Psychological Sciences Newsletter



March - July 2018

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News

Birkbeck launches new resources for people with breast cancer



The Centre for Building Resilience in Breast Cancer (BRIC) has launched a new website to provide support and build community among people living with or survivors of breast cancer, as well as sharing Birkbeck's latest research findings.

Using cutting edge neuroscientific research BRiC aims to improve wellbeing and quality

of life in women with a breast cancer diagnosis. Among the resources available are weekly evening discussions and knowledge exchange sessions where women can discuss the challenges they face living with breast cancer, organised meet-ups, and opportunities to get involved in new research and projects.

One recent research project was led by Professor Naz Derakshan, Director of BRiC, and showed how simple, <u>at-home</u> <u>cognitive exercises</u> <u>can improve mental</u> <u>health among breast</u> <u>cancer patients</u>, boosting cognitive efficiency and reducing anxiety and distress.



Professor Derakshan said: "We hope the resources we've made available, and which we're continuing to develop, will help more women to rebuild their lives after breast cancer, to make links with others who are going through the same thing and to learn new strategies to build resilience in their everyday life.

Crowdfunding for the ToddlerLab

The Birkbeck Centre for Brain & Cognitive Development launched its first <u>crowdfunding</u> campaign to help create the ToddlerLab, which could transform the lives of children with developmental disorders.

Aimed at equipping the planned ToddlerLab facility, and the ground-breaking work which will take place there, the campaign was covered by the



Evening Standard, The i paper, Camden New Journal and The Psychologist. Denis Mareschal also



created a <u>podcast</u> to talk about the successes of Birkbeck's pioneering Babylab in identifying early markers of autism in infants, and the crowdfunding campaign for the world's first ToddlerLab. As a result the <u>ToddlerLab</u> crowdfunding campaign exceeded it's £30,000 target and continues to grow.

More recently representatives from the ToddlerLab were invited to the Speaker's House dinner at house of commons with the Master and charity representatives to tell them about the new ToddlerLab project.

World's largest autism grant will transform research landscape

A group of 48 world-class universities and research institutes has received the largest-ever grant to develop better treatment for autism by the Innovative Medicines Initiative to an international consortium. This will be academically led by the Institute of Psychiatry, Psychology & Neuroscience (IoPPN) at King's College London, with the infant component of the project being led by Birkbeck's <u>Centre for Brain and Cognitive Development</u>.

Birkbeck will receive €2.8 million (the 4th highest proportion of the funding), of a total grant of €115 million, to lead on research relating to infants in trials which will increase understanding of autism and help develop new therapies. Dr Emily Jones and Professor Mark Johnson (Centre for Brain and Cognitive Development) will lead the research at Birkbeck.

Dr Jones said: "This funding is vital to our efforts to discover the mechanisms that underlie the emergence of autism symptoms in early development. With new insights, we hope to develop new therapeutic and support options for individuals and their families." As part of the project, Dr Jones and Prof. Johnson will lead a large longitudinal study of the emergence of autism from fetal life to toddlerhood that includes brain scanning and measures of cognition and behavior. Birkbeck is also in charge of leading the search for EEG and eyetracking measures from infancy to adulthood that could identify subgroups of autistic people that could benefit from particular treatments. Through our development of cutting-edge EEG paradigms and data collection pipelines, these markers will be included in large multisite clinical trials to test whether they provide more sensitive measures of treatment response. Such biomarkers will be submitted to the European Medicines Agency so that they can ultimately be used in clinical practice.

Psychological Sciences in the News

What a Difference Three Dots Make

'Left cradling bias' linked to better social cognitive abilities in children

Gillian Forrester's research generated over 120 news cuttings including print coverage in The Times, The Telegraph, the Sun and The i paper and online on <u>The Daily Mail</u> and <u>BT</u> websites. An image from the study was also entered into the City University of London, Images of Research competition. It was shortlisted in the top 10 of 50 entries and although it did not win, it earned some notoriety.

Faces are so special to humans that just three dots arranged as a face can change behaviour - an effect already present in childhood. Children held a plain sack randomly in either arm, but adding a 'three-dot-face' resulted in a preference to hold in the left arm, mirroring the left-cradling bias shown by mothers holding babies. Left-cradling places the baby's face in the mother's left visual field (LVF). The LVF is directly connected to the brain's right hemisphere, which is specialised for processing socialemotional information. Studies show this effect is not related to handedness. A left bias was also seen when children held a human 'baby' doll but, interestingly, not an 'orangutan' doll. Children who held the 'baby' doll in their left arm scored higher on social ability tests, compared with right holders, indicating that the left-cradling bias is an evolutionarily old trait supporting infant wellbeing and social development.



What's going on in a toddler's brain?



Members of the Centre for Brain and Cognitive Development created a <u>short film with the BBC</u> on their work to find out more about the development of very young children's brains, and their hope that their research will bring to light new findings on conditions like autism or ADHD. Chiara Bulgarelli explained in the film how Birkbeck Babylab is investigating the cognitive functions of very young children, enabling new insights into conditions such as autism and ADHD. The <u>BBC</u> <u>Future</u> website also carried a feature about Babylab examining

the work and techniques used within the facility. This was followed up by a <u>blog post</u> about the Baby Lab's work by Anna Kolesnik.

Increased physical fitness may offset cognitive deterioration in dementia

Eddy Davelaar caused a bit of a stir with his research published in <u>Frontiers in Public Health</u>, showing that increased physical fitness offsets dementia-related cognitive impairment. The work was picked up by <u>news outlets</u> around the globe.

Pioneering behavioural study aims to help predict which babies with a genetic condition will develop autism

Emily Jones' EDEN study on infants with neurofibromatosis Type 1 was featured in <u>Pioneer Magazine</u> (for supporters of Great Ormond Street).

Banning sex work advertising online will put sex workers in danger

Belinda Brooks wrote the article *Banning sex work advertising online will put sex workers in danger* for <u>The Conversation</u> which led to an invitation to deliver an expert session on public impact at Cumberland Lodge. This topic has gained increasing news coverage including in the <u>Independent</u>.

Babies who react strongly to sudden changes in light intensity are more likely to be diagnosed with autism

Researchers from the Birkbeck Centre for Brain & Cognitive Development found that babies whose pupils react more strongly to sudden changes in light intensity are more likely to later be diagnosed with autism spectrum disorder (ASD). <u>The study</u>, published in the journal Nature Communications, reported on an investigation into the pupillary light reflex – a basic mechanism controlling the amount of light that reaches the retina in which the pupil contracts when the eye is exposed to sudden increases in brightness. The researchers suggest that their findings provide support for the view that sensory processing plays an important role in the development of the disorder.

The story generated more than 140 news stories including the <u>Daly Mail</u>, the Mirror, the Express, the i paper and Metro.

Other Departmental News Mentions

Belinda Brooks-Gordon was invited in April 2018 to take part in a debate on Prostitution Law reform as part of the Conservative Party *Human Right's Commission's Inquiry into Prostitution, trafficking and the law*. This contribution grabbed the imagination of the wider public and resulted in coverage in the <u>national press</u>.

Iroise Dumontheil featured in BBC London Evening News programme commenting on gaming addiction and was interviewed for a <u>EdTech podcast</u> on Self-Directed Learning in Adolescence

Natasha Kirkham featured in over 20 local newspapers explaining how going to see <u>live theatre</u> shows can aid children's understanding of emotions.

Tim Smith's research on the influences of screen time on toddler development and collaboration with Polka Theatre's Techtopia festival was featured in 26 May 2018 <u>BBC Click</u>. His research on <u>perception in film</u> was also covered by several news outlets

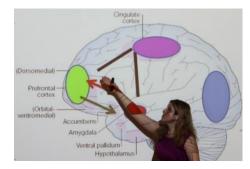
Adam Tierney featured in the BBC World Service's CrowdScience examining how our brains tell the difference between speech and music, even though they are essentially both just sounds.

Public Engagement and Talks

Members of staff from across the department have been engaging in a wide variety of engagement and knowledge transfer activities

Belinda Brooks-Gordon was invited by Fiona Bruce MP to give evidence to the Conservative Human Rights Committee chaired by the Baroness Fiona Hodgson on 18th April 2018 and provided an MP Briefing for a Westminster Hall Debate on banning sex work adverts on 4th July 2018. She has also been invited to be member of national expert advisory group to National Police Chiefs Council (NPCC) to Lead for Strategy on Sex Work/Prostitution.

Nazanin Derakhshan gave the talk *Neuroscience of anxiety* on 1st May 2018 in Camden as part of the <u>Funzing talks</u> and on Breast cancer and its impact on emotional and cognitive health at <u>Birkbeck Science</u> <u>Week talk</u> on 21st June 2018.



Iroise Dumontheil gave a Birkbeck 'Big Ideas' talk on the teenage brain on 26th June 2018.

Gillian Forrester gave a psychology career talk at the Brighton and Hove Sixth Form College (BHASVIC) Career Festival. The College has over 3000 students and runs 25 parallel classes of A-level Psychology.

As part of national STEM week, Emma Meaburn spoke to year 6 students at a London primary school about genes, DNA and her job as a scientist. They made DNA models with pipe cleaners, and extracted DNA from their spit! Emma was also a <u>Learning Zone Scientist</u> for 'I'm a Scientist' individual differences fortnight.

On 26th Feb 2018 Ted Melhuish was invited to give evidence to the parliamentary <u>*Youth Violence*</u> <u>*Commission*</u>. This cross Party Commission was launched in 2017 to examine the root causes of youth



violence in England, Scotland and Wales. The Commission is consulting young people and working with academics and practitioners to better understand how serious violence manifests itself in many young people's lives. He has also given oral evidence to the <u>Parliamentary Science and</u> <u>Technology Committee Enquiry on Early Interventions</u> on 20th March 2018 and to the <u>Education Committee</u> on 12th June 2018, to support a new inquiry examining the impact that early years education and social policy have on determining children's life chances. In addition, Ted has

collaborated with the Northern Territory government (Australia) on early education and parenting support for indigenous groups $3^{rd} - 8^{th}$ April 2018.

Clare Press gave an invited seminar in May entitled *The influence of action predictions on perception: Contrasting facilitation and cancellation models* in Marburg, Germany, as part of a series entitled 'The Brain in Action'. It was attended by those at Justus-Liebig-Universität Giessen (JLU) and Philipps-Universität Marburg (UMR), and (via video link) Queen's University, Western University and York University, Canada. She also gave a departmental seminar in March at the Italian Institute of Technology, Genoa, Italy, entitled *The multiple functions of perception-action interactions*.

Angelica Ronald gave the talks *Developmental and trait-based approach to understanding risk: The case of adolescent psychotic-like experiences* at the Department of Epidemiology, Faculty of Medicine, Imperial College London, May 2018 and *Nature, nurture and neurodevelopment* at the London ADHD Research Forum, University of London, March 2018.

Tim Smith has led the <u>Birkbeck SciFilm</u> series which screens films in which science and the topics of scientific enquiry are represented (or misrepresented). Part of <u>Birkbeck Institute for the Moving</u> <u>Image (BIMI)</u> the series has explored parapsychology and its portrayal in the hugely popular TV "entertainment" genre of Ghost Hunting shows as well as Artificial Intelligence and Robotics with a special 35mm film screening of Forbidden Planet and science of emotions with Pixar's Inside Out.



Tim Smith, Rachael Bedford (CBCD & KCL Henry Wellcome Fellow) along with students from the CBCD, Ana Maria Portugal, Claire Essex, Megan Tongs, Jen Hansel and Manu Ducrocq ran a family science festival on the Science of Screen Time at Polka Theatre, Wimbledon on 24th July 2018. The event was the culmination of their Wellcome Trust public engagement project creating a dialogue between parents, earlyyears practitioners and developmental scientists on the issue of screen time in toddlers. Children of all ages were able to attend for free

and participate in craft activities, experiments, games and attend a family-friendly science show to learn about the latest scientific findings. The event was a huge success provoking lots of discussion and was covered by various websites including <u>NCT Matters</u>.

Jonathan Smith presented two keynotes at meetings: *Trying to make sense of pain: the development* & *application of interpretative phenomenological analysis (IPA) in psychology, Narratives of Suffering* & *Recovery conference*, University of Poitiers, France, April 2018 and *Attempting to get at the lived experience of health and well-being: working with interpretative phenomenological analysis (IPA)* at a mental health awareness event at Portsmouth University, May 2018. He has also provided *Interpretative phenomenological analysis workshops* at both University of Klagenfurt, Austria, March 2018 and as part of the clinical psychology doctoral training at the University of San Francisco, USA, May 2018.

Adam Teirney led a discussion on *The Language* of *Music* at a <u>Wellcome Packed Lunch</u> event on 20th June 2018.



Awards and Recognition

Congratulations to all our staff receiving recognition and awards

Richard Cook for the 16th Elizabeth Warrington Prize from The British Neuropsychological Society, for distinguished early stage career work in Neuropsychology and for the EPS Prize Lectureship (one of the two premier early career prizes in UK psychology)



Ulrike Hahn's CogSci2018 submission, *How Communication Can Make Voters Choose Less Well*, has been selected for the Computational Modeling Prize in Applied Cognition. This is one of four prizes awarded for the best full paper submissions that involve computational cognitive modelling.

Angelica Ronald has taken up an editor role at the Journal of Child Psychology and Psychiatry. This is the top-ranked journal in developmental psychology and 6th ranked journal in general psychology (ISI 2017 rankings).

Ted Melhuish has been made a Fellow if the American Psychological Association and fellow of the Association of Psychological Science for "sustained and outstanding contributions to psychological science".

Iroise Dumontheil and Tim Smith's projects were highly commended in the College's Public Engagement Awards, and Belinda Brooks-Gordon won the award for Transforming Culture or Public Life.



Grants

Congratulations to all our staff receiving research grants

Beth Grunfeld	Internal ISSF fund	To develop and pilot an app to support cancer patients in returning to work following treatment	£4650
Mark Johnson	Waterloo Foundation	BASIS Annual Science Meeting: a platform for collaborative activities and dissemination of research into neurodevelopmental disorders	£10,043
Mark Johnson	MRC	Development & validation of a scalable mobile platform for screening of developmental neuropsychiatric disorders in low-resource settings (Subcontract from University of Reading)	£24,603
Mark Johnson & Emily Jones	MRC	MICA: BRAINTOOLS Phase 1: Optimising neurodevelopmental outcomes for global health	£232,406
Mark Johnson & Emily Jones	EU	Autism Innovative Medicine Studies-2-Trials	€2,899,831
Emily Jones	ESRC Transformative Grant	Why are we social? Mapping the development of social motivation through adaptive sampling	£250,000
Emily Jones	EU Marie Curie	SAPIENS: Shaping the social brain through early interactions	€606,345
Sarah Lloyd Fox	Bill and Melinda Gates Foundation	Ecologically valid measures of moderators of early development: language and caregiving practices	£317,170
Denis Mareschal & Rick Cooper	European Commission	MOTION: Mobile Technology for Infant social-Cognitive Neuroscience: Interdisciplinary Training Network for Innovative Infancy Research (Subcontract from Stichting Katholieke University, Netherlands)	£387,212
Ted Melhuish	Nuffield Foundation	Educational outcomes in children born after assisted reproductive technology; a population based linkage study	£12,674
Anne Miles	Bowel Disease Research Foundation	The role of risk of recurrence, bowel function and avoidance of a permanent stoma in patient preferences for treatment for rectal cancer	£58,142

Jonathan Smith	National Institute of Health Research	Transforming the mental treatment of young people with epilepsy (Sub-contract from Great Ormond Street hospital)	£172,774
Jonathan Smith	European Huntington's Disease Network	Exploring the efficacy of narrative interventions post predictive testing for HD (Subcontract from Central Manchester University Hospitals NHS Foundation Trust)	£2,150
Adam Tierney	Society for Education, Music and Psychology Research	Illusory Song Perception	£3,000
Adam Tierney	Waterloo Foundation	Training temporally-driven sustained selective attention to sound in children with ADHD	£59,387
Adam Tierney & Kazuya Saito	Kansai University, Japan	Which Vocabulary Factors are Crucial for the Assessment and development of Successful Second Language Speech?	£9,303

Conference Activity

Members of staff from across the department have been representing Psychological Sciences at conferences across the world

Belinda Brooks-Gordon presented the paper *Economics, Rights, and Policy in the Night-time and 'Gig' Economy* and was an invited speaker at the Expert Panel (Roundtable) *What is the Future of Sex Work Research?* at the British Society of Criminology Annual Conference, Birmingham City University, Birmingham, 4th July 2018.

Rick Cooper presented the Keynote *Set-Shifting and Place-Keeping as Separable Control Processes: Teasing Apart Executive Functions within a Cognitive Architecture* on 15th June 2018 at MEi:CogSci Conference Bratislava, Slovakia.

Iroise Dumontheil gave invited talks titled *Enhancement of cognitive control in rewarding contexts in adolescence and adulthood* on 22 May at the Symposium on Biology of Decision-Making (SBDM) in Paris, France and *Social cognition during adolescence* on both 15th June 2018 at the Dutch Society for Developmental psychology (VNOP) in Wageningen, Netherlands and 28th June 2018 at the Social Communication Across the Lifespan conference in Canterbury.

Martin Eimer was invited to give the keynote lecture *Face perception and face recognition in developmental prosopagnosia* and graduate seminar *Preparing to attend: How we represent what will become relevant* at the University of Kyoto's International Conference "What is unique and what is typical of the human mind?" Japan, March 2018.

Gillian Forrester presented the paper *Motor Biases and Social Ability in Typically Developing Children* at <u>InTo Brain's MeeTo 2018 conference: From Moving Bodies to Interactive Minds</u>, Turin, 25th-27th May 2018.

Ines Mares presented the papers *Characterizing the time course of face processing development* at The Future of Social Cognition (14th-15th June 2018; Norwich, United Kingdom) and *Characterizing the neural pattern of face processing in WS: An EEG study* at Neurodevelopmental Disorders Annual Seminar (21st June 2018, Coventry, United Kingdom).

Denis Mareschal gave a the keynote address at *IX Congreso Internacional de Psicología y Educación* (CIPE18), held in Logroño Spain, 21st-23rd June 2018. The presentation was entitled *How understanding the brain can help us teach children better*. The presentation, dubbed into Spanish, can be seen <u>here</u>.

Angelica Ronald presented *Do environmentally-induced psychotic experiences exist in adolescence* at Behavior Genetics Association in Boston in June.

Tim Smith presented a keynote at a documentary film conference in Zurich on 26th March 2018.

Doctoral Activity

Theses Awarded Congratulations to all those successfully defending their theses

Candidate: Jonathan Batten Title: Eye Movements in Time: Auditory Influences on Oculomotor Timing Supervisors: Tim Smith, Fred Dick Examiners: Ben Tatler (University of Aberdeen, External), Adam Tierney (Birkbeck, Internal)

Candidate: Prue Gee Title: What is the psychological impact of retirement on men? An interpretative phenomenological analysis Supervisor: Jonathan Smith Examiners: Carla Willig (City) Michael Iarkin (Aston)

Candidate: Renata Sadibolova Title: Body (mis)perception: Perceptual distortions of body size and shape in healthy adults Supervisors: Matthew Longo, Martin Eimer Examiners: Helge Gillmeister (University of Essex, External), Gianna Cocchini (Goldsmiths, Internal)

Candidate: Daniel Yon Title: Sensory prediction mechanisms in action Supervisors: Clare Press and Martin Eimer Examiners: Patrick Haggard (ICN, UCL) and Chris Summerfield (Oxford)

Theses Examined

Staff from around the department are frequently invited to examine doctoral theses at institutions around the world

Denis Mareschal was a jury member for Dr. Solene Kalenine's *Habilitation a Diriger la Recherche* thesis defence at *Universite de Lille*, France on January 12th 2018.

Tim Smith was a board member in the examination of Dr. John Hutson's PhD thesis *Top-down Effects* on Attentional Selection in Dynamic Scenes and Subsequent Memory: Attitude Congruence and Social Vigilantism in Political Videos defence at the Kansas State University, Manhattan, Kansas on 28th June, 2018.

Publications

Journal Articles

Brookman-Byrne A, **Mareschal D**, Tolmie AK, **Dumontheil I** (2018) Inhibitory control and counterintuitive science and maths reasoning in adolescence. PLoS ONE 13(6): e0198973. https://doi.org/10.1371/journal.pone.0198973

Butz M, Knott A, **Cooper R**, Elman J, McRae K, Papafragou A and Zachs J (2018) Symposium on Event Predictive Cognition. In: Kalish, C., Rau, M., Rogers, T. and Zhu, J. (eds.) Proceedings of the 40th Annual Conference of the Cognitive Science Society. Austin, TX: Cognitive Science Society.

Evans R, Taylor S, Beare S, Halligan S, Morton A, Oliver A, Rockall A and **Miles A** (2018) Perceived patient burden and acceptability of whole body MRI for staging lung and colorectal cancer; comparison with standard staging investigations. *British Journal of Radiology*, ISSN 0007-1285.

Farr J, Blenkiron L, Harris R, and **Smith JA** (2018) "It's my language, my culture and it's personal!" Migrant mothers' experience of language use and identity change in their relationship with their children: An interpretative phenomenological analysis. *Journal of Family Issues.*

Fletcher C, Wilson C, Hutchinson A, and **Grunfeld E** (2018) The relationship between anticipated response and subsequent experience of cancer treatment-related side effects: A meta-analysis comparing effects before and after treatment exposure. *Cancer Treat Rev.* 2018;68:86-93. doi: 10.1016/j.ctrv.2018.06.009

Forrester G, Davis R, **Mareschal D**, Malatesta G and Todd B (2018) The left cradling bias: an evolutionary facilitator of social cognition? *Cortex*, ISSN 0010-9452.

Ganea N, Hudry K, Vernetti A, **Tucker L**, Charman T, Johnson M and **Senju, A** (2018) Development of adaptive communication skills in infants of blind parents. *Developmental Psychology*, ISSN 0012-1649

Grace R, Kemp L, **Barnes J**, Elcombe E, Knight J, Baird K, Webster V and Byrne F (2018) Community volunteer support for families with young children: the Volunteer Family Connect Randomised Controlled Trial Research Protocol. JMIR Research Protocols, ISSN 1929-0748. (In Press)

Huff J, **Smith JA**, Jesiek B, Zoltowski C, and Oakes W (2018) Identity in engineering adulthood: An interpretative phenomenological analysis of early-career engineers in the United States as they transition to the workplace. *Emerging Adulthood. DOI: 10.1177/2167696818780444*

Jenkins M, Grubert A and **Eimer M** (2018) Category-based attentional guidance can operate in parallel for multiple target objects. Biological Psychology, ISSN 0301-0511. (In Press)

Manser-Smith K, Tame L and Longo, M (2018) Tactile confusions of the fingers and toes. *Journal of Experimental Psychology: Human Perception and Performance*, ISSN 0096-1523.

Mares I, Smith M, Johnson M and **Senju, A** (2018) Revealing the neural time-course of direct gaze processing via spatial frequency manipulation of faces. *Biological Psychology* 135, pp. 76-83. ISSN 0301-0511.

Miles A, Bhatnagar G, Halligan S, Gupta A, Tolan D, Zealley I and Taylor S. (in press) Magnetic resonance enterography (MRE), small bowel ultrasound (US) and colonoscopy to diagnose and stage Crohn's disease; patient acceptability, and perceived burden. European Radiology.

Melhuish E and Gardiner J (2018) Study of Early Education and Development (SEED): Study of the quality of early years provision in England: Research Report. Reference: DFE-RR706; ISBN: 978-1-78105-845-9. London: Department for Education.

Peng A, **Kirkham N**, and **Mareschal D** (in press) Information processes of task-switching and modality-switching across development. *PLoS ONE*.

Peng A, Kirkham N and **Mareschal D** (2018) Task switching costs in preschool children and adults. *Journal of Experimental Child Psychology*, *172*, 59-72.

Sadibolov R, Tame L, and **Longo, M** (2018) More than skin-deep: integration of skin-based and musculo-skeletal reference frames in localisation of touch. *Journal of Experimental Psychology: Human Perception and Performance*, ISSN 0096-1523.

Siraj I, Taggart B, Sammons P, **Melhuish E**, Sylva K and Shepherd, DL (2018) Effective Teachers in primary Schools: key research on pedagogy and children's learning. London: UCL-IOE Press.

Taylor S, Mallett S, Bhatnagar G, Baldwin-Cleland R, Bloom S, Gupta A, Hamlin J, Hart A, Higginson A, Jacobs I, McCartney S, **Miles A**, Morris S, Murray C, Plumb A, Pollok R, Punwani S, Quinn L, Rodriquez-Justo M, Shabir Z, Slater A, Tolan D, Travis S, Windsor A, Wylie P, Zealley I, Halligan S, on behalf of the METRIC investigators (2018) Diagnostic accuracy for the extent and activity of newly diagnosed and relapsed Crohn's disease: a multicentre prospective comparison of magnetic resonance enterography and small bowel ultrasound –The METRIC study. *Lancet Gastroenterology and Hepatology* pii: S2468-1253(18)30161-4. doi: 10.1016/S2468-1253(18)30161-4.

Tierney A, Aniruddh P and Breen, M (2018) Acoustic foundations of the speech-to-song illusion. *Journal of Experimental Psychology: General* 147 (6), pp. 888-904. ISSN 0096-3445.

Vernetti, Angelina, Ganea, Natasa, **Tucker, L**, Charman, T., **Johnson, M H.** and **Senju, A** (2018) Infant neural sensitivity to eye gaze depends on early experience of gaze communication. *Developmental Cognitive Neuroscienc*, ISSN 1878-9293

Yuan, W. and Lin, F. and **Cooper, R** (2018) Relevance theory, pragmatic inference and cognitive architecture. *Philosophical Psychology*, ISSN 0951-5089.

Book chapters

Carberry, K and **Brooks-Gordon, B** (2018) *Black Therapists – White Families: Positive Outcomes*. In R. Majors, K. Carberry, and M. Greaves (Editors) Black Community Mental Health: International Perspectives, Emerging Trends and Practices. Michigan, USA. Michigan State University Press.

Brooks-Gordon, B (2018) *Into the Light: A model of justice for workers' rights in the shadow and 'gig' econom.* In Realising Justice for Sex Workers (the Work). Edited by Sharron A. FitzGerald and Kathryn McGarry. London. Rowman and Littlefield.

Books

Forrester G, Hudry K, Lindell A and Hopkins W (2018) Cerebral Lateralization and Cognition: Evolutionary and Developmental Investigations of Behavioral Biases . Academic Press

Melhuish E and Barnes J (2018) *Compensatory education*. In S. Hupp & J. Jewell (Eds.) The Encyclopedia of Child and Adolescent Development. London: Wiley/Blackwell.