



The Autism Research Centre (ARC) achievements (1985-2024)

This is a temporary list whilst we continue the reconstruction of our website. The key papers for each achievement can be viewed by clicking on the footnotes below.

2020-present

2023: The first evidence that autistic people have increased risk of physical health conditions across all 9 major organ systems in the body¹.

2023: The first evidence that rare genetic variants are associated with autistic traits, as discovered in multiplex autism families².

2023: Baron-Cohen is awarded the Medical Research Council (MRC) Millennium Medal for his work into the prenatal sex steroid theory of autism and his contribution to autism research and the public understanding of neurodiversity.

2023: The first evidence that postnatal depression is more common in autistic new mothers³.

¹ [Ward, J, Weir, E, Allison, C, Baron-Cohen, S. \(2023\) Increased rates of chronic physical health conditions across all organ systems in autistic adolescents and adults. *Molecular Autism*, 14.](#)

² [More, R, P, Warrier, V, Brunel, H, Buckingham, C, Smith, P, Allison, C, Holt, R, Bradshaw, C, R, Baron-Cohen, S. \(2023\) Identifying rare genetic variants in 21 highly multiplex autism families: the role of diagnosis and autistic traits. *Molecular Psychiatry*, 28, 2148–2157.](#)

³ [Hampton, S, Allison, C, Baron-Cohen, S, Holt, R, \(2023\) Autistic People's Perinatal Experiences II: A Survey of Childbirth and Postnatal Experiences. *Journal of Autism and Developmental Disorders*, 53, 2749-2763.](#)

2023: Confirming sex and gender differences in cognitive empathy in a large population across 57 countries⁴.

2023: Confirming the autistic brain is masculinised, using machine learning and structural MRI⁵.

2022: The first integration of rare and common genetic variants in autism⁶.

2022: The first large scale study of autistic people in the criminal justice system⁷.

2022: The first evidence of differences in brain response to oxytocin in autistic women in response to faces⁸.

2022: The first evidence that autistic people are more likely to die by suicide, using post-mortem coroner's data⁹.

2021: The first study of substance use and misuse in autistic adults¹⁰.

2021: The first large population study of ethnic and socioeconomic differences in autism¹¹.

2021: The first evidence that camouflaging in autism is associated with poor mental health¹².

⁴ [Greenberg, D. M, Warrier, V, Abu-Akel, A, Allison, C, Gajos, K, Z, Reinecke, K, Rentfrow, P, J, Radecki, M, A, Baron-Cohen, S, \(2023\) Sex and age differences in "theory of mind" across 57 countries using the English version of the "Reading the Mind in the Eyes" Test. Proceedings of the National Academy of Sciences, **120**, e2022385119.](#)

⁵ [Floris, D, L, Peng, H, Warrier, V, Lombardo, M, V, Pretzsch, C, M, Moreau, C, Tsompanidis, A, Gong, W, Mennes, M, Llera, A, van Rooij, D, Oldehinkel, M, Forde, N, Charman, T, Tillmann, J, Banaschewski, T, Moessnang, C, Durston, S, Holt, R, J, Ecker, C, Dell'Acqua, F, Loth, E, Bourgeron, T, Murphy, D, G, M, Marquand, A, F, Lai, M-C, Buitelaar, J, K, Baron-Cohen, S, Beckmann, C, F, the EU-AIMS LEAP Group, \(2023\) The link between autism and sex-specific neuroanatomy, and associated cognition and gene expression. American Journal of Psychiatry, **1**, 50-64.](#)

⁶ [Warrier, V, Zhang, X, Reed, P, Havdahl, A, Moore, T, M, Cliquet, F, Leblond, C, S, Rolland, T, Rosengren, A, EU-AIMS LEAP, iPSYCH-Autism Working Group, Spectrum10K and APEX Consortia, Rowitch, D, H, Hurler, M, E, Geschwind, D, H, Borglum, A, D, Robinson, E, B, Grove, J, Martin, H, C, Bourgeron, T, Baron-Cohen, S, \(2022\) Genetic correlates of phenotypic heterogeneity in autism. Nature Genetics, **54**, 1293-1304.](#)

⁷ [Slavny-Cross, R, Allison, C, Griffiths, S, Baron-Cohen, S, \(2022\) Autism and the criminal justice system: An analysis of 93 cases. Autism Research, **15**, 904-914.](#)

⁸ [Procyshyn, T, Lombardo, M, Lai, M, C, Jassim, N, Auyeung, B, Crockford, S, Deakin, J, B, Soubramanian, S, Sule, A, Terburg, D, Baron-Cohen, S, Bethlehem, R, A, I, \(2022\) Oxytocin enhances basolateral amygdala activation and functional connectivity while processing emotional faces: preliminary findings in autistic versus non-autistic women. Social Cognitive and Affective Neuroscience, **10**, 929-938.](#)

⁹ [Cassidy, S, Au-Yeung, S, Robertson, A, Cogger-Ward, H, Richards, G, Allison, C, Bradley, L, Kenny, R, O'Connor, R, Mosse, D, Rodgers, J, Baron-Cohen, S, \(2022\) Autism and autistic traits in those who died by suicide in England. The British Journal of Psychiatry, **5**, 683-691.](#)

¹⁰ [Weir, E, Allison, C, Baron-Cohen, S, \(2021\) Understanding the substance use of autistic adolescents and adults: a mixed-methods approach. The Lancet Psychiatry, **8**, 673-685.](#)

¹¹ [Roman-Urrestarazu, A, Allison, C, Matthews, F, E, Brayne, C, Baron-Cohen, S, \(2021\) Association of race/ethnicity and social disadvantage with autism prevalence in 7 million school children in England. JAMA Pediatrics, **6**, e210054.](#)

¹² [Hull, L, Levy, L, Lai, M, C, Petrides, K, V, Baron-Cohen, S, Allison, C, Smith, P, Mandy, W, \(2021\) Is social camouflaging associated with anxiety and depression in autistic adults? Molecular Autism, **12**, 1-13.](#)

2021: The first evidence of autism as an extreme of the typical male pattern in the default mode network¹³.

2021: A population study screening autism at 18 and 36 months of age¹⁴.

2021: The earliest evidence of atypical neurogenesis in autism, specifically atypical neural rosettes¹⁵.

2020: The first evidence of elevated rates of non-communicable physical health conditions in autism¹⁶.

2020: The first large scale study of elevated rates of transgenderism in autism¹⁷.

2020: Publication of *The Pattern Seekers* (Penguin Random House UK/Basic Books US).

2020: The first evidence of elevated prenatal estrogens in autism¹⁸.

2015-2019

2019: The first evidence of genetic overlap between autism and systemizing¹⁹.

2019: The first major prevalence study of autism in China²⁰.

2019: The first evidence of vulnerability in autistic adults²¹.

2018: The first evidence that autistic women have higher rates of polycystic ovary syndrome²².

¹³ [Floris, D. L, José Filho, O, A, Lai, M, C, Giavasis, S, Oldehinkel, M, Mennes, M, Charman, T, Tillmann J, Dumas, G, Ecker, C, Dell'Acqua, F, Banaschewski, T, Moessnang, C, Baron-Cohen, S, Durston, S, Loth, E, Murphy, D, G, M, Buitelaar, J, K, Beckmann, C, F, Milham, M, P, Di Martino, A. \(2021\) Towards robust and replicable sex differences in the intrinsic brain function of autism. *Molecular Autism*, **12**, 1-17.](#)

¹⁴ [Allison, C, Matthews, F, E, Ruta, L, Pasco, G, Soufer, R, Brayne, C, Charman, T, Baron-Cohen, S, \(2021\) Quantitative Checklist for Autism in Toddlers \(Q-CHAT\). A population screening study with follow-up: the case for multiple time-point screening for autism. *BMJ paediatrics open*, **5**, e000700.](#)

¹⁵ [Adhya, D, Swarup, V, Nagy, R, Dutan, L, Shum, C, Valencia-Alarcón, E, P, Jozwik, K, M, Mendez, M, A, Horder, J, Loth, E, Nowosiad, P, Lee, I, Skuse, D, Flinter, F, Murphy, D, McAlonan, G, Geschwind, D, Price, J, Carroll, J, Srivastava, D, and Baron-Cohen, S. \(2021\) Atypical neurogenesis in induced pluripotent stem cells from autistic individuals. *Biological Psychiatry*, **89**, 486-496.](#)

¹⁶ [Weir, E, Allison, C, Warrier, V, Baron-Cohen, S, \(2020\). Increased prevalence of non-communicable physical health conditions among autistic adults. *Autism*, **25**, 681-694.](#)

¹⁷ [Warrier, V, Greenberg, D, M, Weir, E, Buckingham, C, Smith, P, Lai, M, C, Allison, C, Baron-Cohen, S, \(2020\) Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals. *Nature Communications*, **11**, 3959.](#)

¹⁸ [Baron-Cohen, S, Tsompanidis, A, Auyeung, B, Norgaard-Pedersen, B, Hougaard, D, Abdallah, M, Cohen, A, Pohl, A, \(2020\) Foetal oestrogens and autism. *Molecular Psychiatry*, **25**, 2970-2978.](#)

¹⁹ [Warrier, V, Toro, R, Won, H, Leblond, C, Cliquet, F, Delorme, R, De Witte, W, Bralten, J, Chakrabarti, B, Borglum, A, Grove, J, Poelmans, G, Hinds, D, Bourgeron, T, and Baron-Cohen, S \(2019\) Social and non-social autism symptom and trait domains are genetically dissociable. *Communications Biology*, **2**, 1-13.](#)

²⁰ [Sun, X, Allison, C, Wei, L, Matthews, F, E, Auyeung, B, Wu, Y, Y, Griffiths, S, Zhang, J, Baron-Cohen, S, Brayne, C, \(2019\) Autism prevalence in China is comparable to Western prevalence. *Molecular Autism*, **10**, 7.](#)

²¹ [Griffiths, S, Allison, C, Kenny, R, Holt, R, Smith, P, Baron-Cohen, S, \(2019\) The Vulnerability Experiences Quotient \(VEQ\): A study of vulnerability, mental health and life satisfaction in autistic adults. *Autism Research*, **10**, 1516-1528.](#)

²² [Cherskov, A, Pohl, A, Allison, C, Zhang, H, Payne, A, R, Baron-Cohen, S, \(2018\) Polycystic ovary syndrome and autism: A test of the prenatal sex steroid theory. *Translational Psychiatry*, **8**, 136.](#)

2018: A big data confirmation of the Empathizing-Systemizing and Extreme Male Brain theories of autism and typical sex differences²³.
2017: First evidence of altered brain response to oxytocin in autistic women²⁴.
2017: The first study of camouflaging in autism²⁵.
2016: The first study of empathy and altruism 'in the wild'²⁶.
2016: The first evidence that testosterone reduces cognitive empathy²⁷.
2016: The first large scale evidence that autistic traits differ in those with working in STEM and between genders²⁸.
2015: The first evidence demonstrating oxytocin increases eye-contact in autism²⁹.
2015: The first evidence showing elevated prenatal sex steroid hormones in autism³⁰.

2010-2014

2014: Development of the Sensory and Perception Quotient (SPQ) and evidence of sensory hypersensitivity in autism³¹.
2014: The first evidence of 'steroidopathy' in autistic women³².

²³ [Greenberg, D. M, Warrier, V, Allison, C, Baron-Cohen, S, \(2018\) Testing the Empathizing-Systemizing theory of sex differences and the Extreme Male Brain theory of autism in half a million people. Proceedings of the National Academy of Sciences, 115, 12152-12157.](#)

²⁴ [Bethlehem, R, Lombardo, M, Lai, M-C, Auyeung, B, Crockford, S, Deakin, J, Soubramanian, S, Sule, A, Kundu, P, Voon, V, & Baron-Cohen, S, \(2017\) Intranasal oxytocin enhances intrinsic corticostriatal functional connectivity in women. Transitional Psychiatry, 7, e1099.](#)

²⁵ [Hull, L, Petrides, KV, Allison, C, Smith, P, Baron-Cohen, S, Lai, M-C, Mandy, W, \(2017\) "Putting on my best normal": social camouflaging in adults with autism spectrum conditions. Journal of Autism and Developmental Disorders, 47, 2519-2534.](#)

²⁶ [Bethlehem, R, Allison, C, van Andel, E, Coles, A, Neil, K, & Baron-Cohen, S, \(2016\) Does empathy predict altruism in the wild? Social Neuroscience, 12, 743-750.](#)

²⁷ [Bos, P, Hofman, D, Hermans, E, Montoya, E, Baron-Cohen, S, & van Honk, J, \(2016\) Testosterone reduces functional connectivity during the 'Reading the Mind in the Eyes' test. Psychoneuroendocrinology, 68, 194-201.](#)

²⁸ [Ruzich, E, Allison, C, Chakrabarti, B, Smith, P, Musto, H, Ring, H, & Baron-Cohen, S, \(2015\) Sex and STEM occupation predict Autism Spectrum Quotient \(AQ\) scores in half a million people. PLoS ONE, 10, e0141229.](#)

²⁹ [Auyeung, B, Lombardo, M, Heinrichs, M, Chakrabarti, B, Sule, A, Deakin, J, Bethlehem, R, Dickens, L, Mooney, N, Sipple, J, Thiemann, P, & Baron-Cohen, S, \(2015\) Oxytocin increases eye contact during a real-time, naturalistic social interaction in males with and without autism. Translational Psychiatry, 5, e507.](#)

³⁰ [Baron-Cohen, S, Auyeung, B, Nørgaard-Pedersen, B, Hougaard, D.M, Abdallah, M.W, Melgaard, L, Cohen, A.S, Chakrabarti, B, Ruta, L, Lombardo, M.V, \(2015\) Elevated fetal steroidogenic activity in autism. Molecular Psychiatry, 20, 369-376.](#)

³¹ [Tavassoli, T, Hoekstra, R.A, Baron-Cohen, S, \(2014\) The Sensory Perception Quotient \(SPQ\): development and validation of a new sensory questionnaire for adults with and without autism. Molecular Autism, 5, 29.](#)

³² [Pohl, A, Cassidy, S, Auyeung, B, & Baron-Cohen, S, \(2014\) Uncovering steroidopathy in women with autism: a latent class analysis. Molecular Autism, 5, 27.](#)

2014: The first meta-analysis of sex differences in the human brain³³
2014: The first large scale study of suicidality in autism³⁴.
2013: The first evidence that the brain is 'masculinized' in autistic women³⁵.
2013: The CLASS clinic moves into the newly created Chitra Sethia Autism Centre, Cambridgeshire.
2013: The first evidence that girls with anorexia have higher levels of autistic traits³⁶.
2013: The first evidence of differences in binocular rivalry in autism³⁷.
2013: The first evidence of a sharper gradient of spatial attention in autism³⁸.
2013: The first evidence of higher rates of synaesthesia in autism³⁹.
2012: The first evidence to show associations between prenatal testosterone and regional gray matter volume in the human brain⁴⁰.
2012: The first evidence that transmen have a higher number of autistic traits⁴¹.
2011: Development of the Short Autism Spectrum Quotient (AQ-10) and its incorporation into the NICE Guidelines for screening for autism⁴².
2011: The first evidence that rates of autism are elevated in an IT-rich city (Eindhoven)⁴³.
2011: Publication of *Zero Degrees of Empathy* (Penguin)

³³ [Ruigrok, A, Salimi-Khorshidi, G, Lai, M-C, Baron-Cohen, S, Lombardo, M, Tait, R, & Suckling, J. \(2014\) A meta-analysis of sex differences in human brain structure. *Neuroscience and Biobehavioral Reviews*, 39, 34-50.](#)

³⁴ [Cassidy, S, Bradley, P, Robinson, J, Allison, C, McHugh, M, & Baron-Cohen, S. \(2014\) Suicidal ideation and suicide plans or attempts in adults with Asperger's syndrome attending a specialist diagnostic clinic: a clinical cohort study. *The Lancet Psychiatry*, 1, 142-147.](#)

³⁵ [Lai, M-C, Lombardo, M, Suckling, J, Ruigrok, A, Chakrabarti, B, Ecker, C, Deoni, S, Craig, M, Murphy, D, Bullmore, E, MRC AIMS Consortium, & Baron-Cohen, S. \(2013\) Biological sex affects the neurobiology of autism. *Brain*, 136, 2799-2815.](#)

³⁶ [Baron-Cohen, S, Jaffa, T, Davies, S, Auyeung, B, Allison, C, & Wheelwright, S. \(2013\) Do girls with anorexia nervosa have elevated autistic traits? *Molecular Autism*, 4, 24](#)

³⁷ [Robertson, C, Kravitz, D, Freyberg, J, Baron-Cohen, S, & Baker, C. \(2013\) Slower rate of binocular rivalry in autism. *The Journal of Neuroscience*, 33, 16983-16991.](#)

³⁸ [Robertson, C, Kravitz, D, Freyberg, J, Baron-Cohen, S, & Baker, C. \(2013\) Tunnel vision: sharper gradient of spatial attention in autism. *The Journal of Neuroscience*, 33, 6776-6781.](#)

³⁹ [Baron-Cohen, S, Johnson, D, Asher, J, Wheelwright, S, Fisher, S, Gregersen, P, & Allison, C. \(2013\) Is synaesthesia more common in autism? *Molecular Autism*, 4, 40.](#)

⁴⁰ [Lombardo, M, Ashwin, E, Auyeung, B, Chakrabarti, Taylor, K, Hackett, G, Bullmore, E, & Baron-Cohen, S. \(2012\) Fetal testosterone influences sexually dimorphic gray matter in the human brain. *Journal of Neuroscience*, 32, 674-680.](#)

⁴¹ [Jones, R, Wheelwright, S, Farrell, K, Martin, E, Green, R, Di Ceglie, D, & Baron-Cohen, S. \(2012\) Brief Report: Female-to-male transsexual people and autistic traits. *Journal of Autism and Developmental Disorders*, 42, 301-306.](#)

⁴² [Allison, C, Auyeung, B, & Baron-Cohen, S. \(2012\) Toward brief "red flags" for autism screening: the Short Autism Spectrum Quotient and the Short Quantitative Checklist in 1,000 cases and 3,000 controls. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51, 202-212.](#)

⁴³ [Roelfsema, M, Hoekstra, R, Allison, C, Wheelwright, S, Brayne, C, Matthews, F, & Baron-Cohen, S. \(2012\) Are autism spectrum conditions more prevalent in an information-technology region? A school-based study of three regions in the Netherlands. *Journal of Autism and Developmental Disorders*, 42, 734-739.](#)

2011: The first evidence finding elevated androstenedione in autism⁴⁴.
2010: Publication of *Autism and Asperger Syndrome: The Facts* (OUP).
2010: The first stratification of autistic traits in the population⁴⁵.
2010: The first evidence that watching *The Transporters* leads to improved emotion recognition in autistic children⁴⁶.
2010: The first evidence that prenatal testosterone levels are associated with the size of the corpus callosum⁴⁷.
2010: The first evidence linking prenatal testosterone to autistic traits at 18 months of age⁴⁸.

2009-2005

2009: The first evidence linking prenatal testosterone to autistic traits in childhood⁴⁹.
2009: The first study establishing the prevalence of autism as 1% of the population⁵⁰.
2009: The first evidence that genes regulating prenatal sex steroids are associated with autism⁵¹.
2009: The first molecular genetic study of synaesthesia⁵².

⁴⁴ [Ruta, L, Ingudomnukul, E, Taylor, E, Chakrabarti, B, & Baron-Cohen, S. \(2011\) Increased serum androstenedione in adults with autism spectrum conditions. *Psychoneuroendocrinology*, 36, 1154-1163.](#)

⁴⁵ [Wheelwright, S, Auyeung, B, Allison, C, & Baron-Cohen, S. \(2010\) Defining the broader, medium and narrow autism phenotype among parents using the Autism Spectrum Quotient \(AQ\). *Molecular Autism*, 1, 10.](#)

⁴⁶ [Golan, O, Baron-Cohen, S, Ashwin, E, Granader, Y, McClintock, S, Day, K, & Leggett, V. \(2010\) Enhancing emotion recognition in children with autism spectrum conditions: an intervention using animated vehicles with real emotional faces. *Journal of Autism and Developmental Disorders*, 40, 269-279.](#)

⁴⁷ [Chura, L, Lombardo, M, Ashwin, E, Auyeung, B, Chakrabarti, B, Bullmore, E, T, & Baron-Cohen, S. \(2010\) Organizational effects of fetal testosterone on human corpus callosum size and asymmetry. *Psychoneuroendocrinology*, 35, 122-132.](#)

⁴⁸ [Auyeung, B, Taylor, K, Hackett, G, & Baron-Cohen, S. \(2010\) Foetal testosterone and autistic traits in 18 to 24-month-old children, *Molecular Autism*, 1:11.](#)

⁴⁹ [Auyeung, B, Baron-Cohen, S, Chapman, E, Knickmeyer, R, Taylor, K & Hackett, G. \(2009\) Fetal testosterone and autistic traits. *British Journal of Psychology*, 100, 1-22.](#)

⁵⁰ [Baron-Cohen, S, Scott, F, J, Allison, C, Williams, J, Bolton, P, Matthews, F, E, & Brayne, C. \(2009\) Prevalence of autism-spectrum conditions: UK school-based population study. *British Journal of Psychiatry*, 194, 500-509.](#)

⁵¹ [Chakrabarti, B, Hill-Cawthorne, G, Dudridge, F, Kent, L, Wheelwright, S, Allison, C, Banerjee-Basu, S, & Baron-Cohen, S. \(2009\) Genes related to sex-steroids, neural growth and social-emotional behaviour are associated with autistic traits, empathy and Asperger Syndrome. *Autism Research*, 2, 157-177.](#)

⁵² [Asher, J, Lamb, J, A, Brocklebank, D, Cazier, J-B, Maestrini, E, Addis, L, Sen, M, Baron-Cohen, S, & Monaco, A. P. \(2009\) A whole-genome scan and fine-mapping linkage study of auditory-visual synaesthesia reveals evidence of linkage to chromosomes 2q24, 5q33, 6p12 and 12p12. *The American Journal of Human Genetics*, 84, 279-285.](#)

2008: The first UK trial of Lego Therapy for autistic children⁵³.
2008: The development of the Quantitative Checklist for Autism in Toddlers (Q-CHAT)⁵⁴.
2007: The first evidence of elevated rates of testosterone-related medical conditions in autistic women⁵⁵.
2007: Creation of *The Transporters* to teach emotion recognition to autistic children (www.autismcentreofexcellence.org)
2007: The first evidence that 'brain type' (EQ-SQ differences) predict entry into STEM vs non-STEM subjects⁵⁶.
2006: The first evidence that prenatal testosterone levels are associated with empathy⁵⁷.
2006: The first evidence that prenatal testosterone levels are associated with systemizing⁵⁸.
2006: The first evidence that children with congenital adrenal hyperplasia have elevated autistic traits⁵⁹.
2006: The assortative mating theory of autism is published⁶⁰.
2005: The first evidence that prenatal testosterone levels are associated with narrow interests⁶¹.
2005: The EQ-SQ theory is published in *Science*⁶².

⁵³ [Owens, G, Granader, Y, Humphrey, A, & Baron-Cohen, S. \(2008\) LEGO® therapy and the social use of language programme: an evaluation of two social-skills interventions for children with high functioning autism and Asperger Syndrome. Journal of Autism and Developmental Disorders, 38, 1944-1957.](#)

⁵⁴ [Allison, C, Baron-Cohen, S, Wheelwright, S, Charman, T, Richler, J, Pasco, G & Brayne, C. \(2008\) The Q-CHAT \(Quantitative CHECKlist for Autism in Toddlers \(Q-CHAT\): a normally distributed quantitative measure of autistic traits at 18-24 months of age: preliminary report. Journal of Autism and Developmental Disorders, 38, 1414-1425.](#)

⁵⁵ [Ingudomnukul, E, Baron-Cohen, S, Wheelwright, S, & Knickmeyer, R. \(2007\) Elevated rates of testosterone-related disorders in women with autism spectrum conditions. Hormones and Behavior, 5, 597-604.](#)

⁵⁶ [Billington, J, Baron-Cohen, S, & Wheelwright, S. \(2007\) Cognitive style predicts entry into physical sciences and humanities: questionnaire and performance tests of empathy and systemizing. Learning and Individual Differences, 17, 260-268.](#)

⁵⁷ [Chapman, E, Baron-Cohen, S, Auyeung, B, Knickmeyer, R, Taylor, K & Hackett, G \(2006\) Fetal testosterone and empathy: evidence from the Empathy Quotient \(EQ\) and the 'Reading the Mind in the Eyes' test. Social Neuroscience, 1, 135-148.](#)

⁵⁸ [Auyeung, B, Baron-Cohen, S, Chapman, E, Knickmeyer, R, Taylor, K & Hackett, G. \(2006\) Foetal testosterone and the Child Systemizing Quotient \(SQ-C\). European Journal of Endocrinology, 155, 123-130.](#)

⁵⁹ [Knickmeyer, R, Baron-Cohen, S, Fane, B, A, Wheelwright, S, Mathews, G, Conway, G, Brook, C, & Hines, M. \(2006\) Androgens and autistic traits: a study of individuals with congenital adrenal hyperplasia. Hormones and Behaviour, 50, 148-153.](#)

⁶⁰ [Baron-Cohen, S. \(2006\) Two new theories of autism: hyper-systemizing and assortative mating. Archives of Diseases in Childhood, 91, 2-5.](#)

⁶¹ [Knickmeyer, R, Baron-Cohen, S, Raggatt, P, & Taylor, K \(2005\) Foetal testosterone, social relationships, and restricted interests in children. Journal of Child Psychology and Psychiatry, 46, 198-210.](#)

⁶² [Baron-Cohen, S, Knickmeyer, R, & Belmonte, M \(2005\) Sex differences in the brain: implications for explaining autism. Science, 310, 819-823.](#)

2000-2004

- 2004: The Empathy Quotient (EQ) is published⁶³.
- 2004: Publication of *Prenatal Testosterone in Mind* (MIT Press).
- 2003: Publication of *Mind Reading* for teaching emotion recognition to autistic people (www.autismcentreofexcellence.org).
- 2003: The Systemizing Quotient (SQ) is published⁶⁴.
- 2003: The first evidence that acquired brain damage to the amygdala impairs theory of mind⁶⁵.
- 2003: Publication of *The Essential Difference* (Penguin).
- 2002: The first evidence that V4 is active during coloured hearing synaesthesia⁶⁶.
- 2002: The first evidence that prenatal testosterone levels are associated with language development⁶⁷.
- 2002: The first evidence that prenatal testosterone levels are associated with social development⁶⁸.
- 2002: The 'extreme male brain' (EMB) theory of autism is proposed⁶⁹.
- 2002: Prevalence of Asperger Syndrome in childhood reported as 1 in 166⁷⁰.
- 2002: The first evidence that amygdala damage impairs theory of mind⁷¹.
- 2001: The first measure of autistic traits: the Autism Spectrum Quotient (AQ), and the link between mathematical talent and AQ⁷².

⁶³ [Baron-Cohen, S. & Wheelwright, S. \(2004\) The Empathy Quotient: an investigation of adults with Asperger Syndrome or high functioning autism, and normal sex differences. *Journal of Autism and Developmental Disorders*, **34**, 163-175.](#)

⁶⁴ [Baron-Cohen, S, Richler, J, Bisarya, D, Gurunathan, N, & Wheelwright, S, \(2003\) The Systemizing Quotient: an investigation of adults with Asperger syndrome or high-functioning autism, and normal sex differences. *Philosophical Transactions of the Royal Society, Series B*, **358**, 361-374.](#)

⁶⁵ [Stone, V, Baron-Cohen, S, Young, A, Calder, A, & Keane, J. \(2003\) Acquired theory of mind impairments in individuals with bilateral amygdala lesions. *Neuropsychologia*, **41**, 209-220.](#)

⁶⁶ [Nunn, J, Gregory, L, Morris, R, Brammer, M, Bullmore, E, Harrison, J, Williams, S, Baron-Cohen, S, and Gray, J. \(2002\) Functional magnetic resonance imaging of synaesthesia: activation of V4/V8 by spoken words. *Nature Neuroscience*, **5**, 371-375.](#)

⁶⁷ [Lutchmaya, S, Baron-Cohen, S, & Raggatt, P. \(2002\) Foetal testosterone and vocabulary size in 18- and 24-month-old infants. *Infant Behaviour and Development*, **24**, 418-424.](#)

⁶⁸ [Lutchmaya, S, Baron-Cohen, S, & Raggatt, P. \(2002\) Foetal testosterone and eye contact in 12-month-old human infants. *Infant Behaviour and Development*, **25**, 327-335.](#)

⁶⁹ [Baron-Cohen, S. \(2002\) The extreme male brain theory of autism. *TRENDS in Cognitive Sciences*, **6**, 248-254.](#)

⁷⁰ [Scott, F, Baron-Cohen, S, Bolton, P, & Brayne, C. \(2002\) Brief Report: Prevalence of autism spectrum conditions in children aged 5-11 years in Cambridgeshire, UK. *Autism*, **6**, 231-237.](#)

⁷¹ [Adolphs, R, Baron-Cohen, S, & Tranel, D. \(2002\) Impaired recognition of social emotions following amygdala damage. *Journal of Cognitive Neuroscience*, **14**, 1-11.](#)

⁷² [Baron-Cohen, S. & Wheelwright, S, Skinner, R, Martin, J, & Clubley, E. \(2001\) The Autism Spectrum Quotient \(AQ\): evidence from Asperger Syndrome/high-functioning autism, males and females, scientists, and mathematicians. *Journal of Autism and Developmental Disorders*, **31**, 5-17. Also see Errata, **31**, 6.](#)

2001: The first demonstration of superior visual search in autistic children⁷³.
2001: Creation of the 'Reading the Mind in the Eyes' Test – Revised. This test was recommended by NIH as a core metric for dimensionalising social cognition⁷⁴.
2000: Creation of the first clinic for the diagnosis of autism in adults in the UK (the Cambridge Lifespan Asperger Syndrome Service (CLASS) clinic).
2000: The first demonstration of innate interest in another person's eyes⁷⁵.
2000: The first evidence for innate sex differences in neonates⁷⁶.
2000: The amygdala theory of autism is proposed⁷⁷.
2000: The first discussion of whether autism is necessarily at disability⁷⁸.

1995-1999

1999: The first test of the brain basis of superior attention to detail in autism⁷⁹.
1999: The first evidence of amygdala differences in autism, and the first test of the brain basis of theory of mind in autism⁸⁰.
1999: The first prevalence study of Gilles de la Tourette in autism⁸¹.
1998: The first evidence of the role of the orbito-frontal and medial frontal cortex in theory of mind demonstrated⁸².

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⁷⁸ [Baron-Cohen, S. \(2000\) Is Asperger Syndrome/high-functioning autism necessarily a disability? *Development and Psychopathology*, **12**, 489-500.](#)

⁷⁹ [Ring, H, Baron-Cohen, S, Williams, S, Wheelwright, S, Bullmore, E, Brammer, M, & Andrew, C. \(1999\) Cerebral correlates of preserved cognitive skills in autism. A functional MRI study of Embedded Figures Task performance. *Brain*, **122**, 1305-1315.](#)

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⁸¹ [Baron-Cohen, S, Mortimore, C, Moriarty, J, Robertson, M, & Izaguirre, J. \(1999\) The prevalence of Gilles de la Tourette Syndrome in children and adolescents with autism. *Journal of Child Psychology and Psychiatry*, **40**, 213-218.](#)

⁸² [Stone, V, Baron-Cohen, S, & Knight, R. \(1998\) Frontal lobe contributions to theory of mind. *Journal of Cognitive Neuroscience*, **10**, 640-656.](#)

1998: The first demonstration of superior attention to detail in autistic adults⁸³.
1997: Publication of *Teaching children with autism to mind-read* (Wiley).
1997: The first report linking autism to parents who are high 'systemizers'⁸⁴.
1997: The 'language of the eyes' coined⁸⁵.
1997: The first report of the 'Reading the Mind in the Eyes' Test⁸⁶.
1997: The first proposal of the extreme male brain theory of autism⁸⁷.
1997: The first test of the broader autism phenotype in parents of autistic children⁸⁸.
1997: The first test of whether language delay in autism is the result of not using gaze processing⁸⁹.
1996: The first test of whether theory of mind could be taught to autistic children⁹⁰.
1996: The first large population study of the Checklist for Autism in Toddlers (CHAT)⁹¹.
1996: The first prevalence study of synaesthesia and the first demonstration that synaesthesia runs in families⁹².
1995: The first study of the brain basis of synaesthesia⁹³.
1995: Publication of the first edition of *Mindblindness* (MIT Press).

⁸³ [Jolliffe, T. & Baron-Cohen, S. \(1997\) Are people with autism or Asperger Syndrome faster than normal on the Embedded Figures Task? Journal of Child Psychology and Psychiatry, 38, 527-534.](#)

⁸⁴ [Baron-Cohen, S. Wheelwright, S. Stott, C. Bolton, P. & Goodyer, I. \(1997\) Is there a link between engineering and autism? Autism, 1, 101-108.](#)

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⁸⁹ [Baron-Cohen, S. Baldwin, D. & Crowson, M. \(1997\) Do children with autism use the speaker's direction of gaze strategy to crack the code of language? Child Development, 68, 48-57.](#)

⁹⁰ [Hadwin, J. Baron-Cohen, S. Howlin, P. & Hill, K. \(1996\) Can we teach children with autism to understand emotions, belief, or pretence? Development and Psychopathology, 8, 345-365.](#)

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⁹² [Baron-Cohen, S. Burt, L. Smith-Leyton, F. Harrison, J. & Bolton, P. \(1996\) Synaesthesia: prevalence and familiarity. Perception, 25, 1073-1079.](#)

⁹³ [Paulesu, E. Harrison, J. Baron-Cohen, S. Watson, J. Goldstein, L. Heather, J. Frakowiak, R. and Frith, C. \(1995\) The physiology of coloured hearing. A PET activation study of coloured-word synaesthesia. Brain, 118, 661-676.](#)

1985-1994

1994: The first report of the brain basis of theory of mind and the discovery of the role of the orbito-frontal cortex (OFC) in this⁹⁴.

1994: The formulation of the Mindreading System, as a model of how 'theory of mind' develops in a typical child⁹⁵.

1993: Publication of the first edition of *Understanding Other Minds* (OUP).

1992: The first demonstration that autism could be diagnosed at 18 months old, the development of the Checklist for Autism in Toddlers (CHAT), and the first 'baby siblings' study of genetic high likelihood of autism⁹⁶.

1990: The term 'mindblindness' was coined, in relation to autism⁹⁷.

1987: The first empirical study of synaesthesia in contemporary psychology, and the creation of the 'Test of Genuineness' of synaesthesia, which opened up the field of synaesthesia research after it had been dormant for over 80 years as was deemed unscientific⁹⁸.

1985: The first test of the 'theory of mind' (ToM) hypothesis of autism⁹⁹.

⁹⁴ [Baron-Cohen, S. Ring, H. Moriarty, J. Shmitz, P. Costa, D. & Ell, P. \(1994\) Recognition of mental state terms: clinical findings in children with autism and a functional neuroimaging study of normal adults. *British Journal of Psychiatry*, **165**, 640-649.](#)

⁹⁵ [Baron-Cohen, S. \(1994\) How to build a baby that can read minds: cognitive mechanisms in mindreading. *Cahiers de Psychologie Cognitive/ Current Psychology of Cognition*, **13**, 513-552.](#)

⁹⁶ [Baron-Cohen, S. Allen, J. & Gillberg, C. \(1992\) Can autism be detected at 18 months? The needle, the haystack, and the CHAT. *British Journal of Psychiatry*, **161**, 839-843.](#)

⁹⁷ [Baron-Cohen, S. \(1990\) Autism: a specific cognitive disorder of "mind-blindness". *International Review of Psychiatry*, **2**, 81-90.](#)

⁹⁸ [Baron-Cohen, S. Wyke, M. & Binnie, C. \(1987\) Hearing words and seeing colours: an experimental investigation of a case of synaesthesia. *Perception*, **16**, 761-767.](#)

⁹⁹ [Baron-Cohen, S. Leslie, A.M., & Frith, U. \(1985\) Does the autistic child have a "theory of mind?" *Cognition*, **21**, 37-46.](#)