DANIEL ANSARI
Curriculum Vitae

Address: Department of Psychology
Brain and Mind Institute
The University of Western Ontario
Western Interdisciplinary Research Building, Room 5180
1151 Richmond Street North
London, ON N6A 5B7
Canada

Tel: +1 519 661 2111 Ext. 80548
Fax: +1 519-850-2554
E-Mail: daniel.ansari@uwo.ca
Homepage: http://www.numericalcognition.org
Google Scholar: https://scholar.google.ca/citations?user=raWdds0AAAAJ&hl=en
Open Science Framework: osf.io/b8dp9

EDUCATION

1999 – 2003
PhD
Neurocognitive Development Unit
Institute of Child Health
University College London

2000 – 2001
MSc in Neuroscience
University of Oxford

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

POSITIONS

July 2018 – present
Professor (Full)
Jointly appointed between Department of Psychology & Faculty of Education
The University of Western Ontario

July 2014 – July 2018
Professor (Full)
Department of Psychology & Brain and Mind Institute
The University of Western Ontario

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

July 2011 – present
Professor (cross-appointment)
Faculty of Education
The University of Western Ontario

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

2012 – 2018
Visiting Associate Professor
Department of Cognitive Neuroscience
Maastricht University

2012 – present
Associate Scientist, Children's Health Research Institute
Lawson Health Research Institute, London, Ontario

2006 – 2010
Assistant Professor
Department of Psychology
The University of Western Ontario

2003 – 2006
Assistant Professor
Department of Education
Dartmouth College, USA

HONORS & AWARDS

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

July 2019 – July 2020
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

July 2018 – July 2019
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)

April 2017 – April 2022
Natural Sciences and Engineering Research Council of Canada (NSERC)
Discovery Operating Grant (Renewal: $58,000 per year)
Role : Principal Investigator

June 2017-October 2022
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

April 2016-March 2019
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)

April 2015– April 2017
E.W.R. Steacie Fellowship
Natural Sciences and Engineering Council of Canada (NSERC)
Prize ($125,000 per year)

February 2015
Faculty Directed Research Fund
Faculty of Social Science, Western University
Travel Grant ($1106)

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

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

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

April 2013-April 2015
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)

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

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

April 2012
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)

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

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

April 2009-April 2014
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

July 2008
Canadian Institutes for Health Research (CIHR)
1-year Operating Grant ($84,637)
Role : Principal Investigator

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

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

March 2007
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 (114)

(* indicates student/post-doc/trainee first author)

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

*Goffin, C., Vogel., S.E., Slipenkyj, M. & **Ansari, D.** (in press) 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*

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

*Wilkey, E.D. & **Ansari, D.** (in press) Challenging the neurobiological link between number sense and symbolic numerical abilities. *Annals of the New York Academy of Sciences*

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

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

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 Difference,* 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 non-symbolic 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.

*Bartelet, D., Vaessen, A. & Blomert, L. & **Ansari, D** (2014) What basic number processing measures in kindergarten explain unique variability in grade 1 arithmetic proficiency? *Journal of Experimental Child Psychology,* 117C, 12-28.

Archibald, L.,Cardy, J.O., Joanisse, M.F.& **Ansari, D** (2013) Language, Reading, and Math Learning Profiles in an Epidemiological Sample of School Age Children, *PLoS ONE* Oct 14;8(10):e77463

De Smedt, B., Noel, M.P., Gilmore, C. & **Ansari, D.** (2013) The relationship between symbolic and non-symbolic numerical magnitude processing and the typical and atypical development of mathematics: A review of evidence from brain and behavior. *Trends in Neuroscience and Education,* 2, 48-55.

*Nosworthy, N., Bugden, S. Archibald, L.A., Evans, B. & **Ansari, D**. (2013) A two-minute paper and pencil test of symbolic and nonsymbolic numerical magnitude processing explains variability in primary school children's arithmetic competence. *PLoS ONE.* Jul 2;8(7):e67918

*Vogel, S.E., Grabner, R.H., Schneider, M., Siegler, R.S. & **Ansari, D**. (2013). Overlapping and distinct brain regions involved in estimating the spatial position of numerical and non-numerical magnitudes: An fMRI study. *Neuropsychologia,* 13, 979-989.

Grabner, R.H., **Ansari, D.,** Koschutnig, K., Reishofer, G. & Ebner, F. (2013). The function of the left angular gyrus in mental arithmetic: Evidence from the associative confusion effect. *Human Brain Mapping,* 34, 1013-24.

*Price, G.R., Mazzocco, M.M. & **Ansari, D.** (2013). Why mental arithmetic counts: Brain activation during single digit arithmetic predicts high-school math scores. *Journal of Neuroscience,* 33, 156-63.

*Holloway, I.D., Vogel, S.E., Battista, C. & **Ansari, D.** (2013). Semantic and perceptual processing of number symbols: Evidence from a cross-linguistic fMRI adaptation study. *Journal of Cognitive Neuroscience,* 25, 388-400.

*Matejko, A., Price, G.R., Mazzocco, M.M. & **Ansari, D.** (2013). Individual differences in left parietal white matter predict math scores on the Preliminary Scholastic Aptitude Test *NeuroImage,* 66, 604-610.

*Price, G.R. & **Ansari, D.** (2013). Dyscalculia: Characteristics, causes and treatments. *Numeracy,* Vol. 6, Article 2.

Ansari, D. De Smedt, B. & Grabner, R.H. (2012). "Neuroeducation" – a critical overview of an emerging field. *Neuroethics,* 5, 105-117.

*Vogel, S.E. & **Ansari, D.** (2012). Neurokognitive Grundlagen der typischen und atypischen Zahlenverarbeitung (Neurocognitive foundations of typical and atypical number processing). *Lernen und Lernstoerungen (Learning and Learning Disorders),* 1, 135-149.

Karmiloff-Smith, A., D'Souza, D., Dekker, T.M., Van Herwegen, J., Xu, F., Rodic, M. & **Ansari, D.** (2012). Genetic and environmental vulnerabilities in children with neurodevelopmental disorders. *Proceedings of the National Academy of Sciences,* 16, 17261-5.

Lyons, I.M., **Ansari, D.** & Beilock, S.L. (2012). Symbolic estrangement: Evidence against a strong association between numerical symbols and the quantities they represent. *Journal of Experimental Psychology: General,* 141, 653-41.

*Bugden, S., Price, G.R., McLean, A. & Ansari, D. (2012). The role of the left intraparietal sulcus in the relationship between symbolic number processing and children's arithmetic competence. *Developmental Cognitive Neuroscience,* 2, 448-57.

*Price, G.R., Palmer, D., Battista, C. & **Ansari, D.** (2012). Nonsymbolic numerical magnitude comparison: Reliability and validity of different task variants and outcome measures, and their relationship to arithmetic achievement in adults. *Acta Psychologica,* 17, 50-57.

Ansari, D. (2012). Culture and education: New frontiers in brain plasticity. *Trends in Cognitive Sciences,* 16, 93-95.

Zebian, S. & **Ansari, D.** (2012). Differences between literates and illiterates on symbolic but not non-symbolic numerical magnitude processing. *Psychonomic Bulletin and Review,* 19, 93-100.

Ansari, D., Grabner, R.H., Koschutnig, K., Reishofer, G. & Ebner, F. (2011). Individual differences in mathematical competence modulate brain responses to arithmetic errors. *Learning and Individual Differences (Special Issue: 'Educational Neuroscience'),* 21, 633-635.

*Price, G.R & **Ansari, D.** (2011). Symbol processing in the left angular gyrus: Evidence from passive perception of digits. *NeuroImage,* 57, 1205-11

De Smedt, B., Holloway, I.D. & **Ansari, D.** (2011). Effects of problem size and arithmetic operation on brain activation during calculation in children with varying levels of arithmetical fluency. *NeuroImage,* 57, 771-81.

Gallivan, J.P., Chapman, C.S., Wood, D.K., Milne, J.L., **Ansari, D.,** Culham, J.C., & Goodale, M.A. (2011). One to four, but nothing more: Non-conscious parallel object individuation in action. *Psychological Science,* 22: 803-11.

Borgman, K., Fugelsang, J., **Ansari, D.** & Besner, D. (2011). Congruency proportion reveals asymmetric processing of irrelevant physical and numerical dimensions in the size congruity paradigm. *Canadian Journal of Experimental Psychology,* 65, 98-104.

Maloney, E.A., **Ansari, D.** & Fugelsang, J.A. (2011). The effect of mathematics anxiety on the processing of numerical magnitude. *Quarterly Journal of Experimental Psychology,* 64, 10-6.

*Bugden, S. & **Ansari, D.** (2011). Individual differences in children's mathematical competence are related to the intentional but not automatic processing of Arabic numerals. *Cognition,* 118, 32-44.

Ansari, D., Coch, D. & De Smedt, B. (2011). Connecting education and cognitive neuroscience: Where will the journey take us? *Educational Philosophy and Theory,* 43, 37-42.

*Merkley, R. & **Ansari, D.** (2010). Using eye-tracking to study numerical cognition: The case of the numerical ratio effect. *Experimental Brain Research,* 206, 455-60.

*Holloway, I.D. & **Ansari, D.** (2010). Developmental specialization in the right intraparietal sulcus for the abstract representation of numerical magnitude. *Journal of Cognitive Neuroscience,* 22, 2627-37.

*Van Eimeren, L., Grabner, R.H., Koschutnig, K.,, Reishofer, G., Ebner, F. & **Ansari, D.** (2010). Structure-function relationship underlying calculation: A combined diffusion tensor imaging and fMRI study. *NeuroImage,* 52, 358-63.

Maloney, E.A., Risko, E.F., Preston, F. **Ansari, D.** & Fugelsang, J.A. (2010). Challenging the reliability and validity of cognitive measures: The case of the numerical distance effect. *Acta Psychologica,* 134, 154-61.

DeSmedt, B., **Ansari, D.,** Grabner, R.H., Hannula, M.M., Schneider M. & Verschaffel, L. (2010). Cognitive neuroscience meets mathematics education. *Educational Research Review,* 5, 97-105.

Thomas, M.S., Van Duuren, M, Purser, HR, Marschal, D. **Ansari, D.** & Karmiloff-Smith, A. (2010). The development of metaphorical language comprehension in typical development and in Williams syndrome. *Journal of Experimental Child Psychology,* 106, 99-114.

Ansari, D. (2010). Neurocognitive approaches to developmental disorders of numerical and mathematical cognition: The perils of neglecting the role of development. *Learning and Individual Differences,* 20, 123-129. *(Special Issue: 'Perspectives on Math Difficulty and Disability in Children')*

DeSmedt, B., Taylor, J. Archibald, L. & **Ansari, D.** (2010). How is phonological processing related to individual differences in children's arithmetic skills? *Developmental Science*, 13, 508-20.

Raizada, R.D., Tsao, F.M., Liu, H.M., Holloway, I.D., **Ansari, D**. & Kuhl, P. (2010). Linking brain-wide multivoxel activation patterns to behaviour: Examples from language and math. *NeuroImage,* 15, 426-71.

Maloney, E.A, Risko, E.F, **Ansari, D.** & Fugelsang, J. (2010). Mathematics anxiety affects counting but not subitizing during visual enumeration. *Cognition,* 114, 293-297.

Berkowitz, A. & **Ansari, D.** (2010). Expertise-related deactivation of the right temporoparietal junction during musical improvisation. *NeuroImage,* 49, 721-9.

*Holloway, I.D., Price, G.R. & **Ansari, D.** (2010). Common and segregated neural pathways for the processing of symbolic and nonsymbolic numerical magnitude: An fMRI study. *NeuroImage,* 49, 1006-17.

*Lyons, I.M & **Ansari, D**. (2009). The cerebral basis of mapping nonsymbolic numerical quantities onto abstract symbols: An fMRI training study. *Journal of Cognitive Neuroscience,* 21, 1720-35.

Morton, J.B., Bosma, R. & **Ansari, D.** (2009). Age-related changes in brain activation associated with dimensional shifts of attention: An fMRI study. *NeuroImage,* 46, 336-58.

*Holloway, I.D. & **Ansari, D.** (2009). Mapping numerical magnitudes onto symbols: The numerical distance effect and individual differences in children's math achievement. *Journal of Experimental Child Psychology,* 103, 17-29.

Coch, D., Michlovitz, S.A., **Ansari, D.** & Baird, A. (2009). Building Mind, Brain and Education connections: The view from the Upper Valley. *Mind, Brain and Education,* 3, 27-33.

Grabner, R.H., **Ansari, D.,** Koschutnig, K., Reishofer, G., Ebner, F. & Neuper, C. (2009). To retrieve or to calculate? Left angular gyrus mediates the retrieval of arithmetic facts during problem solving. *Neuropsychologia,* 47, 604-8. **#First two authors contributed equally**

Thomas, M.S., Annaz, D., **Ansari, D.** Scerif, G. Jarrold, C & Karmiloff-Smith, A. (2009). Using developmental trajectories to understand developmental disorders. *Journal of Speech, Language, and Hearing Research,* 52, 336-358.

Hubbard, E.M. Diester, I., Cantlon, J.F., **Ansari, D.**, Van Opstal, F. & Troiani, V. (2008). The evolution of numerical cognition: From number neurons to linguistic quantifiers. *Journal of Neuroscience*, 28, 11819-24.

*Holloway, I. & **Ansari, D.** (2008). Domain-specific and domain-general changes in children's development of number comparison. *Developmental Science,* 11 (5), 644-649.

*Van Herwegen, J., **Ansari, D.,** Elsabbagh, M., Xu, F. & Karmiloff-Smith, A. (2008). Small and large number processing in infants and toddlers with Williams syndrome. *Developmental Science,* 11 (5), 637-643.

*Van Eimeren, L., Niogi, S.N., McCandliss, B.D., Holloway, I.D. & **Ansari, D.** (2008). White matter microstructures underlying mathematical abilities in children. *NeuroReport,* 19, 1117-21.

Ansari, D. (2008). Effects of development and enculturation on number representation in the brain. *Nature Reviews Neuroscience,* 9, 278-91.

Berkowitz, A.L. & **Ansari, D.** (2008). Generation of novel motor sequences: The neural correlates of musical improvisation, *NeuroImage*, 41, 535-43.

Rheinlander, K., Wallace, D., Morrison, W., **Ansari, D.,** Coch, D., Willams, V.B. (2008). Teacher talk: Pressure points in the K-8 mathematics curriculum. *Numeracy,* Vol. 1, Article 4.

*Price, G.R., Holloway, I.D., Vesterinen, M., Rasanen, P. & **Ansari, D**. (2007). Impaired parietal magnitude processing in Developmental Dyscalculia, *Current Biology,* 17(24), R1042-3.

Ansari, D., Lyons, I., van Eimeren, L & Xu, F. (2007). Linking visual attention and number processing in the brain: The role of the temporo-parietal junction in small and large non-symbolic number comparison. *Journal of Cognitive Neuroscience,* 19, 1845-1853. **#First two authors contributed equally**

Grabner, R.H., **Ansari, D**., Reishofer, G., Stern, E., Ebner, F. & Neuper. C. (2007). Individual differences in mathematical competence predict parietal brain activation during mental calculation. *NeuroImage,* 38, 346-356. **# First two authors contributed equally**

Ansari, D., Donlan, C., & Karmiloff-Smith, A (2007). Atypical and typical development of visual estimation abilities. *Cortex*, 6, 758-768.

Ansari, D. & Dhital, B. (2006). Age-related changes in the activation of the intraparietal sulcus during non-symbolic magnitude processing: An event-related fMRI study. *Journal of Cognitive Neuroscience,* 18, 1820-8.

Ansari, D., Fugelsang, J., Dhital, B., & Venkatraman, V. (2006) Dissociating response conflict from numerical magnitude processing in the brain: An event-related fMRI study, *Neuroimage, 32,* 799-805.

Venkatraman, V., Soon, C.S., Chee, M.W., & **Ansari, D**. (2006). Effects of language switching on arithmetic: A bilingual fMRI study. *Journal of Cognitive Neuroscience,* 18, 64 – 75.

Ansari, D., Dhital, B., & Soon, C.S. (2006). Parametric effects of numerical distance on the intraparietal sulcus during passive viewing of rapid numerosity changes. *Brain Research.*1067, 181-188.

Ansari, D. & Coch, D. (2006). Bridge over troubled waters: Education and cognitive neuroscience. *Trends in Cognitive Sciences,* 10, 146-151. **# First two authors contributed equally**

Thomas, M. S. C., Dockrell, J. E., Messer, D., Parmigiani, C., **Ansari, D**., & Karmiloff- Smith, A. (2006). Speeded naming, frequency and the development of the lexicon in Williams syndrome. *Language and Cognitive Processes,* 21, 721-759.

Ansari, D., Garcia, N., Lucas, E., Hamon, K., & Dhital B. (2005). Neural correlates of symbolic number processing in children and adults. *Neuroreport,* 16: 1769-1773.

Venkatraman, V., **Ansari, D**., & Chee, M.W.L. (2005). Neural correlates of symbolic and non-symbolic arithmetic. *Neuropsychologia, 43*, 744-53.

Ansari, D., Donlan, C., Thomas, M., Ewing, S., Peen, T. & Karmiloff-Smith, A. (2003). What makes counting count? Verbal and visuo-spatial contributions to typical and atypical number development. *Journal of Experimental Child Psychology, 85*, 50-62.

Ansari, D. & Karmiloff-Smith, A. (2002). Atypical trajectories of number development: a neuroconstructivist perspective. *Trends in Cognitive Sciences, 6*(12), 511-516.

Laing, E., Butterworth, G., **Ansari, D.,** Gsoedl, M., Longhi, E., Panagiotaki, G., Paterson, S.,& Karmiloff-Smith, A. (2002). Atypical development of language and social communication in toddlers with Williams syndrome. *Developmental Science, 5*(2), 233-246.

Book Chapters (18)

Ansari, D. (2019) Development of Number Understanding: Different Theoretical Perspectives. *International Handbook of Mathematical Learning Difficulties*, 91-104.

*Vogel, S.E., Matejko, A. & **Ansari, D.** (2016) Imaging the developing human brain using functional and structural Magnetic Resonance Imaging: Methodological and practical guidelines. J.Prior & J. Van Herwegen (Eds.) *Practical Research with Children.* Hove: Psychology Press, 46-70.

*Lyons, I.M., Vogel, S.E. & **Ansari, D.** (2016) On the ordinality of numbers: A review of neural and behavioural studies. *Progress in Brain Research,* 227: 187-221.

*Sokolowski, H.M. & **Ansari, D.** (2016) Symbolic and nonsymbolic representation of number in the human parietal cortex: a review of the state-of-the art, outstanding questions and future directions. *Continuous Issues in Numerical Cognition,* San Diego, CA: Elsevier, 37-58

Ansari, D. (2015) Number symbols in the brain. In D.B. Berch, D.C. Geary & K. Mann Koepke (Eds.) *Mathematical Cognition and Learning*, Volume 2*,* San Diego, CA: Elsevier, 27-46.

*Holloway, I.D. & **Ansari, D.** (2015) Numerical symbols: an overview of their cognitive and neural underpinnings. In R.C. Kadosh & A. Dowker (Eds.) *Oxford Handbook of Numerical Cognition.* Oxford: Oxford University Press, 531-551.

*Lyons, I.M. & **Ansari, D**. (2015) Foundations of children's numerical and mathematical skills: the roles of symbolic and non-symbolic representations of numerical magnitude. *Advances in Child Development and Behavior*, Vol 48, UK: Academic Press, 93-116

*Bugden, S. **& Ansari, D.** (2015) How can cognitive developmental neuroscience constrain our understanding of developmental dyscalculia? *International Handbook of Dyscalculia and Mathematical Learning Difficulties,* Routledge, 18-43.

Ansari, D. (2015) Mind, Brain and Education: a discussion of practical, conceptual and ethical issues. In J. Clausen & N. Levy (Eds.) *Handbook of Neuroethics.* Springer, 1703-1719.

Ansari, D. & Vogel, S.E. (2013). Cognitive neuroscience of numerical cognition. In K. Ochsner & S. Kosslyn (Eds.) *Oxford Handbook of Cognitive Neuroscience, Volume 2: The Cutting Edges.* Oxford: Oxford University Press.

Coch, D. & **Ansari, D.** (2012). Constructing connection: The evolving field of mind, brain and education. In S. Della Sala & M. Anderson (Eds.) *Neuroscience in Education: The Good, The Bad and The Ugly.* Oxford: Oxford University Press, 33-47.

*Price, G.R. & **Ansari, D.** (2012). Developmental dyscalculia: A case for neuroscience in education. *British Journal of Educational Psychology Monograph: "Educational Neuroscience",* The British Psychological Society, Leicester, UK, 45-63.

Ansari, D. (2011). Was haben wir durch die kognitive Neurowissenschaft über die Dyskalkulie gelernt? In Schulte-Körne G (Ed.) *Legasthenie und Dyskalkulie: Stärken erkennen – Stärken fördern.* Winkler Verlag, Bochum, 235-245.

Ansari, D. (2010). The computing brain. In Souza D. (Ed.) *Mind, Brain and Education*: *Neuroscience Implications for the Classroom*, Bloomington, Indiana: Solution Tree Press, 201-227.

Ansari, D., Price, G.R. & Holloway, I.D. (2010). Typical and atypical development of basic magnitude representations: A review of behavioural and neuroimaging studies. In Ferrari, M.. & Vuletic, L. (Eds.) *The Developmental Interplay between Mind, Brain and Education: Essays in honor of Robbie Case.* Amsterdam, NL: Springer. 105-129.

van Eimeren, L. & **Ansari, D.** (2009). Rechenschwaeche - eine neurokognitive Perspektive. In A. Fritz, G. Ricken & S. Schmidt (Eds*.) Raechenschwaeche. Lernwege, Schwierigkeiten und Hilfen bei Dyskalkulie. Ein Handbuch* - Neu-Auflage. Beltz-Verlag Weinheim

Ansari, D., Holloway, I.D., Price, G.R. & Van Eimeren, L. (2008). Towards a developmental cognitive neuroscience approach to the study of typical and atypical number development. In A. Dowker (Editor) *Mathematical Difficulties*. London: Elsevier, 14-43.

Karmiloff-Smith, A., **Ansari, D**., Campbell, L., Scerif, G., & Thomas. M. (2006). The theoretical implications of studying atypical development: The Case of Williams syndrome. In C. Morris, H. Lenhoff, and P.Wang (Eds.). *Williams-Beuren Syndrome: Research and Clinical Perspectives*. Johns Hopkins University Press, 254-27

Commentaries & Editorials (21)

Hyde, DC. & **Ansari, D.** (2018) Advances in Understanding the Development of the Mathematical Brain. *Developmental Cognitive Neuroscience,* 30: 236-238.

Ansari, D. & Gervain, J. (2018) Registered Reports: introducing a new article format in Developmental Science. *Developmental Science*, 21(1).

*Merkley, R., Scerif, G. & **Ansari, D.** (2017) What is the precise role of cognitive control in the development of a sense of number? *Behavioral and Brain Sciences.* (Commentary on Leibovich et al.), 40e179

*Merkley, R., Matejko, A.A. & **Ansari, D.** (2017) Strong causal claims require strong evidence: A commentary on Wang et al. (2016). *Journal of Experimental Child Psychology,* 153, 163-7.

Howard-Jones, P., Varma, S., **Ansari, D.,** Butterworth, B., De Smedt, B., Goswami, U, Laurillard, D. & Thomas, M.S.C. (2016) The Principles and Practices of Educational Neuroscience: Commentary on Bowers (2016). *Psychological Review,* 123, 620-7.

Ansari, D. (2016) The neural roots of mathematical expertise. *Proceedings of the National Academy of Sciences (PNAS),* 113, 4887-9.

Ansari, D. & Lyons, I.M. (2016) Mathematics Learning: How far have we come? Where do we need to go? *ZDM: The International Journal on Mathematics Education,* 48, 379-383.

Ansari, D. (2013). The emergence of a multi-level approach to the study of skill acquisition and expertise. In J.J. Staszewski (Ed.), *Expertise and Skill Acquisition: The impact of William G. Chase.* Psychology Press, 325-33.

Ansari, D. De Smedt, B. & Grabner, R.H. (2012). Introduction to the Special Section on "Numerical and mathematical processing". *Mind, Brain and Education,* 6, 147-155.

Van Opstal, F. Santens, S. & **Ansari, D.** (2012). The Numerate Brain: Recent findings and theoretical reviews on the neurocognitive foundations of number processing (editorial for special issue). *Frontiers of Human Neuroscience,* 6: 201.

Ansari, D. (2012). Why the 'symbol grounding problem' for number symbols is still problematic. Commentary on Coolidge, F.L & Overmann, K.A. Numerosity, Abstractions and the Emergence of Symbolic Thinking. *Current Anthropology,* 53, 204-225.

De Smedt, B., **Ansari, D.** Grabner, R.H., Hannula-Sormunen, M., Schneider, M. & Verschaffel, L. (2011). Cognitive neuroscience meets mathematics education: It takes two to tango. *Educational Research Review,* 6, 232-237.

Ansari, D. (2011) Towards a Developmental Cognitive Neuroscience of Numerical and Mathematical Cognition. *Developmental Neuropsychology.* (Commentary on Special Issue: "Toward a developmental cognitive neuroscience of numerical and mathematical cognition"). *Developmental Neuropsychology,* 36, 645-50.

Grabner, R.H. & **Ansari, D.** (2010). Promises and pitfalls of a 'Cognitive Neuroscience of Mathematics Learning' *ZDM: The International Journal on Mathematics Education.* (Commentary on articles in ZDM Special Issue:" Cognitive Neuroscience and Mathematics Learning"), 42, 655-660.

Ansari, D (2009). Are nonabstract brain representations of number developmentally plausible? *Behavioral and Brain Sciences* (Commentary on Cohen-Kadosh & Walsh), 32, 329-330.

Coch, D & **Ansari, D.** (2009). Thinking about mechanisms is crucial to connecting neuroscience and education. *Cortex,* 45, 546-7. # **First two authors contributed equally**

Ansari, D (2007). Does the Parietal Cortex Distinguish between "10," "Ten," and Ten Dots? *Neuron,* 165-7. (Preview)

Ansari, D. (2005). Time to use neuroscience findings in teacher training. *Nature* (Scientific Correspondence), *437*(7055), 26.

Ansari, D. (2005). Paving the way towards meaningful interactions between neuroscience and education. *Developmental Science,* 8, 466. (Commentary on Blakemore & Frith)

Karmiloff-Smith, A., Scerif, G., & **Ansari, D.** (2003). Double dissociations in developmental disorders? Theoretically misconceived, empirically dubious. *Cortex, 39*(1), 161-3.

Encyclopedia Entries (4)

Price, G.R., & **Ansari, D.** (2013). Dyscalculia. In Dulac, O. & Lassonde, M. (Eds.) *Handbook of Clinical Neurology*, Elsevier, London, 111, 241-4.

*Matejko, A. & **Ansari, D.** (2012). Developmental Cognitive Neuroscience and Learning. In N.M. Seel (Ed.) *Encyclopedia of the Sciences of Learning.* Springer, 1949-1950.

*Holloway, I.D. & **Ansari, D.** (2012). Learning Numerical Symbols. In N.M. Seel (Ed.) *Encyclopedia of the Sciences of Learning.* Springer, 961-963.

Ansari, D. (2009) Neuroimaging of numerical and mathematical development. In Encyclopedia of Language and Literacy Development. London, ON: Canadian Language and Literacy Research Network (CLLRNet)

Other Publications (11)

Goffin, C. & **Ansari, D.** (2018) Can Brain Training Train Your Brain? Using the Scientific Method to Get the Answer. *Frontiers for Young Minds.* 6:26.

Kamkar, N., Kamkar, N. & **Ansari, D.** (2018) What Is the Key to Success? And How Do We Get There? *Frontiers for Young Minds.* 6:12.

Sokolowski, H.M. & **Ansari, D.** (2017) Who Is Afraid of Math What Is Math Anxiety And Whart Can You Do about It? *Frontiers for Young Minds.* 5:57.

Merkley, R. & **Ansari, D.** (2017) Numerical symbols count for mathematical success. *Perspectives on Language and Literacy,* 43, 21-25.

Ansari, D. (2015) No more math wars: An evidence-based, developmental perspective on math education. *Education Canada,* 53.

Ansari, D. & Matejko, A. (2015) The Development of the numerate brain. *Principal Connections* (Catholic Principal's Council Ontario)*,* 18, 16-20.

*Bugden, S. & **Ansari, D.** (2014) When your brain can't do 2+2: A case of developmental dyscalculia. *Frontiers for Young Minds.* 2:8

Nelson, C.A., De Haan, M. & **Ansari, D.** (2013) A winner of 2012 Developmental Science Early Career Prize. *Developmental Science,* 16, 792.

Ansari, D. (2012) The foundations of numerical and mathematical abilities: A literature review. *World Bank Working Paper.*

Grabner, R.H., **Ansari, D.** De Smedt, B. & Hannula, M.M. (2010). Glossary of technical terms in Cognitive Neuroscience. *ZDM: The International Journal on Mathematics Education.* (ZDM Special Issue:" Cognitive Neuroscience and Mathematics Learning"), 42, 661-663.

Ansari, D. (2009). Den neuronalen Grundlagen der Dyskalkulie auf der Spur. *LeDy Mitgliederzeitschrift des Bundesvergandes Leghastenie und Dyskalkulie e.V.*

Ansari, D. (2008). The brain goes to school: Strengthening the education-neuroscience connection. *Education Canada,* 48, 6-10.

INVITED CONFERENCE TALKS, COLLOQUIA & WORKSHOPS

2020
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 (76)

(*Indicates Student/Trainee first author)

*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 meta-analysis. *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 meta-analysis. *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 non-symbolic 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 temporo-parietal 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 number-specificity 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-specfic 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 non-symbolic 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, *Journal of Educational Psychology,* 2020 -
Registered Reports Editor, *Developmental Science* 2018 - present

Rapid Internal Review Editor, *Developmental Science* 2016 - present
Associate Editor, *Frontiers for Young Minds,* 2013 - present

Past
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, *Educational Neuroscience,* 2015 - present
Editorial Board, *Cognitive Development,* 2014 - present
Editorial Board, *Cognition,* 2011 - present
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)
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 - 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.

Book Proposals
Taylor and Francis Limited Publishers (multiple), Teachers College Press, Wiley-Blackwell, Pearson, Elsevier (Multiple), Norton

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, Neuroscience, Experimental Brain Research (multiple), Behavioral and Brain Sciences, 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, 2018 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

2020-2021 – Chair, Mathematical Cognition and Learning Society (MCLS)
2019-2020-Chair Elect, Mathematical Cognition and Learning Society (MCLS)
2019 – present Member, Drafting Group of the Global Education Assessment, UNESCO
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

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

2017 - 2019 Promotion and Tenure Committee, Psychology Dept.
2018 - 2019 Chair Selection 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

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

2019 - University of Wisconsin-Madison

2019 – University of British Columbia
2018 - University of California, Irvine
2018 - Florida State University
2018 - University of Minnesota
2018 - Hebrew University of Jerusalem
2018 - Temple University
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*

Aymee Alvarez	2018 -
Lau Tze Tan	2017 -
Adrián Sardiñas	2017 - 2018

Principal Advisor – *Completed*

Helen Moriah Sokolowski	2013 – 2019 (PhD Completed 2019)
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

Jennifer Milne, Neuroscience	2009 – 2010
Matthew Waxer, Psychology	2008 – 2011
Jason Gallivan, Neuroscience	2007 – 2011

External

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
Lindsay Oliver, Neuroscience 2017
Kenneth Valyear, Neuroscience 2010
Craig Chapman, Psychology 2010
Aneta Kielar, Psychology 2008
Amy Desrocher, Psychology 2008

External
Kyle Morrisey, Psychology, Memorial University of Newfoundland, 2018
Chang Xu, Cognitive Science, Carleton University, 2018
Alison Liu, Psychology, University of Pittsburgh, 2018
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

PhD Comprehensive Exam Project
Eva Berlot 2018
Krista McPherson 2010 – 2011
Neil McMillan 2009 – 2010
Ben Bowles 2008 – 2009

Masters Examination Committee
Internal
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 & Pharmacology 2008

Post-Doctoral Fellows
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
Natalie Abeysena 2014 – 2015
Tina Felfeli 2012 – 2013
Jordan Rozario 2010 – 2011
Rachael Bosma 2008 – 2009
Kathryn D. MacMillan 2005 – 2006 (Dartmouth College)
Elizabeth Lucas 2005 – 2006, Presidential Scholar (Dartmouth College)

Undergraduate Scholar Elective Student
Stephen Beukema 2008 – 2009

Undergraduate Honors Thesis
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
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)
Wadah Baobaid, 2012-2014 (University of Western Ontario)
Michelle Hurst, Summer of 2011, 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)
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)