on Numerical Cognition, edited by Jamie Campbell), 70:12-23.

Goffin, C. & Ansari, D. (2016) Beyond magnitude: Judging ordinality of symbolic number is unrelated to magnitude comparison and independently relates to individual differences in arithmetic. *Cognition*, 150, 68-76.

Leibovich, T., Vogel, S.E., Henik, A. & **Ansari, D**. (2016) Asymmetric processing of numerical and non-numerical magnitudes in the brain: An fMRI study. *Journal of Cognitive Neuroscience*, 28, 166-76.

Lyons, I.M. & Ansari, D. (2015) Numerical Order Processing in Children: From Reversing the Distance-Effect to Predicting Arithmetic. *Mind, Brain and Education*, 9, 207-21.

Lyons, I.M., Nuerk, H.C. & Ansari, D. (2015) Rethinking the implications of numerical ratio effects for understanding the development of representational precision and numerical processing across formats. *Journal of Experimental Psychology: General*, 144, 1021-35.

Holloway, ID., Atteveldt, N., Blomert, L. & Ansari D. (2015) Orthographic dependency in the neural correlates of reading: Evidence from audiovisual integration in English readers. *Cerebral Cortex*, 25, 1544-53.

Lyons, I.M., **Ansari, D.** & Beilock, S.L. (2015) Qualitatively different coding of symbolic and nonsymbolic numbers in the human brain. *Human Brain Mapping*, 36, 475-488.

Matejko, A.A. & **Ansari, D.** (2015) Drawing connections between white matter and numerical and mathematical cognition: A literature review. *Neuroscience & Biobehavioral Reviews*, 48C, 35-52.

Vogel, S.E., Goffin, C. & Ansari, D. (2014) Developmental specialization of the left parietal cortex for the semantic representation of Arabic numerals: An fMR-Adaptation study. *Developmental Cognitive Neuroscience*, 12C, 61-73.

Vogel, S.E., Remark, A. & Ansari, D. (2014) Differential processing of symbolic numerical magnitude and order in 1st grade children. *Journal of Experimental Child Psychology*, 129, 26-39.

Lyons, I.M., Price, G.R., Vaessen, A., Blomert, L. & Ansari, D. (2014) Numerical predictors of arithmetic success in grades 1-6. *Developmental Science*, 17, 714-26.

Atteveldt, N. & Ansari, D. (2014) How symbols transform brain function: A review in memory of Leo Blomert. *Trends in Neuroscience and Education*, 3, 44-49.

Chapman, C.S., Gallivan, J.P., Wood, D.K., Milne, J.L., **Ansari, D.,** Culham, J.,C. & Goodale, M.A. (2014) Counting on the motor system: Rapid action planning reveals the format- and magnitude-dependent extraction of numerical quantity. *Journal of Vision*, 26; 14(3): 30

Bartelet, D., Ansari, D., Vaessen, A. & Blomert, L. (2014) Cognitive Subtypes of Mathematics Learning Difficulties in Primary Education. *Research in Developmental Disabilities*, 35, 657-670.

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INVITED CONFERENCE, COLLOQUIA & WORKSHOP TALKS

2023

PIE Network (Policy Innovators in Education), USA (Virtual) European Association for Research on Learning & Instruction (Keynote), Thessaloniki, Greece 'Math Matters; Conference, Bellavista School, Johannesburg, South Africa Duolingo Research Colloquium, Pittsburgh, USA (Virtual) Western Galilee College, Israel (Virtual) Think Forward Educators, Australia (Virtual) Learning Disabilities Institute, Canada (Virtual) Mathematical Cognition Group Seminar Series, University College London, UK (Virtual) Centre for Diverse Learners, Solutions for Learners Conference, Burlington, Canada (Virtual) Neuroscience and Applied Cognitive Sciences Seminar, University of Guelph, Canada (Virtual) Department of Psychology, University of California at San Diego, USA (Virtual) International Dyslexia Association, Dallas Regional Conference, Dallas, USA College de France, Paris

2022

Division Scolaire France-Manitobaine, Manitoba, Canada (Virtual) Red River College Polytech, Manitoba, Canada (Virtual) British Columbia Association of School Psychologists Conference, Vancouver, Canada Behavioural Science Institute, Radboud University, Netherlands Association for Research in Neuroeducation (ARN) Conference, Montreal, Canada IDeA Zentrum, Goethe Universität Frankfurt, Germany Social Exposome Cluster Workshop, University of British Columbia, Canada Arkansas Department of Education, USA (Virtual) University of Maryland, Educational Psychology Colloquium Series, USA (Virtual) Galway Education Centre, Ireland (Virtual) Department of Neuroscience, University of Minnesota, USA (Virtual) College of Health, Psychology & Social Care, University of Derby, UK (Virtual) Mathematical Association, UK (Virtual)

2021

Demonstration School Branch, Ontario Ministry of Education, Canada (Virtual) LEAD Graduate School, University of Tuebingen, Germany (Virtual) Mathematics Education Centre, Loughborough University, UK (Virtual) Italian Society for Neurodevelopmental Disorders Annual Conference (Virtual) LD@school's 4th Annual Educators' Institute, Canada (Virtual) Westmark School, Los Angeles, USA (Virtual) British Dyslexia Association Conference, UK (Virtual) Learning Disabilities Association of Canada Annual Conference (Virtual) Patoss Annual Conference (Virtual) Basic Education Sector Lekgotla, Johannesburg, South Africa (Virtual) Department of Biological &Experimental Psychology, Queen Mary University, London (Virtual) Canadian Early Mathematics Education Conference (Virtual) Learning Disabilities Association of Halton Conference (Virtual)

2020

Developmental Brown Bag, Department of Psychology, University of Chicago (Virtual) School of Psychology, Bangor University (Virtual) Brain Imaging Research Centre, University of Connecticut, USA (Virtual) Alberta Children's Hospital Department of Paediatrics, Canada Vanderbilt University, Peabody College, Nashville, USA Basic Education Sector Lekgotla, Johannesburg, South Africa

2019

Fyssen Foundation Seminar "Foundations of Mathematics", Paris, France Georgetown University, Department of Psychology, USA IBE-UNESCO Dialogue on Neuroscience &Future of Education & Learning, Daegu, Korea University of Delaware "Neuroscience and Mathematics Education Workshop", USA School of Psychological Science, University of Western Australia, Perth, Australia Science of Learning Seminar Series, National Institute of Education, Singapore Centre for Research & Development in Learning, Nanyang Technological University, Singapore Open Science: Walking the Talk, Library, Nanyang Technological University, Singapore Department of Psychology, University of Winnipeg, Winnipeg, Canada Global Education & Skills Forum, Dubai, UAE Language, Literacy and Learning Conference, Perth Australia

2018

Science of Learning Symposium, National Research Foundation of Singapore, Singapore l'Association francophone pour l'enseignement des mathématiques en Ontario, Ottawa, Canada Mathematical Cognition Workshop, University of Leuven, Belgium Macquire University, Sydney, Australia British Dyslexia Association, Telford, UK Jean Piaget Conference, Archives Jean Piaget, Geneva, Switzerland Latin American School for Education, Cognitive and Neural Sciences, Santiago de Chile, Chile Ontario Mathematics Coordinators Association, Mississauga, Ontario Association of School Psychologists of British Columbia, Surrey, Canada

2017

Department of Psychology, University of Waterloo, Canada

The Art & Science of Math Education Conference, London, ON, Canada

Current Research in Mathematics Education: What does it mean for the classroom? Peter Gilgan Centre for Research & Learning, Toronto, Canada

The Annual Learnus Lecture, London, UK

Centre for Educational Neuroscience, London, UK

ResearchED, Toronto, Canada

Behavioural & Neurological Perspectives on Mathematical Thought, Royal Academy of Science, Stockolm, Sweden

Centre for Research & Development in Learning, Nanyang Technological University, Singapore National Institute of Education, Singapore

Developmental Disabilities Research Day, Western University, Canada

University of Michigan, Combined Program in Education & Psychology, UA

Invited SRCD Salon on "Education Neuroscience: Limitations and Opportunities", Austin, USA

Dr. Patricia Canning Memorial Lecture in Child Health & Development, Memorial University, St. John's, Canada

Learning & the Brain Conference, San Francisco

2016

The Art & Science of Math Education Conference, Ottawa, Canada

Association of School Psychologists of British Columbia, Vancouver, Canada Association of Educational Therapists, Redwood City, CA, USA 4th Annual FLUX Congress, St. Louis, USA

Fifth Symposium of the Association for Research in Neuroeducation, Montreal, Canada Public Education Symposium, Ontario Public School Boards' Association, Toronto, Canada Learning Disabilities Association of Halton 5th Annual Conference, Burlington, Canada Center for Human Development, University of California, San Diego, USA Department of Psychology, University of Toronto, Canada

2015

Association of Educational Researchers of Ontario (AERO), Toronto, Canada Spatial Intelligence and Learning Center Conference, University of Chicago Neuroplasticity & Education Conference, Vancouver, Canada Canadian Education Association, Quebec City, Canada Learning Disabilities Association of Ontario, Toronto, Canada University of Anger, Discoveries in Neuroscience Conference, France Centre for the Neurocognitive Basis of Numerical Cognition, Israel Learning & The Brain Conference, New York, USA Department of Psychology, Boston College, USA Department of Psychology, University of Pittsburgh, USA Temporal Dynamics of Learning Center, All Hands on Deck Meeting, UC San Diego, USA Ontario Institute for Studies in Education, Toronto, Canada Royal Canadian Institute, Toronto, Canada White House Workshop: Bridging Neuroscience and Learning, Washington DC, USA

2014

Maastricht Brain Imaging Centre, Blomert Lecture, Maastricht, Netherlands Arhus University, Department of Education, Copenhagen Campus, Denmark Tracking Early Human Development Symposium, British Academy, London, UK Centre for Brain and Cognitive Development, Birkbeck College, London, UK Centre for Educational Neuroscience, London, UK Gallaudet University, Cognitive & Educational Neuroscience Seminar Series McMaster Symposium on Education & Cognition Brain and Learning Conference, Arhus University, Copenhagen Campus, Denmark 'Grand Challenges in Mathematical Cognition ', Kavli Royal Society Centre, London, UK 3rd Word Congress on 'Neuroeducation', Lima, Peru Second Midwest Meeting on Mathematical Thinking, Wisconsin, MI, USA OECD Symposium on Teacher Pedagogical Knowledge, Brussels, Belgium 2nd Annual Math Cognition Conference, Washington, DC, USA 18th Congress of the German Association for Dyslexia and Dyscalculia, Erfurt, Germany 2014 BASICS Conference, Banff, Alberta, Canada

2013

Forum for Action, Ontario Ministry for Education, Toronto, Canada 'Kickstarting Education – Cognition, Content & Confidence', Toronto Education Workers Department of Psychology, Neuroscience & Behaviour, McMaster University, Canada Dyscalculia & Dyslexia Conference, University of Munich, Germany Educational Neuroscience Workshop, University of Tuebingen, Germany Mortimer D. Sackler Summer Institute, Weill Cornell Medical College, New York, USA Korea University, Seoul, 2013 bMRI Symposium, Seoul, Korea (delivered remotely) 5th National Dyscalculia & MLD Conference, London, UK Mind, Brain and Education Conference, Universidad San Francisco de Quito, Ecuador Neurobiology Seminar Series, The University of Texas at San Antonio, USA Ontario Association for Mathematics Education 2013 Conference, Toronto, Canada Stanford Human Intracranial Cognitive Electrophysiology Program, Stanford University Fields Institute Workshop on Mind in Mathematics: New Frontiers, Toronto, Canada Children's Health Research Institute (CHRI), London, Canada Math Connect Conference, University of Calgary, Canada

2012

International Numeracy Conference, German Federal Ministry for Economic Cooperation and Development & the Global Partnership for Education, Berlin, Germany

Education & Neuroscience Conference, University of Geneva, Switzerland International Dyslexia Association (IDA) Meeting, Baltimore, USA Workshop on Developmental Dyscalculia, Cambridge University, UK NeuroDevNet 2012 Brain Development Conference, Toronto, Canada Opening of Fraser Mustard Institute for Human Development, University of Toronto, Canada Keynote Speaker, Learning and the Brain Conference, Boston, USA Canadian Institute for Advanced Research (CIFAR), Meeting of the Experienced-based Brain and Biological Development Program, Alton, Ontario, Canada Mathematics Education Centre, Loughborough University, UK Department of Experimental Psychology, University of Oxford, UK Centre for Cognitive and Social Neuroscience, University of Chicago, USA 4th Expert Meeting on Mathematical Thinking and Learning, Leuven University, Belgium Department of Psychology, Queen's University, Kingston, Canada

2011

Temple Institute for Learning and Education Sciences (TILES), Temple University, USA 'The Arts and Science of Mathematics Education', University of Winnipeg, Canada Department of Psychology, The University of Western Ontario, Canada Second Annual Aspen Brain Forum, USA

Annual Convention of the American Psychological Association, Washington, DC, USA Summer Institute in Cognitive Neuroscience, UC Santa Barbara, USA Learning and the Brain Conference, Chicago, USA

Centre for the Neurocognitive Basis of Numerical Cognition Workshop, Israel 17th Congress of the German Association for Dyslexia and Dyscalculia, Erfurt, Germany Human Development Forum, World Bank, Washington DC, USA.

2010

Dorothy Hill Memorial Symposium, Ontario Psychological Association, Toronto, Canada 'Brain, Learning & Applications Institute' Hillfield Strathallen College, Hamilton, Canada Institute of Cognitive Neuroscience, National Central University, Taiwan Centre for Educational Neuroscience, UCL, Birkbeck and Institute of Education, London, UK Annual Convention of the Association for Psychological Science, USA Georgetown University, Interdisciplinary Program in Neuroscience, Washington, D.C, USA.

2009

September 2009 - Decade of the Mind V, Berlin, Germany

Department of Psychology, University of Sussex, UK.

Experimental Psychology Society/ESCOP Workshop on: "Cultural effects on the mental number line", University of York, UK

Canadian Math Society (CMS), Memorial University, Newfoundland, Canada

Third Annual Meeting on Concepts, Actions and Objects: Functional and Neural Perspectives", University of Trento, Rovereto, Italy

Institute for Advanced Studies, Jerusalem, Israel

Workshop on "Cognitive Neuroscience meets Mathematics Education', Brugge, Belgium

Department of Psychology, University of Maastricht, Netherlands

Cognitive Science Distinguished Lecture Series, Carleton University, Canada

2008

Department of Psychology, University of Waterloo, Canada Department of Psychology, Wilfred Laurier University, Canada Department of Psychology, Université libre de Bruxelles, Brussels, Belgium 16th Congress of the German Association for Dyslexia and Dyscalculia, Berlin, Germany. Department of Psychology, University of Guelph, Canada International Forum of Applied Neuroscience in Education, Monterrey, Mexico Department of Education, University of Turku, Finland College de France, Paris, France. Ontario Visionary Establishment (LOVE) Conference, Niagara Falls, Canada. Fields Institute for Research in Mathematical Science, Toronto, Canada

2007

Max Planck Institute for Biological Cybernetics, Tuebingen, Germany Department of Psychology, University of Tuebingen, Germany 'Building the Interface' Conference on Educational Neuroscience, Stowe, VT. USA Workshop on "Dyslexia – from Causal Research to the Implementation of Remedial Education Measures", Free University of Berlin, Germany University of Graz, Medical University, Austria University of Graz, School of Education, Austria Department of Human Development and Applied Psychology, Ontario Institute for Studies in Education, University of Toronto, Canada

2006

Conference on 'Neural Basis of Mathematical Development', Peabody College, Vanderbilt University, USA

2004

Sackler Institute for Developmental Psychobiology, Weill Medical College of Cornell University, New York, NY, USA Transfercenter for Neuroscience and Learning, University of Ulm, Germany

2003

Department of Experimental Psychology, University Ghent, Belgium

2002

Cognitive Neuroscience Laboratory, Singapore General Hospital, Singapore Institute of Education, University of London, UK Conference on 'Conference on Mathematical Disabilities' Department of Experimental Psychology, University of Oxford, UK Sackler Institute for Developmental Psychobiology, Weill Medical College, NY, USA Institute of Cognitive Neuroscience, University College London, UK

CONFERENCE PRESENTATIONS (83)

Goffin, C., Sokolowski, H. M., Slipenkyj, M., & Ansari, D. (2019). Is writing handedness involved in the neural representation of symbolic number? *Poster presented at the Mathematical Cognition and Learning Society (MCLS), Ottawa, Canada.*

Hawes, Z., Sokolowski, H. M., Ononye, C., & Ansari, D. (2019). Where and under what conditions do spatial and numerical cognition converge and diverge in the brain? An fMRI metaanalysis. *Poster presented at the Mathematical Cognition and Learning Society Conference (MCLS), Ottawa, Canada.*

Peters L., Vanbinst K., De Smedt B., & **Ansari D.** (2019). The effect of formal math education: A cross-national study. *Poster presented at the Mathematical Cognition and Learning Society Conference (MCLS). Ottawa, Canada.*

Sokolowski, H. M., Hawes, Z., Peters, L., & Ansari, D. (2019). Symbols are special: An fMRI adaptation study of symbolic, nonsymbolic, and non-numerical magnitude processing in the human brain. *Poster presented at the Mathematical Cognition and Learning Society conference, Ottawa, Canada.*

Ansari, D., De Smedt, B., Joanisse, M., Peters, L., Bathelt, J. & Rimfeld, K. (2018) Associated Domains of Learning: On the overlap between reading and arithmetic. *Symposium presented at the International Mind, Brain, and Education Society Conference, Los Angeles, USA.*

Goffin, C., Sokolowski, H. M., Matejko, A. A., Bugden, S., Lyons, I. M. & Ansari, D. (2018). Assessing knowledge translation in the field of mind, brain and education in pre-service teachers. *Poster presented at the International Mind, Brain, and Education Society Conference, Los Angeles, USA.*

Sokolowski, H.M., Merkley, R., Kinissepp, S., Vaikuntharajan, P. & Ansari, D. (2018). Learning verbal number words relates to how children attend to numerical quantity. *Poster presented at the International Mind, Brain, and Education Society Conference, Los Angeles, USA.*

Hawes, Z., Moss, J., Caswell, B., Seo, J. & Ansari, D. (2018). Relations between Numerical, Spatial, and Executive Function Skills and Mathematics Achievement: A Latent-Variable Approach. *Poster presented at the Mathematical Cognition and Learning Society (MCLS) Conference, Oxford University, UK*.

Goffin, C., Vogel, S. E. & Ansari, D. (2018). Do general ordinal relationships account for symbolic number representation? *Poster presented at the Mathematical Cognition and Learning Society (MCLS) Conference, Oxford, UK.*

Lyons, I. M., Hutchison, J. E., Bugden, S., Goffin, C., & Ansari, D. (2018). Kindergarteners reliably mis-classify ordered sequences of non-adjacent numbers. *Poster presented at the Mathematical Cognition and Learning Society (MCLS) Conference, Oxford, UK.*

Sokolowski, H. M., Hawes, Z, Leibovich, T. Ansari, D. (2017) The interference of symbolic and nonsymbolic numbers in a novel enumeration stroop task. *Poster presented at the 29th Annual Association for Psychological Science (APS) Convention, Boston, USA*.

Goffin, C., Vogel, S. E. & Ansari, D. (2017). Do general ordinal relationships account for symbolic number representation in the brain? An fMRI adaptation study. *Poster presented at the 29th Annual APS Convention, Boston, USA*.

Merkley, R., Lyons, I.M. & Ansari D. (2016) Longitudinal analysis of mathematics abilities in the early years: Modeling risk and resilience for learning difficulties. *Poster presented at NeuroDevNet Annual Brain Development Conference, Calgary, Canada.*

Leibovich, T. & Ansari, D. (2016) New method for calculating individual subitizing range. *Poster presented at The International Mind, Brain and Education Society 2016 Conference, Toronto, Canada.*

Vogel, S., Goffin, C., Lyons I., Bohnenberger, J., Koschutnig, K., Grabner, R. & Ansari, D. (2016) The neural correlates of auditory and visual symbolic number processing: Investigations with fMRI adaptation. *Poster presented at The International Mind, Brain and Education Society 2016 Conference, Toronto, Canada.*

Sokolowski, H. M. & Ansari, D. (2016) Developmental changes in the neural correlates of number processing: A functional neuroimaging meta-analysis. *Poster presented at EARLI-SIG 22 "Neuroscience and Education" Conference, Amsterdam, Netherlands.*

Lyons, I., Jesus, S., Zheng, S., Bugden, S. & Ansari, D. (2016) Assessing numeracy in the classroom. *Poster presented at the Latin American School for Educational Neuroscience, Argentina.*

Sokolowski, H. M., Fias, W. & Ansari D. (2016) Common and distinct brain regions support symbolic and nonsymbolic numerical magnitude processing: A functional neuroimaging metaanalysis. *Poster presented at the Education and Neuroscience Symposium, Germany.*

Goffin, C. & Ansari, D. (2015) Measuring symbolic numerical processing in adults. *Poster* presented at the NIH Math Conference, St. Louis, Missouri, USA.

Sokolowski. H. M., Fias, W., & Ansari, D. (2015) Are numbers specialized or grounded in a generalized system for magnitude representation: A functional neuroimaging metaanalysis. *Poster presented at the NIH Math Conference, St. Louis, Missouri, USA*.

Bugden, S. & Ansari, D. (2014). Probing the nature of deficits in the 'Approximate Number System' in children with persistent Developmental Dyscalculia. *Poster presented at the NIH Math Cognition Meeting "Development of Mathematical Cognition: Neural Substrates and Genetic Influences", Washington DC, USA.*

Matejko, A. & Ansari, D. (2014). How the first year of formal schooling shapes symbolic number development: Evidence from brain and behaviour. *Poster presented at the NIH Math Cognition Meeting "Development of Mathematical Cognition: Neural Substrates and Genetic Influences", Washington DC, USA.*

Bugden, S. & Ansari, D. (2014). Probing the nature of deficits in the 'Approximate Number System' in children with persistent Developmental Dyscalculia. *Poster at the annual meeting of the Banff Annual Seminar in Cognitive Science (BASICS), Banff, Alberta, Canada.*

Goffin, C., Vogel, S. E., & Ansari, D. (2014). Reliability and validity of effects commonly used in numerical cognition research. *Poster at the Banff Annual Seminar in Cognitive Science* (*BASICS*), *Banff, Canada*.

Lyons IM, Vaessen A, Blomert L, Ansari D (2014). The Development of Ordinal Processing of Numbers in Grades 1-6. *Poster at the Banff Annual Seminar in Cognitive Science (BASICS)*, Banff, Alberta, Canada.

Matejko, A., Ansari, D. (2014). Trajectories of math and number development in Grade 1: Evidence from brain and behavior. *Poster presented at the BASICS Conference, Banff, AB, Canada.*

Lyons, I.M. **Ansari, D.** & Beilock, S.L. (2013). Analogue coding of non-symbolic numbers and digital coding of symbolic numbers in the human brain. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Seattle, WA, USA.* **Postdoctoral first author awarded OHBM Trainee Abstract Award**

Lyons, I.M., **Ansari, D.** & Beilock, S.L. (2013). Distributed coding of symbolic and nonsymbolic numbers in the human brain. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, USA*.

Ansari, D., Price, G.R., Vaessen, A. & Blomert, L. (2013). Why symbols count: The relationship between individual differences in 1st to 6th graders' arithmetic competencies and their symbolic and non-symbolic numerical magnitude processing skills. *Oral Symposium Presentation at Biennial Meeting of the Society for Research in Child Development, Seattle, WA, USA*.

Bugden, S., Archibald, L. & Ansari, D. (2013). The effects of symbolic and non-symbolic priming on magnitude processing in children with developmental dyscalculia. *Poster at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA, USA.*

Matjeko, A., Sokolowski, M. & Ansari, D. (2013). Early numeracy skills in preschool and kindergarten children: an IPad pilot study. *Poster at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA, USA.*

Vogel, S.E., Goffin, C. & **Ansari, D**. (2013). Entwicklungsbedingte Veränderung der neuronalen Korrelate für die Repräsentation symbolischer Zahlenmengen. 14. Fachgruppentagung Pädagogische Psycholgoie, Hildesheim, Germany.

Battista, C., **Ansari, D.** & Morton, J.B. (2012). How individual differences in strategy use and development impact the neural circuitry underlying arithmetic skills: Evidence from Customized Arithmetic Training. *Oral Presentation in Nanosymposium on 'Development of Numerical Cognition', Annual Meeting of the Society for Neuroscience, New Orleans, USA.*

Battista, C., **Ansari, D.** & Morton, J.B. (2012). The interaction between strategy and training on brain circuits underlying arithmetic processing. *Poster at the EARLI-SIG 22 "Neuroscience and Education" Conference, Institute of Education, London, UK.*

Bugden, S., Nosworthy, N., Archibald, L. & Ansari, D. (2012). A longitudinal investigation of the stability of cognitive profiles in children with developmental dyscalculia. *Poster at the EARLI-SIG 22 "Neuroscience and Education" Conference, Institute of Education, London, UK.*

Matejko, A., Price, G.R., Mazzocco, M.M. & Ansari, D. (2012). Individual differences in left parietal white matter predict performance on the Preliminary Scholastic Aptitude Test (PSAT). *Poster at the EARLI-SIG 22 "Neuroscience and Education" Conference, Institute of Education, London, UK.*

Vogel, S.E. & Ansari, D. (2012). Developmental changes in the brain mechanisms underlying the sematic processing of numerical symbols. *Poster at the EARLI-SIG 22 "Neuroscience and Education" Conference, Institute of Education, London, UK.*

Price, G.R., Mazzocco, M. & **Ansari, D.** (2012). Neural correlates of mathematical competence: Parietal brain activation during single digit arithmetic predicts performance on PSAT math test. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, Chicago, USA.*

Vogel, S., Grabner, R.H., Schneider, M., Siegler, R.S. & Ansari, D. (2012). The neural correlates of mapping numerical and non-numerical quantities into space. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, Chicago, USA*.

Battista, C., Ansari, D. & Morton, J.B. (2012). A customized arithmetic program for use in functional neuroimaging experiments. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, Chicago, USA.*

Ansari, D. (2011). The relationship between basic number processing and individual differences in mathematical achievement: Evidence from brain and behavior. *Oral symposium presentation,* 15th European Conference on Developmental Psychology, Bergen, Norway.

Vogel, S.E., Price, G.R., Ly, R., Halberda, J. & Ansari, D. (2011). Cerebral correlates of nonsymbolic numerical magnitude processing: The role of surface area. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Quebec City, Canada.*

Bugden, S., Price, G.R., McLean, A. & Ansari, D. (2011). Parietal brain activation during number processing predicts children's arithmetic achievement. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Quebec City, Canada.*

Holloway, I.D., Blomert, L. & Ansari, D. (2011). The sound of symbols: Audiovisual integration in Hindu-Arabic numerals in the brain. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Quebec City, Canada.*

Bugden, S. & Ansari, D. (2011). Individual differences in neural correlates of symbolic number processing correlate with children's arithmetic achievement. *Oral symposium presentation, Biennial Meeting of the Society for Research in Child Development, Montreal, QC, Canada.*

DeSmedt, B., Holloway, I. & Ansari, D. (2011). Brain activation during calculation in children with varying levels of arithmetic fluency. *Oral symposium presentation at the Biennial Meeting of the Society for Research in Child Development, Montreal, QC, Canada.*

Archibald, L., Ansari, D., Joanisse, M.F & Oram Cardy, J.E. (2011). Language, reading and math development: Specific and co-occuring deficits. *Poster at Biennial Meeting of the Society for Research in Child Development, Montreal, QC, Canada.*

Ansari, D. (2010). Towards an educational neuroscience of the calculating brain. Oral Mini-Symposium presentation, 40th Annual Meeting of the Society for Neuroscience, San Diego, USA.

Chapman, C.S., Gallivan, J.P., Wood, D.K., Milne, J.L., Culham, J.C., **Ansari, D,** & Goodale, M.A. (2010). Rapid reaching task 'points' toward different representations of number. *Poster at the 40th Annual Meeting of the Society for Neuroscience, San Diego, USA*.

Ansari, D. & Zebian, S. (2010). Effects of formal education in symbolic and non-symbolic numerical magnitude processing. *Poster at the 24th Attention & Performance Meeting: Space, time and Number: Cerebral Foundations of Mathematical Intuitions, Abbaye de Vaux de Cernay, France.* **Invited as Observer.**

Price, G.R. & Ansari, D. (2010). Neural correlates of Arabic digit processing: Exploring the visual number code. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Barcelona, Spain.*

Grabner, R.H., Ansari, D. Reishofer, G., Koschutnig, K. & Ebner, F. (2010). Associative confusion in arithmetic problem solving: An fMRI study. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Barcelona, Spain.*

Nosworthy, N., Waxer, M. & Ansari, D. (2010). Electrophysiology of number comparison in 6-7 year old children. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, Montreal, Canada.*

Ansari, D. (2009). The calculating brain: Roles of development and individual differences. *Oral symposium presentation at the IV Biennial Meeting of the Cognitive Development Society, San Antonio, TX, USA.*

Zebian, S. & Ansari, D. (2010) The Distance Effect in literate and illiterate Arabic speakers. Paper Presentation at the Thirty-Sixth Annual Convention of the Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB '10), March 29. De Montfort University, Leicester, UK.

Ansari, D., Grabner, R.H., Koschutnig, K., Reishofer, G., Ebner, F. & Neuper, C. (2009) Individual differences in mathematical competence modulate brain responses to arithmetic errors: An fMRI study. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), San Francisco, CA, USA.*

Grabner, R.H., **Ansari, D.**, Koschutnig, K., Reishofer, G., Ebner, F. & Neuper, C. (2009). Mapping arithmetic problem solving strategies in the brain: The role of the left angular gyrus in arithmetic fact retrieval. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), San Francisco, CA, USA.*

Holloway, I.D. & Ansari, D. (2009). Age-related specialization of the inferior parietal cortex for the abstract representation of numerical magnitude. *Poster at the 15th Annual Meeting of the Organization for Human Brain Mapping (HBM), San Francisco, CA, USA.*

Van Eimeren, L. Ansari, D, Grabner, R.H., Koschutnig, K., Reishofer, G., Ebner, F & Neuper, C. (2009). White matter microstructure of the left superior corona radiata is related to activation differences in the left angular gyrus during calculation. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), San Francisco, CA, USA*. Student first author awarded OHBM Trainee Abstract Award

Hannula, M.M., Grabner, R.H., Lehtinen, E., Laine, T. Parkkola, R. & Ansari, D. (2009). Neural correlates of spontaneous focusing on numerosity (SFON). *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), San Francisco, CA, USA*.

De Smedt, B., Taylor, J., Archibald, L. & Ansari, D. (2009). How is phonological processing related to individual differences in arithmetic skills? *Oral symposium presentation at the European Society of Psychology, Krakow, Poland.*

Ansari, D. & Holloway, I.D. (2008). Common and segregated neural pathways for the processing of symbolic and non-symbolic numerical magnitude: Evidence from children and adults. *Poster at MGH-Foundation IPSEN-Cell Exciting Biologies 2008: Biology of Cognition Workshop, Chantilly, France.*

Ansari, D. (2008). Functional neuroimaging of typical and atypical number development. *Oral presentation at Mini-Symposium, Annual Meeting of the Society for Neuroscience, Washington DC., USA.*

Ansari, D. (2008). The development of symbolic and non-symbolic numerical magnitude representation: Evidence from behavioural and brain-imaging studies. *Oral Symposium Presentation at the XXIX International Congress of Psychology (ICP), Berlin, Germany.*

Ansari, D. (2008). Developing an understanding of abstract numerical symbols: Behavioural and brain-imaging evidence. *Oral Symposium Presentation at the Meeting of the International Society for the Study of Behavioural Development (ISSBD), Wuerzburg Germany.*

Holloway, I.D. & Ansari, D. (2008). Developmental specialization for symbolic number processing in the left supramarginal gyrus – an fMRI study. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, USA*.

Van Eimeren, L., Holloway, I., Niogi, S., McCandliss, B.D. & Ansari, D. (2008). Left temporoparietal white matter microstructure "matters" for both reading and mathematical abilities: Correlation between fractional anisotropy values in the left superior corona radiata and children's math scores. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, USA*.

Price, G.R., Holloway, I., Vesterinen, M., Rasanen, P. & Ansari, D. (2008). Numerical magnitude processing impairments in the developmental dyscalculic brain. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, USA*.

Hannula, M.H., **Ansari, D.,** McCandliss, B.D. (2008). Parietal activation during symbolic number processing depends on an explicit focus on numerical magnitude. *Poster at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, USA*.

Hannula, M.H., **Ansari, D.,** McCandliss, B.D. (2007). The intraparietal sulcus exhibits numberspecificity only when explicit access to number semantics is required. *Poster presented at the Summer School on Numeracy and Brain Development (NUMBRA). Santorini, Greece.*

Grabner, R.H., Ansari, D., Reishofer, G., Stern, E., Ebner, F. & Neuper, C. (2007). Brain activation patterns during mental calculation are related to mathematical competence. *Poster presented at the Summer School on Numeracy and Brain Development (NUMBRA). Santorini, Greece.*

Grabner, R.H., **Ansari, D**., Reishofer, G., Stern, E., Neubauer, A.C., Ebner, F. & Neuper, C. (2007). The impact of mathematical competence on brain activation during mental calculation. *Poster presented at the Biennial Meeting of the International Society for the Study of Individual Differences (ISSID). Giessen, Germany.*

Ansari, D. (2007). Behavioural and brain mechanisms underlying children's understanding of numerical magnitude: Implications for education. *Oral Symposium Presentation at the 12th Biennial Conference for Research on Learning and Instruction (EARLI), Budapest, Hungary*

Invited Discussant at Symposium entitled: "Relations between external and internal knowledge representations in mathematics learning". (2007). *Organized by Michael Schneider, Biennial Conference for Research on Learning and Instruction (EARLI), Budapest, Hungary.*

Van Herwegen, J., **Ansari, D**., Xu, F. & Karmiloff-Smith, A. (2007). Small and large number processing in infants and toddlers with Williams syndrome. *Oral presentation at the 6th IEEE International Conference on Development and Learning. Imperial College London, UK.*

Ansari D (2007). Comorbidity of mathematics learning disability with Williams-Beuren Syndrome. Oral Presentation at Annual Conference of the Academy for Research in Learning Disabilities, Bled, Slovenia.

Ansari, D. & Lyons, I. (2007). Hemispheric differences for the processing of small number and shape in occipitotemporal cortex revealed fMRI adaptation. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Chicago, IL, USA.*

Lyons, I. & Ansari, D. (2007). The neural correlates of mapping numerical quantities onto abstract symbols. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Chicago, IL, USA.*

Student first author awarded OHBM Trainee Abstract Award

Morton, J.B. & Ansari, D. (2007). Neurocognitive mechanisms underlying the development of cognitive flexibility: A developmental fMRI study. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Chicago, IL, USA.*

Grabner, R.H., **Ansari, D.**, Reishofer, G., Neuper, C. & Ebner, F. (2007). Effects of numerical competence on the neural correlates of number magnitude processing. *Poster at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Chicago, IL, USA.*

Holloway, I. & Ansari, D. (2007). Developmental changes in numerical and non-numerical comparison reveal domain-general and domain-specific factors in the emergence of number semantics and mathematical skills. *Oral Presentation at the Annual Convention of the Association for Psychological Science, Washington, DC, USA.*

van Eimeren, L., MacMillan, K.D. & Ansari, D. (2007). The role of subitizing in children's development of verbal counting. *Poster at the Biennial Meeting of the Society of Research in Child Development, Boston, MA, USA.*

Ansari, D (2006). Typical and atypical development of approximate number representation: Evidence from behavioral and brain-imaging studies. *Oral presentation at the International Congress of Applied Psychology. Athens, Greece.*

Holloway, I & Ansari, D (2006) How domain-specific are developmental changes in the distance effect? *Poster at the 2006 NUMBRA Summer School on numeracy, reading, dyslexia and dyscalculia : Brain development, culture and remediation, Jyvaskala, Finland.* Also selected for Oral Presentation

Ansari, D., Fugelsang J.A., Dhital, B. & Venkatraman, V. (2006) Dissociating response-conflict from numerical magnitude processing in the brain: An event-related fMRI study. *Poster presented at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Florence Italy.*

Ansari, D. & Dhital, B. (2005). The Neural basis of the symbolic distance effect in children and adults: An event-related fMRI study. *Presented at NUMBRA/ESCOP Summer School* "*Neuroscience of number processing*.", *Erice, Sicily, Italy* **Also selected for Oral Presentation**

Ansari, D. (2005). "Atypical trajectories of number development: The case of Williams syndrome," *Paper Symposium, Biennial Meeting of the Society of Research in Child Development, Atlanta, (GA)*. Discussant at same symposium.

Venkatraman, V., **Ansari, D.**, & Chee, M. (2005). Effects of language switching on arithmetic processing: A bilingual fMRI study. *Poster presented at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Toronto, Canada.*

Ansari, D. (2004). The promise of cognitive science and cognitive neuroscience for mathematics education research and practice. *Paper presented at the International Congress on Mathematical Education. Copenhagen, Denmark.*

Ansari, D., Donlan, C., & Karmiloff-Smith, A. (2004). The importance of low-level representational deficits in developmental impairments of numerical cognition: Evidence from Williams syndrome. *Conference Symposia Presentation, International Congress of Psychology, Bejing, China.*

Ansari, D., Venkatraman, V., & Chee, M.W.L. (2003). Neural correlates of symbolic and nonsymbolic arithmetic. *Poster presented at the Annual Meeting of the Society for Neuroscience*, *New Orleans, USA*.

Ansari, D., Ewing, S.A., Donlan, C., Thomas, M.S.C, & Karmiloff-Smith, A. (2003). What predicts number development in typical and atypical development? *Poster presentation at the British Psychological Society, Developmental Section Annual Conference, Coventry, UK.*

Ansari, D., Donlan, C., Ewing, S.A., Grice, S.J., & Karmiloff-Smith, A. (2002). Atypical numerical representation in Williams syndrome? *Poster presented at the Meeting of the Cognitive Neuroscience Society, San Francisco, CA, USA*.

Sodhi, M.S., Ansari, D., & Harrison, P.J. (2002). Genetic imprinting in schizophrenia. Poster presented at the Annual Meeting of the Society for Neuroscience, Orlando, FL, USA.

EDITORIAL SERVICE

Editorial Duties

Standing Associate Editor, Cognition, 2023 – present Associate Editor, Journal of Educational Psychology, 2020 - present

Past

Registered Reports Editor, *Developmental Science* 2018 - 2023 Associate Editor, *Frontiers for Young Minds*, 2013 - 2023 Rapid Internal Review Editor, *Developmental Science* 2016 - 2023 Associate Editor, *Developmental Science*, 2009 – 2017 Academic Editor, *PLOS One*, 2013 - 2014 Associate Editor, *Mind, Brain and Education*, 2011 - 2015

Ad Hoc

Guest Action Editor, *eLIFE*, 2019
Guest Action Editor, *Proceedings of the National Academy of Sciences (PNAS)*, 2019
Co-editor (with Daniel C. Hyde), Special Issue on 'Development of the Mathematical Brain', *Developmental Cognitive Neuroscience*, 2016
External Action Editor, *Journal of Experimental Psychology: General*, 2015
Co-editor, Special Issue, *International Journal of Mathematics Education*, 2010
Co-editor, Research Topic, *Frontiers in Human Neuroscience*, 2011.
Co-editor, Special Issue, *Mind, Brain and Education*, 2011.
Section Editor, *Canadian Language and Literacy Network (CLLRNet) Encyclopedia of Language and Literacy Development*. 2007 - 2010

Editorial Board Membership

Editorial Board, *Psychological Science in the Public Interest*, 2019 - present Editorial Board, *Cognitive Development*, 2014 - 2020 Editorial Board, *Cognition*, 2011 - 2023 Editorial Board, *Neuropsychologia*, 2011 - present Editorial Board, *Trends in Neuroscience and Education*, 2011 - present Editorial Board, *Lernen und Lernstörungen*, 2011 – present Editorial Board, *Child Development Perspectives*, 2011 – 2015 Editorial Board, *Encyclopedia of Sciences of Learning*, 2009 – 2012

Grant Review Panels

Standing Member:

2018 – College of Expert Reviewers, European Science Foundation (ESF)
2017- College of Reviewers, Canadian Institute of Health Research (CIHR)
2015 - 2019, Member, Consolidator Grant Panel, European Research Council (ERC)
2013-2016 Member, Biological Systems and Functions Evaluation Group, Discovery Grant
Panel, Natural Sciences and Engineering Research Council of Canada (NSERC)
2012-2014 Member & Scientific Officer, Research Management Committee, NeuroDevNet
2010 - 2013 Principal Member, Basic Processes Review Panel, Institute of Education Sciences, US Department of Education

Ad-hoc Member:

2016 – 2017 Canadian Institutes of Health Research (CIHR) Project Scheme, Stage 1 September 2015 - Developmental Neurosciences Research Training Awards, Brain Canada September 2012 – Science Campus Tübingen, Grant Review Panel July 2012 – National Institutes of Child Health and Development (NICHD), Learning Disabilities Innovation Hubs (R24) Special Emphasis Grant Review Panel February 2012 – German Excellence Initiative "Humanities and Social Science" Graduate School Review Panel (GS 13), German Science Foundation (DFG). April 2008 – National Institutes of Child Health and Development (NICHD), Special Emphasis Grant Review Panel, Mathematical Cognition and Specific Learning Disabilities November 2007 – Chair of German Federal Ministry for Education and Research Phase 3

Review Panel: "Neuroscience, Instruction and Learning"

October 2005 – October 2007 - Member of Steering Group for "Neuroscience, Instruction and Learning", Germany Federal Ministry for Education and Research (BMBF)

Ad-hoc Reviews

Grants

National Science Foundation USA (NSF, multiple), Singapore National Institute of Education (multiple), Israel Science Foundation (multiple), Canada Foundation for Innovation (CFI), German Ministry of Education (BMBF), Netherlands Organization for Scientific Research (NWO), Ontario Graduate Scholarships (OGS), Canada Foundation for Innovation (CFI) Leaders Opportunity Fund (LOF), Neurological Foundation of New Zealand, Economic and Social Research Council, UK (ESRC), The British Academy, Research Foundation Flanders, Belgium (FWO), Austrian Science Fund (FWF), National Science and Engineering Council of Canada (NSERC), Health Research Council of New Zealand, US Department of Education Institute of Education Sciences (IES), Social Sciences and Humanities Research Council of Canada (SSHRC), Leverhulme Trust, UK. The Wellcome Trust & Education Endowment Foundation, UK, National Science Center, Poland, Temasek Foundation, Singapore, Chilean National Agency for Research and Development (ANID), National Killam Program, Canada

Journal Articles

Psychological Science (multiple), Developmental Science (multiple), Neuropsychology, Trends in Cognitive Sciences (multiple), Cognitive Development (multiple), British Journal of Educational Psychology (multiple), NeuroImage (multiple), Acta Paediatrica, Journal of Experimental Psychology: Applied, Brain Research, Human Brain Mapping (multiple), Cognition (multiple), Child Development (multiple), Journal of Experimental Psychology: Human Perception and Performance, Journal of Child Psychology and Psychiatry (multiple), Neuron (multiple), Current Biology (multiple), Neuropsychologia (multiple), BMC Medical Education, Behavioral and Brain Functions (multiple), Progress in Neurobiology, Infant and Child Development, Cortex (multiple), Trends in Neurosciences, Exceptional Children, Journal of Experimental Child Psychology (multiple), Cognitive Psychology (multiple), Journal of Cognitive Neuroscience (multiple), Journal of Clinical and Experimental Neuropsychology, Experimental Brain Research (multiple), Behavioral and Brain Sciences, Neuroscience, Developmental Neuropsychology, Journal of Memory and Language, Brain, Mind, Brain and Education, Journal of Neuroscience (multiple), PLOS One (multiple), Developmental Disabilities Research Reviews, Frontiers in Human Neuroscience (multiple), Journal of Experimental Psychology: General, Developmental Psychology (multiple) Proceedings of the National Academy of Sciences (PNAS, multiple), Alcoholism, Psychological Research, Cognitive Neuropsychology, PLOS Biology, Child Development Perspective, Trends in Neuroscience and Education, Nature Communication, Journal of Psychiatric Research.

Award Selection Committee

2016-2021 Alice Wilson Award Selection Committee, Royal Society of Canada SRCD 2016 Early Career Contribution Award Awards Committee Member Member, 2014, International Mind, Brain and Education Society Awards Committee Member, 2012, Boyd McCandless Award Selection Committee, APA Division 7 Chair, 2012 Boyd McCandless Award Selection Committee, APA Division 7 EARLI 2011 Outstanding Publications Award Committee SRCD 2011 Early Career Contribution Award Awards Committee Member

Conference Program Committees

FLUX Congress Program Committee, 2019

Association for Psychological Science (APS), Convention Program Committee, 2017-2019 Organizer of The International Mind, Brain and Education Society 2016 Conference, Toronto, Canada

Member, Steering Committee, NIH-funded 'Mathematical Cognition' Conference Series SRCD Biennial Meeting Reviewer, 2011, 2013

Abstracts for Human Brain Mapping Annual Meeting 2006, 2007, 2008, 2009 Member of Program Committee, Cognitive Sciences Society 2008 Hebb Student Awards Committee, Canadian Society for Brain, Behaviour and Cognitive Science Conference 2008.

Co-organizer (with J.Fugelsang) of 2009 & 2010 Lake Ontario Visionary Establishment (L.O.V.E) Conference, Niagara Falls, Ontario, Canada.

PROFESSIONAL SERVICE

External Organizations

2020 - present, Member, Professional Advisory Board, National Centre for Learning Disabilities 2020-2021 - Chair, Mathematical Cognition and Learning Society (MCLS) 2019-2020-Chair Elect, Mathematical Cognition and Learning Society (MCLS) 2018-present Member of the Advisory Board, Centre of Research and Development in Learning (CRADLE), Nanyang Technological University, Singapore 2019-present, Member of Advisory Panel, Deans for Impact 2016-2018 - Past-President, International Mind, Brain and Education Society 2014-2016 - President, International Mind, Brain and Education Society 2016-present - Expert Advisor, Understood (Understood.org) 2015 -2019 - Member, Governing Board of The Mathematical Cognition and Learning Society 2013 - 2015 - President-Elect, International Mind, Brain and Education Society 2012 – 2013 - Secretary, International Mind, Brain and Education Society 2013 – 2014 - Member, Expert Group on Teachers' Pedagogical Knowledge, Organization for Economic Cooperation and Development (OECD) 2012 - present - Member, Fields Cognitive Science Network, Fields Institute, Toronto 2011 - 2015 - Board of Directors, International Mind, Brain and Education Society 2011 - present - Member, Advisory Council of the International Association for the Study of Attention and Performance (A&P) 2009 - 2013 - Co-coordinator & Founder, Special Interest Group 22: Neuroscience and Education, European Association for Research on Learning and Instruction (EARLI) Special 2005 – 2007 - Associate (Penumbera) Member of NUMBRA (Numeracy and Brain Development) European Union Research Training Network.

University of Western Ontario (extra-departmental service)

2021 - Tenure & Promotion Committee, Department of Languages & Cultures

2021 - Tenure & Promotion Committee, Department of Epidemiology & Biostatistics

2020 - Tenure & Promotion Committee, Department of Political Science

2020 - 2021 Canada Research Chair Selection Committee, Faculty of Social Sciences

2020 - 2022 Steering Committee, Western Institute for Neuroscience

2020 - 2022 Special Initiatives Funding Program, BrainsCAN, Western University

2018 - Brain & Mind Institute Director Search Committee

2017 - 2019 Honorary Degrees Committee, Western University

2017 - present, Faculty of Social Sciences Vanier Scholarship Selection Committee

2015 - Faculty of Education, Neuroscience & Education, Junior Faculty Selection Committee

2015 - Western Research Chair in Cognitive Neuroscience & Junior Faculty Selection

Committee, Office of the Vice-President Research, Western University

2014 - Faculty Scholar Selection Committee, Office of the Provost, Western University

2014 - NSERC RTI Internal Selection Committee, Western University

2014 - Steering Committee, Brain & Mind Institute, Western University

Department of Psychology, University of Western Ontario

2021 - 2022 Workload and Resource Planning Committee, Psychology Dept.

2020 - 2022 Appointments Committee, Psychology Dept.

2020 - 2021 Chair, Colloquium Committee, Psychology Dept.

2017 - 2019 Promotion and Tenure Committee, Psychology Dept.

2013 - 2014: Graduate Selection Committee, Psychology Dept.

2011 - 2012: Chair, Developmental Faculty Search Committee, Psychology Dept.

2008 - 2012: Chair, Developmental Area, Psychology Dept.

2008 - 2009: Chair, Graduate Affairs Committee, Psychology Dept.

2008 - 2011: Program Committee, Graduate Program in Neuroscience

2008 - 2010: Workload and Resource Planning Committee, Psychology Dept.

2007 - 2008, 2010-2011: Graduate Affairs Committee, Psychology Dept.

2007 - 2008, 2010-2012, 2017-2019: Annual Performance and Evaluation Committee, Psychology Dept.

Brain & Mind Institute, University of Western Ontario

2014 - 2016 Brain & Mind Institute Steering Committee

Faculty of Education, University of Western Ontario

- 2022 Appointments Committee, Faculty of Education
- 2022 Tenure & Promotion Committee, Faculty of Education
- 2021 Faculty of Education Awards & Scholarship Committee
- 2019 Director, Centre for the Science of Learning
- 2015 Search Committee, Applied Psychology Tenure Track Search
- 2017 Search Committee, Tier 2 Canada Research Chair in Science of Learning & Tier 2

Canada Research Chair in Neuroscience of Learning Disorders.

External Tenure and Promotion Reviews

- 2023 National Institute of Education, Singapore
- 2023 Rutgers University, USA
- 2023 University College London, UK
- 2023 University of York, UK
- 2022 University of California at Irvine, USA
- 2022 Wesleyan University, USA
- 2021 University of California San Diego, USA
- 2021 University of California Berkeley, USA
- 2020 University of Maryland, USA
- 2020 Florida State University, USA
- 2020 Boston College, USA
- 2019 University of Wisconsin-Madison, USA
- 2019 University of British Columbia, USA
- 2018 University of California, Irvine, USA
- 2018 Florida State University, USA
- 2018 University of Minnesota, USA
- 2018 Hebrew University of Jerusalem, Israel
- 2018 Temple University, USA
- 2017 Memorial University of Newfoundland, Canada
- 2017 University of Waterloo, Canada
- 2017 University of Southern California, USA
- 2017 University of Illinois at Urbana-Champaign, USA
- 2017 University of Pittsburgh, USA
- 2017 University of Texas at Arlington, USA
- 2016 University of California, San Diego
- 2015 Max Stern Yezreel Valley College, Israel
- 2015 Rochester University, USA
- 2015 University of Pennsylvania, USA
- 2015 Achva Academic College, Israel
- 2015 Boston College, USA
- 2015 Loughborough University, UK
- 2014 University of Guelph, Canada
- 2014 University College London, UK
- 2013 University of Ohio, USA
- 2013 Temple University, USA

Member of Scientific Grant Advisory Boards

2013 - NIH Learning Disabilities Hub, University of California, San Diego

2013 - NIH Learning Disabilities Hub, Ohio State University

2014 - NSF Research, Education & Learning (REAL) Grant "Cognitive and Neural Indicators of School-based Improvements in Spatial Problem Solving"

SUPERVISON

Graduate Student Research Supervision

Principal Advisor – Current		
Caitlin Roberts	2022 -	
Nadir Diaz	2022 -	
Nidhi Shah	2022 -	
Chloe Henry	2021 -	
Rebecca Legace-Cusiac	2019 -	
Aymee Alvarez	2018 -	

Principal Advisor – *Completed*

Tsz Tan Lau	2017 – 2021 (PhD Completed 2021)
Helen Moriah Sokolowski	2013 – 2019 (PhD Completed 2019)
	Awarded Governor General Gold Medal Award
Zachary Hawes	2015 – 2019 (PhD Completed 2019)
Celia Goffin	2013 – 2019 (PhD Completed 2019)
Anna Matejko	2012 - 2016 (PhD Completed 2016)
	Awarded Vanier Canada Graduate Scholarship
Stephanie Bugden	2010 – 2014 (PhD Completed 2014)
Christian Battista	2009 – 2013 (PhD Completed 2013)
Stephan Vogel	2009 – 2013 (PhD Completed 2013)
Nadia E.A. Nosworthy	2008 – 2013 (MEd 2009; PhD Completed 2013)
Lucia van Eimeren	2006 – 2009 (MSc Completed August 2008)
Ian D. Holloway	2005 – 2012 (MSc Completed August 2007, PhD
	Completed 2012
	Awarded Vanier Canada Graduate Scholarship

PhD Advisory Committee Internal

Tianshu Zhu, Psychology	2019 - 2022
Jennifer Milne, Neuroscience	2009 - 2010
Matthew Waxer, Psychology	2008 - 2011
Jason Gallivan, Neuroscience	2007 - 2011

External

SarahBeth Sullivan, Gallaudet University, 2019-2021 Becky Wong, National Institute of Education, Singapore, 2018-2020 K. Breana Downey, Neuroscience, Georgetown University, 2018-2020 Lisa Sprute, Psychology, Dartmouth College, 2010 – 2012 Margaret Gulllick, Psychology, Dartmouth College , 2010 – 2012 Tanya Gerner, Neuroscience, Georgetown University, 2010 – 2013 Gavin Price, Psychology University of Jyvaskala, Finland, 2006 – 2008

PhD Examination Committee

Internal	
Chenglin Lou, Psychology	2023
Kathleen Lyons, Psychology	2022
Tianshu Zhu, Psychology	2022
Niki Hosseini-Kamkar, Psychology	2021
Olivia Daub, Communication Sciences & Disorders	2021
Ashley Bildfell, Education	2021
Alexandra Cross, Health Sciences	2020
Joshua Patenaude, Psychology	2020
Lindsay Oliver, Neuroscience	2017
Kenneth Valyear, Neuroscience	2010
Craig Chapman, Psychology	2010
Aneta Kielar, Psychology	2008
Amy Desrocher, Psychology	2008

External

Mahdi Moshirian Farahi, Carleton University, 2023 Tonje Amland, University of Oslo, 2023 Barbara Brewster, University of Prince Edward Island, 2023 K. Breana Downey, Neuroscience, Georgetown University, 2020
Kyle Morrisey, Psychology, Memorial University of Newfoundland, 2018
Chang Xu, Cognitive Science, Carleton University, 2018
Alison Liu, Psychology, University of Pittsburgh, 2018
Nicola Jastrzebski, Psychology, Swinburne University of Technology, 2017
Carla Sowinski, Cognitive Science, Carleton University, 2016
Laura Gibson, Psychology, McMaster University, 2015
Pierina Cheung, Psychology, University of Waterloo, 2015
Lisa Sprute, Psychology, Dartmouth College, 2013
Tanya Gerner, Neuroscience, Georgetown University, 2013
Margaret Gullick, Psychology, Dartmouth College , 2012
Khng Kiat Hui, National Institute of Education, Singapore, 2010
Marice Penner-Wilger, Psychology, Carleton University, 2009

Masters Examination Committee

Internal

Susana Correa, Neuroscience	2023	
Emma Stewart, Psychology	2022	
Josephine Pham, Neuroscience.	2020	
Gregory Brooks, Psychology	2020	
Shayla Jackson, Psychology	2020	
Karim Virany, Neuroscience	2011	
Taryn Bingley, Kinesiology	2010	
Saman Khalkhai, Psychology	2010	
Gesine L. Alders, Neuroscience	2010	
Heather Wilk, Psychology	2010	
Jia Stella Chen, Psychology	2008	
Stephen Wegener, Physiology & Ph	armacology	2008

Post-Doctoral Fellows

Dr. Chenxi He (co-supervised with Dr. Blake Butler) - September 2020 – now (Awarded BrainsCAN Tier 1 Postdoctoral Fellowship)

Dr. Celia Goffin – January 2020 – December 2021 (Awarded Mitacs Elevate Postdoctoral Fellowship)

Dr. Mojtaba Soltanlou - January 2020 - presented (Awarded BrainsCAN Tier 1 Postdoctoral Fellowship)

Dr. Eric Wilkey - August 2018 - present (Awarded Banting Postdoctoral Fellowship) Dr. Lien Peters - August 2017 - present (Awarded Brain & Mind Institute Fellowship) Dr. Pierina Cheung - May 2017 - May 2018 (now Research Scientist, National Institute of Education, Singapore).

Dr Rebecca Merkley - October 2015 – May 2018 (Awarded Brain Canada/NeuroDevNet Fellowship – now Assistant Professor, Carleton University)

Dr. Tali Leibovich - February 2015 – January 2017 (Awarded Brain & Mind Institute Fellowship – now Senior Lecturer at Haifa University)

Dr. Ian Lyons - October 2012 - July 2016 (Awarded Banting Postdoctoral Fellowship - now Assistant Professor at Georgetown University)

Dr. Heather Brown - January 2014 - January 2015 (now Assistant Professor at University of Alberta

Dr. Gavin Price - June 2009 - June 2012 (now Assistant Professor at Vanderbilt University) Dr. Bert De Smedt, Visiting Postdoctoral Fellow, 2008-2010 (now Associate Professor at KU Leuven)

Undergraduate Student Research Supervision

Undergraduate Independent Study

2021-2022
2020 - 2021
2014 - 2015
2012 - 2013
2010 - 2011
2008 - 2009

Kathryn D. MacMillan 2005 – 2006 (Dartmouth College) Elizabeth Lucas 2005 - 2006, Presidential Scholar (Dartmouth College)

Undergraduate Scholar Elective Student

Kameela Alibhai	2017 - 2018
Stephen Beukema	2008 - 2009

Undergraduate Honors Thesis		
Maya Ghai	2022-2023	
Shannon O'Neill	2022-2023	
Jana Menalo	2022-2023	
Akshaj Jonnalagadda	2022-2023	
Rafeul Islam	2022-2023	
Julia Schmid	2021-2022	
Ashini Peiris	2021-2022	
Ira Gupta	2021-2022	
Beatrice Arsenault-Dufour	2019-2020	
Michael Slipenkyj	2017-2018	
Diana Samoil	2017-2018	
Selena Basile	2016-2017	
Sarah Bray Kinissepp	2016-2017	
Bailey Friday	2015-2016	
Jane Hutchinson	2014 – 2015 (Winner - McClelland Award: best honors thesis)	
Dana Smith	2013 - 2014	
Adam Dharsee	2013 - 2014	
Moriah H. Sokolowski	2012 - 2013	
Chelsea DeGuzman	2012 - 2013	
Savannah Barker	2012 - 2013	
Jordan Rozario	2011 - 2012	
Celia Goffin	2011 – 2012 (Winner - McClelland Award: best honors thesis)	
Sarah Rockman	2011 - 2012	
Jordan Lass	2010 - 2011	
David Truong	2010 - 2011	
Daniel Palmer	2010 - 2011	
Lisa King	2009 - 2010	
Alicia Remark	2009 - 2010	
Meghan Reid	2008 - 2009	
Rebecca M. Merkley	2008 - 2009	
Stephanie Bugden	2007 - 2008	
Jessica Taylor	2007 - 2008	

Undergraduate Research Assistants

Ankit Bakshi, Summer of 2023, USRI Summer Internship Holder (University of Western Ontario)

Akshaj Jonnalagadda, Summer of 2022, NSERC USRA Holder (University of Western Ontario) Julia Schmid, Summer of 2021, NSERC USRA Holder (University of Western Ontario) Ashini Peiris, Summer of 2021, Diversity in Neuroscience Summer Internship (University of Western Ontario)

Ira Gupta, Summer of 2021, NSERC USRA Holder (University of Western Ontario) Ashini Peiris, Summer of 2020, NSERC USRA Holder (University of Western Ontario) Ira Gupta, Summer of 2020, NSERC USRA Holder (University of Western Ontario) Vivek Patil, Summer of 2020, NSERC USRA Holder (University of Western Ontario) Kameela Alibhai, Summer of 2019, NSERC USRA Holder (University of Western Ontario) Michael Slipenkyj, Summer of 2017, NSERC USRA Holder (University of Western Ontario) Irene Zhang, Summer of 2016, NSERC USRA Holder (University of Western Ontario) Adam Mousa, Summer of 2014, NSERC USRA Holder (University of Western Ontario) Jas Sahota, Summer of 2015, NSERC USRA Holder (University of Western Ontario) Adam Mousa, Summer of 2014, NSERC USRA Holder (University of Western Ontario) Jas Sahota, Summer of 2014, NSERC USRA Holder (University of Western Ontario) Adam Mousa, Summer of 2014, NSERC USRA Holder (University of Western Ontario) Adam Mousa, Summer of 2014, NSERC USRA Holder (University of Western Ontario) Adam Mousa, Summer of 2014, NSERC USRA Holder (University of Western Ontario) Adam Mousa, Summer of 2014, NSERC USRA Holder (University of Western Ontario) David Truong, 2009 – 2010 (University of Western Ontario) Stephanie Bugden, 2007 – 2008 (University of Western Ontario) Bibek Dhital, 2003 – 2006 (Dartmouth College) Ian M. Lyons 2005 – 2006 (Dartmouth College) Kathleen Hamon 2003, – 2005 (Dartmouth College) Nicolas Garcia 2004, – 2006 (Dartmouth College) Kathryn MacMillan, 2005 – 2006 (Dartmouth College) Elizabeth Lucas, 2005 – 2006 (Dartmouth College)

COURSES TAUGHT

2017 – How Changeable are we? (Graduate Course, University of Western Ontario)
2003 – present: Development of the Mathematical Brain (Dartmouth College & University of Western Ontario)
2007 – present: Mind, Brain and Education (University of Western Ontario)
2003 – 2006: Learning and Education Across Cultures (Dartmouth College)
2005 – 2006: Introduction to Education (Dartmouth College)

2004 – 2006: Human Development and Education (Dartmouth College)

Ad-hoc Lectures in:

Proseminar in Cognitive Developmental and Brain Sciences (University of Western Ontario) Summer School in Neuroscience (University of Western Ontario)

Proseminar of the Graduate Program in Psychological and Brain Sciences (Dartmouth College)

Neuroscience 500, Graduate Program in Neuroscience (University of Western Ontario). Psychology 2410, Department of Psychology (University of Western Ontario)

Education 5429S, Faculty of Education (University of Western Ontario)