SIMON E. FISHER – CURRICULUM VITAE (FEBRUARY 2019)

PERSONAL STATEMENT: I am a director of the Max Planck Institute for Psycholinguistics and Professor of Language and Genetics at the Donders Institute for Brain, Cognition and Behaviour, in Nijmegen, the Netherlands. I obtained a Natural Sciences degree at Cambridge University, UK, followed by a doctorate in human genetics at Oxford University, UK. For postdoctoral research I joined Prof. Anthony Monaco's group at the Wellcome Trust Centre for Human Genetics (WTCHG) in Oxford, where I worked on genetic analyses of human neurodevelopmental disorders, and isolated the first gene implicated in speech and language deficits. In 2002, I was awarded a Royal Society Research Fellowship and became head of my own laboratory at the WTCHG, investigating how language-related genes influence the brain. In 2010 I was appointed director of the Nijmegen MPI, heading a new department, the first in the world to be devoted to tracing the functional links between genetics and language. My work involves extensive supervision of post-doctoral scientists, research assistants and students, and interdisciplinary collaborations worldwide. I am author of 15 book chapters, and >175 journal articles, including original research in *Nature*, *New England Journal of Medicine*, *Cell*, *Current Biology, PNAS, Nature Communications, Nature Neuroscience, Nature Genetics*, and *Molecular Psychiatry*, and reviews in *Nature Reviews Genetics*/*Neuroscience*, *Annual Review of Genetics/Neuroscience*, *Trends in Cognitive Sciences*/*Genetics* and *Current Opinion in Neurobiology*. According to Google Scholar, my publications have been cited >21,500 times and my *h*-index is 67. I have given >140 invited talks at departmental colloquia and international conferences. Awards include the *Francis Crick Medal and Lecture* (2008) and the *Eric Kandel Young Neuroscientists Prize* (2009). My research adopts a multidisciplinary viewpoint, integrating data from genomics, psychology, neuroscience, developmental biology and evolutionary anthropology.

EDUCATION:

1988-1991	Trinity Hall, Cambridge University, UK; BA Hons in Natural Sciences
1995	Trinity Hall, Cambridge University, UK; MA in Natural Sciences
1991-1996	St. Catherine's College, Oxford University, UK; DPhil in Genetics

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POSITIONS AND EMPLOYMENT:

1990	Summer research assistant under Dr. J. Williams, Imperial Cancer Research Fund, UK
1991	Undergraduate research under Dr. M. Akam, Genetics Dept., Cambridge University, UK
1991-1996	Doctoral research under Prof. I. Craig, Genetics Lab., Biochem. Dept., Oxford University, UK
1996 Feb-Oct	Post-doctoral research under Prof. A.V.S. Hill, WTCHG, Oxford University, UK
1996-2002	Post-doctoral research under Prof. A.P. Monaco, WTCHG, Oxford University, UK
2002-2010	Head of Molecular Neuroscience Group, WTCHG, Oxford University, UK
2010-2012	Honorary Research Fellow; WTCHG, Oxford University, UK
2010-present	Director, Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands
2012-present	Professor of Language and Genetics, Donders Institute for Brain, Cognition and Behaviour, Faculty of Science, Radboud University Nijmegen, the Netherlands

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AWARDS AND HONOURS:

1989-1990	*Trinity Hall Scholar*, Cambridge University, UK
2002-2010	*University Research Fellow*, Royal Society, UK
2003-2006	Conferred with title of *University Research Lecturer*, Oxford University, UK
2005	Highly Commended for *Young Researcher of the Year* at the Times Higher Awards
2006-2010	Conferred with title of *Reader in Molecular Neuroscience*, Oxford University, UK
2007-2010	Appointed *Isobel Laing Fellow in Biomedical Sciences*, Oriel College, Oxford University, UK
2008	Awarded *Francis Crick Medal and Lecture* (Royal Society, UK)
2008	Delivered the *Nijmegen Lectures*
2009-present	Elected Fellow, *Royal Society of Biology*
2009	Awarded inaugural *Eric Kandel Young Neuroscientists Prize* (Hertie Foundation, Germany)
2011-present	Elected Member, *International Neuropsychological Symposium*
2012	*Special Presidential Lecturer* at Society for Neuroscience Annual Meeting, New Orleans
2018	Selected to deliver *Norman Geschwind Memorial Lecture*, International Dyslexia Association

PROFESSIONAL MEMBERSHIPS, BOARDS AND COMMITTEES:

2007-present	Member of the *American Society of Human Genetics* and the *Society for Neuroscience*
2008-present	Neuroscience Board of the *Lifeboat Foundation*
2009-2011	Royal Society Research Grants - Board F (dev. biol./genetics/immunology/microbiology)
2009-2010	Neuroscience Management Board (Co-leader: Genes & Development), Oxford University
2010-present	Scientific Member of the *Max Planck Society*
2013	Scientific Committee for *IMFAR: International Meeting For Autism Research*
2013-2017	External Advisory Committee for *University of Connecticut* interdisciplinary training program on *Language Plasticity: Genes, Brain, Cognition and Computation*
2014-present	Scientific Advisory Board (Chair since 2016) of the *Netherlands Institute for Neuroscience*
2017	Scientific Committee for *International Conference for Cognitive Neuroscience*

JOURNAL EDITORSHIPS:

2010-present	Associate Editor of *Frontiers in Language Sciences*
2011-present	Section Editor of the *European Journal of Human Genetics*
2011-present	Review Editor of *Frontiers in Neurogenomics*
2013-present	Associate Editor of *Neuroscience Research*
2014-present	Editorial Board of *Journal of Neurolinguistics*
2014-present	Reviewing Editor of *Brain and Language*

SELECTED RESEARCH ARTICLES (from >175 papers, http://www.mpi.nl/people/fisher-simon/publications):

Lloyd SE, Pearce SHS, **Fisher SE**, Steinmeyer K, Schwappach B, Scheinman SJ, Harding B, Bolino A, Devoto M, Goodyer P, Rigden SPA, Wrong O, Jentsch TJJ, Craig IW, Thakker RV (1996) A common molecular basis for three inherited kidney stone diseases. ***Nature*** 379: 445-9

Fisher SE, Vargha-Khadem F, Watkins KE, Monaco AP, Pembrey ME (1998) Localisation of a gene implicated in a severe speech and language disorder. ***Nature Genetics*** 18: 168-70

Lai CSL*, **Fisher SE***, Hurst JA, Vargha-Khadem F, Monaco AP (2001) A forkhead-domain gene is mutated in a severe speech and language disorder. ***Nature*** 413: 519-23; ***joint first authors**

Fisher SE, Francks C, Marlow AJ, MacPhie IL, Newbury DF, Cardon LR, Ishikawa-Brush Y, Richardson AJ, Talcott JB, Gayán J, Olson RK, Pennington BF, Smith SD, DeFries JC, Stein JF, Monaco AP (2002) Independent genome-wide scans identify a chromosome 18 quantitative-trait locus influencing dyslexia. ***Nature Genetics*** 30: 86-91

Enard W, Przeworski M, **Fisher SE**, Lai CSL, Wiebe V, Kitano T, Monaco AP, Pääbo S (2002) Molecular evolution of FOXP2, a gene involved in speech and language. ***Nature*** 418: 869-72

MacDermot KD, Bonora E, Sykes N, Coupe AM, Lai CSL Vernes SC, Vargha-Khadem F, McKenzie F, Smith RL, Monaco AP, **Fisher SE** (2005) Identification of FOXP2 truncation as a novel cause of developmental speech and language deficits. ***American Journal of Human Genetics*** 76:1074-80

Vernes SC, Newbury DF, Abrahams BS, Winchester L, Nicod J, Groszer M, Alarcón M, Oliver PL, Davies KE, Geschwind DH, Monaco AP, **Fisher SE** (2008) A functional genetic link between distinct developmental language disorders. ***New England Journal of Medicine*** 359: 2337-45

Groszer M, Keays DA, Deacon RM, de Bono JP, Prasad-Mulcare S, Gaub S, Baum MG, French CA, Nicod J, Coventry JA, Enard W, Fray M, Brown SD, Nolan PM, Pääbo S, Channon KM, Costa RM, Eilers J, Ehret G, Rawlins JN, **Fisher SE** (2008) Impaired synaptic plasticity and motor learning in mice with a point mutation implicated in human speech deficits. ***Current Biology*** 18: 354-62

Vernes SC, Oliver PL, Spiteri E, Lockstone HE, Puliyadi R, Taylor JM, Ho J, Mombereau C, Brewer A, Lowy E, Nicod J, Groszer M, Baban D, Sahgal N, Cazier J-B, Ragoussis J, Davies KE, Geschwind DH, **Fisher SE** (2011) Foxp2 regulates gene networks implicated in neurite outgrowth in the developing brain. ***PLoS Genetics*** 7: e1002145

O'Roak BJ, Deriziotis P, Lee C, Vives L, Schwartz JJ, Girirajan S, Karakoc E, MacKenzie AP, Ng S, Baker C, Rieder M, Nickerson D, Bernier R, **Fisher SE**, Shendure J, Eichler EE (2011) Exome sequencing in sporadic autism spectrum disorders identifies severe de novo mutations. ***Nature Genetics*** 43: 585-9

Deriziotis P, O'Roak BJ, Graham SA, Estruch SB, Dimitropoulou D, Bernier RA, Gerdts J, Shendure JA, Eichler EE, **Fisher SE** (2014) De novo TBR1 mutations in sporadic autism disrupt protein functions. ***Nature Communications*** 5:4954

Hibar DP et al. (2015) Common genetic variants influence human subcortical brain structures. ***Nature*** 520:224-9

SELECTED LECTURES (from >140 invited talks, http://www.mpi.nl/people/fisher-simon/presentations):

July 2001: **Plenary session speaker.** 31st Annual Meeting, Behavior Genetics Association. Cambridge, UK.

Feb 2003: Symposium 'From gene to speech'. Annual Meeting, American Association for the Advancement of Science (AAAS). Denver, USA.

Nov 2003: Symposium 'Transgenic Models of Complex Behavioral Phenotypes'. 53rd Annual Meeting, American Society of Human Genetics (ASHG). Los Angeles, USA.

Oct 2004: **Keynote.** 16th Annual Meeting of European Academy of Childhood Disability. Edinburgh, UK.

Feb 2006: **Two invited talks in independent symposia.** Symposium 'In Search of Genes that Influence Language: Phenotypes and Molecules' AND Symposium 'Language Evolution: New Perspectives from Genetics, Neuroscience, and Human Infants'. AAAS Annual Meeting. St. Louis, USA.

May 2006: Symposium 'Genetics of speech, reading, writing'. 38th European Human Genetics Conference. Amsterdam, the Netherlands.

Oct 2006: Minisymposium 'Singing mice and songbirds'. 36th Annual Meeting, Society for Neuroscience. Atlanta, USA.

Aug 2007: **Presenter of Main Report.** 27th World Congress, International Association of Logopedics and Phoniatrics. Copenhagen, Denmark.

Oct 2007: Invited session 'Human brain evolution: What makes us unique?' 57th ASHG Annual Meeting. San Diego, USA.

Nov 2006: **Keynote.** Symposium 'Future Directions in Search of Genes that Influence Language'. 31st Boston University Conference on Language Development. Boston, USA.

Dec 2008: **3-day Lecture Series.** Nijmegen Lectures 2008. 'The Nature and Origins of Language: A Genetic Perspective'. Co-presented with Prof. Gary Marcus. Nijmegen, the Netherlands.

Dec 2008: **Prize Lecture.** Francis Crick Prize Lecture. Royal Society, London, UK.

Oct 2009: **Keynote.** 1st Annual Meeting of the Society for the Neurobiology of Language. Chicago, USA.

June 2010: **Plenary.** Plenary session 'Human Language - Lessons from FOXP2'. European Human Genetics Conference 2010. Gothenburg, Sweden.

July 2011: **Plenary.** 12th Congress of the International Association for the Study of Child Language. Montreal, Canada.

Oct 2011: **Invited speaker & session co-moderator.** Invited session 'Neurogenetic Pathways Underlying Speech and Language Disorders'. 12th International Congress on Human Genetics. Montreal, Canada.

March 2012: **Plenary.** 9th International Conference on the Evolution of Language (Evolang IX), Kyoto, Japan.

Oct 2012: **Presidential Special Lecture.** 42nd Annual Meeting, Society for Neuroscience, New Orleans, USA.

Feb 2013: Symposium 'The biology and evolution of human language'. AAAS Annual Meeting. Boston, USA.

April 2013: Symposium 'Building blocks for language'. Cognitive Neuroscience Society 20th Anniversary Meeting, San Francisco, USA.

July 2014 & 2016: **Course leader.** Genetics & Neurobiology of Language, Cold Spring Harbor, New York, USA.

November 2016: **Keynote.** Cambridge Language Sciences Annual Symposium, University of Cambridge, UK.

SUPERVISION AND MENTORING: From 2002-2010 as head of my Oxford research group, I supervised 3 DPhil students (*Sonja Vernes, Fanny Elahi, Joses Ho*), 4 postdoctoral scientists (*Jérôme Nicod, Catherine French, Matthias Groszer, Pelagia Deriziotis*), 4 research assistants and 12 short-term students (summer students, undergraduates studying medicine, postgraduates carrying out MSc projects). Since my move to Nijmegen, 7 of my PhD students successfully defended their theses at Radboud University (*Alessandro Gialluisi, Martin Becker, Amaia Carrión Castillo, Tulio Guadalupe, Sara Estruch, Rick Janssen, Jon-Ruben van Rhijn*), and I have supervised internships of 5 MSc's. I am presently promoter of 10 Nijmegen PhD students (International Max Planck Research School or Donders Graduate School) and 1 Leiden PhD student (co-supervised by Carel ten Cate). I lead a department that includes 2 senior investigators, 8 postdoctoral scientists, a laboratory manager, and 3 technicians (http://www.mpi.nl/departments/language-and-genetics/people).

TEACHING: As *Isobel Laing Fellow* at Oriel College, Oxford University, I was responsible for teaching Biochemistry & Medical Genetics to undergraduates. For over a decade I lectured on a number of Oxford undergraduate and graduate courses. I currently teach on multiple courses of the Radboud University Cognitive Neuroscience and Medical Biology Masters, as well as for the annual Radboud Summer Schools.

RESEARCH SUPPORT: I was the sole applicant on grants listed below, unless otherwise noted.

- Royal Society (UK) University Research Fellowship: Oct 2002-Sept 2010. ~£476,000.
- Wellcome Trust Project Grant: 'Investigating the role of the Foxp2 transcription factor in mouse neurodevelopment'. March 2004-Feb 2007. ~£243,000.
- UK Medical Research Council Project Grant (Brain Sciences Initiative): 'Molecular dissection of neural pathways underlying neurodevelopmental disorders'. April 2004-May 2007. ~£218,000.
- Marie Curie Intra-European Fellowship: Funded by the 6th European Community Framework Programme, Oct 2004-Sept 2006. Postdoctoral fellowship for Dr Jérôme Nicod to work in my lab. ~€159,000.
- Autism Speaks Pilot Study Grant: 'A ChIP-on-chip system for dissecting genetic pathways involved in developmental language disorders'. July 2006-June 2008. ~$116,000.
- Wellcome Trust Project Grant: 'Uncovering the functions of the Foxp2 gene in the mammalian central nervous system'. March 2007-Feb 2010. ~£405,000.
- Wellcome Trust VIP (Value In People) award: Oct 2007-Sept 2008. Fellowship to support Sonja Vernes.
- Co-Applicant on Wellcome Trust Capital Award: 'Oxford Behavioural and Systems Neuroscience Centre'. Principal Applicant is Prof. J. N. P. Rawlins. Oct 2008-Dec 2011. ~£2M.
- Simons Foundation Autism Research Initiative (SFARI) Individual Grant: 'Functional Genomic Dissection of Language-Related Disorders'. Dec 2009-Nov 2011. ~$634,000.
- Max Planck Society: Longterm core support for 'Language and Genetics' Department. Oct 2010-Aug 2037. Core funding of dept is currently ~€1.5M per annum. I also received equipment startup of €1.1M.
- Work Package leader and Board Member on NWO Gravitation award: 'Language in Interaction'. Principal Applicant is Prof. P. Hagoort. July 2013-June 2022. ~€27.6M. https://www.languageininteraction.nl/
- Co-Applicant on National Health & Medical Research Council (Aus) award: 'Centre for Research Excellence in Speech & Language Neurobiology'. Principal Applicant is Prof. A. Morgan. Nov 2016-Oct 2021. AUD2.5M.

COMMUNICATION OF SCIENCE: My work involves frequent interaction with the media. I have conducted interviews for major national newspapers (including the New York Times, The London Times, Daily Telegraph, The Guardian, Financial Times, Le Monde, de Volkskrant), popular science magazines (New Scientist, Scientific American, National Geographic etc.) and radio/TV in the UK, Italy, USA, Canada and Japan. Major documentary interviews include the Channel 4 (UK) TV series 'What Makes Us Human', the PBS (USA) TV series 'The Human Spark', and the award-winning 'What the Songbird Said' for BBC Radio 4. Public engagement includes a 'talking point' (60 minute talk, 30 minute Q&A session) at the Royal Institution (UK) in 2009, a Café Scientifique on 'Talking primates' at the Summer Science Exhibition of the Royal Society (UK) in 2011, and lay talks at Rome's Science Festival (Italy) in 2014, InScience, the Dutch International Science Film Festival in 2016, and New Scientist Live, the UK's biggest science festival, in 2017.

PEER REVIEW: I have acted as peer reviewer for many journals across diverse fields, including:

American Journal of Human Genetics
American Journal of Medical Genetics
Annals of Neurology
Archives of General Psychiatry
Behavior Genetics
Biological Psychiatry
BMC Evolutionary Biology
BMC Genetics
Child Development
Clinical Genetics
Cortex
Cognition
Current Anthropology
Current Biology
Development
European Journal of Human Genetics
European Journal of Medical Genetics
Genomics
Human Genetics
Human Molecular Genetics
Journal of Comparative Neurology
Journal of Medical Genetics
Journal of Neurodevelopmental Disorders
Journal of Neuroscience
Journal of Neuroscience Research
Journal of Speech Language Hearing Res
Molecular Biology and Evolution
Molecular and Cellular Biology
Molecular Psychiatry
Nature Communications
Nature Genetics
Nature Medicine
Nature Reviews Neuroscience
Neural Development
Neurobiology of Disease
Neuroinformatics
Neuron
Neuroscience
New England Journal of Medicine
PLoS Biology
PLoS Genetics
PLoS ONE
Science
Trends in Cognitive Sciences

In addition, I have reviewed grant proposals for funding bodies in the UK (Wellcome Trust, MRC, BBSRC, SPARKS, Autism Speaks), Europe (Pasteur Institute), US (NIH and NSF), Hong Kong (Research Grants Council).

127) Tilot AK, Kucera KS, Vino A, Asher JE, Baron-Cohen S, Fisher SE (2018) Rare variants in axonogenesis genes connect three families with sound-color synesthesia. *Proc Natl Acad Sci USA* 115: 3168-73

128) Mei C, Fedorenko E, Amor DJ, Boys A, Hoeflin C, Carew P, Burgess T, Fisher SE, Morgan AT (2018) Deep phenotyping of speech and language skills in individuals with 16p11.2 deletion. *Eur J Hum Genet* 26: 676-86

129) Snijders Blok L, Hiatt SM, Bowling KM, Prokop JW, Engel KL, Cochran JN, Bebin EM, Bijlsma EK, Ruivenkamp CAL, Terhal P, Simon MEH, Smith R, Hurst JA; DDD study, McLaughlin H, Person R, Crunk A, Wangler MF, Streff H, Symonds JD, Zuberi SM, Elliott KS, Sanders VR, Masunga A, Hopkin RJ, Dubbs HA, Ortiz-Gonzalez XR, Pfundt R, Brunner HG, Fisher SE, Kleefstra T, Cooper GM (2018) De novo mutations in MED13, a component of the Mediator complex, are associated with a novel neurodevelopmental disorder. *Hum Genet* 137: 375-88

130) Kong XZ, Mathias SR, Guadalupe T; ENIGMA Laterality Working Group, Glahn DC, Franke B, Crivello F, Tzourio-Mazoyer N, Fisher SE, Thompson PM, Francks C (2018) Mapping cortical brain asymmetry in 17,141 healthy individuals worldwide via the ENIGMA Consortium *Proc Natl Acad Sci USA* 115: E5154-63

131) French CA, Vinueza Veloz MF, Zhou K, Peter S, Fisher SE[1], Costa RM[1], De Zeeuw CI (2018) Differential effects of Foxp2 disruption in distinct motor circuits. *Mol Psychiatry* doi: 10.1038/s41380-018-0199-x **[1]joint corresponding authors**

132) de Kovel CGF, Lisgo SN, Fisher SE, Francks C (2018) Subtle left-right asymmetry of gene expression profiles in embryonic and foetal human brains. *Sci Rep* 8: 12606

133) Xu S, Liu P, Chen Y, Chen Y, Zhang W, Zhao H, Cao Y, Wang F, Jiang N, Lin S, Li B, Zhang Z, Wei Z, Fan Y, Jin Y, He L, Zhou R, Dekker JD, Tucker HO, Fisher SE, Yao Z, Liu Q, Xia X, Guo X (2018) Foxp2 regulates anatomical features that may be relevant for vocal behaviors and bipedal locomotion. *Proc Natl Acad Sci USA* 115: 8799-8804

134) den Hoed J, Sollis E, Venselaar H, Estruch SB, Deriziotis P, Fisher SE (2018) Functional characterization of TBR1 variants in neurodevelopmental disorder. *Sci Rep* 8: 14279

135) van der Meer D, Rokicki J, Kaufmann T, Córdova-Palomera A, Moberget T, Alnæs D, Bettella F, Frei O, Doan NT, Sønderby IE, Smeland OB, Agartz I, Bertolino A, Bralten J, Brandt CL, Buitelaar JK, Djurovic S, van Donkelaar M, Dørum ES, Espeseth T, Faraone SV, Fernández G, Fisher SE, Franke B, Haatveit B, Hartman CA, Hoekstra PJ, Håberg AK, Jönsson EG, Kolskår KK, Le Hellard S, Lund MJ, Lundervold AJ, Lundervold A, Melle I, Monereo Sánchez J, Norbom LC, Nordvik JE, Nyberg L, Oosterlaan J, Papalino M, Papassotiropoulos A, Pergola G, de Quervain DJF, Richard G, Sanders AM, Selvaggi P, Shumskaya E, Steen VM, Tønnesen S, Ulrichsen KM, Zwiers MP, Andreassen OA, Westlye LT; Alzheimer's Disease Neuroimaging Initiative; Pediatric Imaging, Neurocognition and Genetics Study (2018) Brain scans from 21,297 individuals reveal the genetic architecture of hippocampal subfield volumes. *Mol Psychiatry* doi: 10.1038/s41380-018-0262-7

136) van Rhijn JR, Fisher SE, Vernes SC, Nadif Kasri N (2018) Foxp2 loss of function increases striatal direct pathway inhibition via increased GABA release. *Brain Struct Funct* 223: 4211-26

137) Snijders Blok L, Rousseau J, Twist J, Ehresmann S, Takaku M, Venselaar H, Rodan LH, Nowak CB, Douglas J, Swoboda KJ, Steeves MA, Sahai I, Stumpel CTRM, Stegmann APA, Wheeler P, Willing M, Fiala E, Kochhar A, Gibson WT, Cohen ASA, Agbahovbe R, Innes AM, Au PYB, Rankin J, Anderson IJ, Skinner SA, Louie RJ, Warren HE, Afenjar A, Keren B, Nava C, Buratti J, Isapof A, Rodriguez D, Lewandowski R, Propst J, van Essen T, Choi M, Lee S, Chae JH, Price S, Schnur RE, Douglas G, Wentzensen IM, Zweier C, Reis A, Bialer MG, Moore C, Koopmans M, Brilstra EH, Monroe GR, van Gassen KLI, van Binsbergen E, Newbury-Ecob R, Bownass L, Bader I, Mayr H, Wortmann SB, Jakielski KJ, Strand EA, Kloth K, Bierhals T, the DDD study, Roberts JD, Petrovich RM, Machida S, Kurumizaka H, Lelieveld S, Pfundt R, Jansen S, Deriziotis P, Faivre L, Thevenon J, Assoum M, Shriberg L, Kleefstra T, Brunner HG, Wade PA, Fisher SE[1], Campeau PM[1] (2018) CHD3 helicase domain mutations cause a neurodevelopmental syndrome with macrocephaly and impaired speech and language. *Nature Commun* 9: 4619 **[1]joint corresponding authors**

138) Sønderby IE, Gústafsson Ó, Doan NT, Hibar DP, Martin-Brevet S, Abdellaoui A, Ames D, Amunts K, Andersson M, Armstrong NJ, Bernard M, Blackburn N, Blangero J, Boomsma DI, Bralten J, Brattbak HR, Brodaty H, Brouwer RM, Bülow R, Calhoun V, Caspers S, Cavalleri G, Chen CH, Cichon S, Ciufolini S, Corvin A, Crespo-Facorro B, Curran JE, Dale AM, Dalvie S, Dazzan P, de Geus EJC, de Zubicaray GI, de Zwarte SMC, Delanty N, den Braber A, Desrivières S, Donohoe G, Draganski B, Ehrlich S, Espeseth T, Fisher SE, Franke B, Frouin V, Fukunaga M, Gareau T, Glahn DC, Grabe H, Groenewold NA, Haavik J, Håberg A, Hashimoto R, Hehir-Kwa JY, Heinz A, Hillegers MHJ, Hoffmann P, Holleran L, Hottenga JJ, Hulshoff HE, Ikeda M, Jahanshad N, Jernigan T, Jockwitz C, Johansson S, Jonsdottir GA, Jönsson EG, Kahn R, Kaufmann T, Kelly S, Kikuchi M, Knowles EEM, Kolskår KK, Kwok JB, Hellard SL, Leu C, Liu J, Lundervold AJ, Lundervold A, Martin NG, Mather K, Mathias SR, McCormack M, McMahon KL, McRae A, Milaneschi Y, Moreau C, Morris D, Mothersill D, Mühleisen TW, Murray R, Nordvik JE, Nyberg L, Olde Loohuis LM, Ophoff R, Paus T, Pausova Z, Penninx B, Peralta JM, Pike B, Prieto C, Pudas S, Quinlan E, Quintana DS, Reinbold CS, Marques TR, Reymond A, Richard G, Rodriguez-Herreros B, Roiz-Santiañez R, Rokicki J, Rucker J, Sachdev P, Sanders AM, Sando SB, Schmaal L, Schofield PR, Schork AJ, Schumann G, Shin J, Shumskaya E, Sisodiya S, Steen VM, Stein DJ, Steinberg S, Strike L, Teumer A, Thalamuthu A, Tordesillas-Gutierrez D, Turner J, Ueland T, Uhlmann A, Ulfarsson MO, van 't Ent D, van der Meer D, van Haren NEM, Vaskinn A, Vassos E, Walters GB, Wang Y, Wen W, Whelan CD, Wittfeld K, Wright M, Yamamori H, Zayats T, Agartz I, Westlye LT, Jacquemont S, Djurovic S, Stefánsson H, Stefánsson K, Thompson P, Andreassen OA; 16p11.2 European Consortium, for the ENIGMA-CNV working group (2018) Dose response of the 16p11.2 distal copy number variant on intracranial volume and basal ganglia. *Mol Psychiatry* doi: 10.1038/s41380-018-0118-1

139) Haworth S, Shapland CY, Hayward C, Prins BP, Felix JF, Medina-Gomez C, Rivadeneira F, Wang C, Ahluwalia TS, Vrijheid M, Guxens M, Sunyer J, Tachmazidou I, Walter K, Iotchkova V, Jackson A, Cleal L, Huffmann J, Min JL, Sass L, Timmers PRHJ, UK10K consortium, Davey Smith G, Fisher SE, Wilson JF, Cole TJ, Fernandez-Orth D, Bønnelykke K, Bisgaard H, Pennell CE, Jaddoe VWV, Dedoussis G, Timpson N, Zeggini E, Vitart V, St Pourcain B (2019) Low-frequency variation in TP53 has large effects on head circumference and intracranial volume. *Nature Commun* 10: 357

140) Gunz P, Tilot AK, Wittfeld K, Teumer A, Shapland CY, van Erp TGM, Dannemann M, Vernot B, Neubauer S, Guadalupe T, Fernandez G, Brunner H, Enard W, Fallon J, Hosten N, Völker U, Profico A, Di Vincenzo F, Manzi G, Kelso J, St Pourcain B, Hublin J-J, Franke B, Pääbo S, Macciardi F, Grabe HJ, Fisher SE (2019) Neandertal introgression sheds light on modern human endocranial globularity. *Curr Biol* 29: 120-7

141) Verhoef E, Demontis D, Burgess S, Shapland CY, Dale PS, Okbay A, Neale BM, Faraone SV; iPSYCH-Broad-PGC ADHD Consortium, Stergiakouli E, Davey Smith G, Fisher SE, Børglum AD, St Pourcain B (2019) Disentangling polygenic associations between attention-deficit/hyperactivity disorder, educational attainment, literacy and language. *Transl Psychiatry* 9: 35

142) Gialluisi A, Andlauer TFM, Mirza-Schreiber N, Moll K, Becker J, Hoffmann P, Ludwig KU, Czamara D, St Pourcain B, Brandler W, Honbolygó F, Tóth D, Csépe V, Huguet G, Morris AP, Hulslander J, Willcutt EG, DeFries JC, Olson RK, Smith SD, Pennington BF, Vaessen A, Maurer U, Lyytinen H, Peyrard-Janvid M, Leppänen PHT, Brandeis D, Bonte M, Stein JF, Talcott JB, Fauchereau F, Wilcke A, Francks C, Bourgeron T, Monaco AP, Ramus F, Landerl K, Kere J, Scerri TS, Paracchini S, Fisher SE, Schumacher J, Nöthen MM, Müller-Myhsok B, Schulte-Körne G (2019) Genome-wide association scan identifies new variants associated with a cognitive predictor of dyslexia. *Transl Psychiatry* 9: 77

143) Castells-Nobau A, Eidhof I, Fenckova M, Brenman-Suttner DB, Scheffer-de Gooyert JM, Christine S, Schellevis RL, van der Laan K, Quentin C, van Ninhuijs L, Hofmann F, Ejsmont R, Fisher SE, Kramer JM, Sigrist SJ, Simon AF, Schenck A (2019) Conserved regulation of neurodevelopmental processes and behavior by FoxP in Drosophila. *PLoS ONE* 14: e0211652

Review/perspective articles in journals

[Includes peer-reviewed articles as indicated]

1) Fisher SE, Stein JF, Monaco AP (1999) A genome-wide search strategy for identifying quantitative trait loci involved in reading and spelling disability (developmental dyslexia). *Eur Child & Adol Psych* 8-S3: 47-51

2) Francks C, Fisher SE, Marlow AJ, Richardson AJ, Stein JF, Monaco AP (2000) A sibling-pair based approach for mapping genetic loci that influence quantitative measures of reading disability. *Prostaglandins, Leukotrienes & Essential Fatty Acids* 63: 27-31

3) Fisher SE, DeFries JC (2002) Developmental dyslexia: genetic dissection of a complex cognitive trait. *Nature Rev Neurosci* 3: 767-80 [peer-reviewed]

4) Marcus GF, Fisher SE (2003) FOXP2 in focus: what can genes tell us about speech and language? *Trends Cogn Sci* 7: 257-62 [peer-reviewed]

5) Fisher SE, Lai CSL, Monaco AP (2003) Deciphering the genetic basis of speech and language disorders. *Annu Rev Neurosci* 26: 57-80

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