

## Dr Rachael W Cheung, MBChB, MSc, MSc

Department of Psychology, Lancaster University, UK  
General Medical Council: registered clinician, non-practising  
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<https://cheungrw.github.io>

**Summary:** I am a multi-disciplinary early career researcher with a sincere passion for conducting research about early experiences. My research investigates the environment surrounding language acquisition and how it affects the cognitive processes and behaviour of caregivers and their children. I also conduct research regarding more general learning mechanisms, and have a particular interest in comparing typical and atypical development and outcomes across a wide range of fields, including language development and psychiatry.

## Education

- 2017 - current**      **Leverhulme Trust Doctoral Scholar** (Psychology PhD student)  
*Lancaster University*
- Thesis (provisional title): Characterising language learning and language outcomes in typical and atypical development
- Supervisors: Professor Padraic Monaghan, Dr Calum Hartley (Department of Psychology, Lancaster University)
- 2014 - 2016**      **Developmental Neuroscience & Psychopathology MSc (Distinction)**  
*University College London*
- Thesis: The effect of videogames on attention and resting state functional connectivity in adolescent males
- Principle Investigator: Dr Michelle Hampson (Yale Magnetic Resonance Research Centre, Yale School of Medicine, Yale University)
- 2006 - 2012**      **Medicine MBChB**  
*University of Manchester*
- 2010 - 2011**      **Healthcare Ethics & Law MSc (Distinction)**  
*University of Manchester (medical intercalation)*
- Thesis: Medical expert witnesses & clinical negligence: a time for change?
- Supervisor: Dr Catherine Stanton (School of Law, University of Manchester)

## Prizes & Awards

- 2019**      **Faculty of Science and Technology Dean's Award for PhD Excellence**  
For outstanding performance in PhD
- 2017 - current**      **Leverhulme Trust Doctoral Scholarship**  
Value per annum: maintenance stipend (£14,553), tuition fees (£4,195) and research budget (approx. £5,000)
- 2011**      **Lord David Alliance Prize**  
For outstanding performance and best mark in Healthcare Ethics & Law MSc

## Employment

<b>2017 - 2018</b>	<b>Emergency Medicine – Locum Doctor (A&amp;E Agency; SHO)</b> <i>Salford Royal NHS Foundation Trust; Stockport NHS Foundation Trust</i>
<b>Jan - June 2017</b>	<b>Associate Medical Writer</b> <i>Ashfield Healthcare Communications</i>
<b>Aug - Dec 2016</b>	<b>Core Trainee Psychiatry Doctor (CT1) - portfolio available</b> <i>Pennine Care NHS Trust</i>
<b>2012 - 2014</b>	<b>Foundation Doctor (FY1, FY2) – portfolio available</b> <i>Tameside &amp; Glossop Acute Services NHS Foundation Trust</i>  General Medicine & Endocrinology, General & Colorectal Surgery, Trauma & Orthopaedics, Paediatrics, General Practice (Community), Emergency Medicine

## Research Projects

<b>2017 – current</b>	<b>Leverhulme Trust Doctoral Scholar</b> <i>Babylab / Department of Psychology, Lancaster University, UK</i>  <u>Longitudinal project:</u> Predicting language outcomes in late talkers and characterising how they learn (infant and child studies)  <u>Cross-sectional projects:</u> Gestures and multiple cues in word learning (infant and adult studies)  <u>With:</u> Professor Padraic Monaghan, Dr Calum Hartley  <u>Methods:</u> Eye-tracking, behavioural, video-coding mother-infant interactions, standardised testing, touch-screen behaviours
<b>2015 - 2016</b>	<b>Clinical Research Fellow</b> <i>Yale Child Study Centre / Yale Magnetic Resonance Research Centre, Yale University, USA</i>  <u>Longitudinal project:</u> The effect of electronic media on attention and fMRI in children and adolescents  <u>With:</u> Dr Linda Mayes, Dr Todd Constable, Dr Dennis Sukhodolsky, Dr Mike Crowley, Dr Dustin Scheinost, Chris Walsh, and Dr Michelle Hampson  <u>Methods:</u> Functional MRI (resting state functional connectivity), behavioural

## Research Skills

**Programming:** R (proficient)

**Analysis:** General linear and mixed effect models, linear mixed effect models  
Growth curve analysis of longitudinal data  
Eye-tracking data analysis (HDF-conversion, fixation data; AOI based; growth curve analysis)

**Software:** Analysis – SPSS  
Eyetracking – Tobii Studio (Tobi X3-120)  
Task programming – E-Prime, PsychoPy3  
Neuroimaging analysis – BiImage Suite  
Research – Qualtrics, NIH Toolbox  
Video-coding – ELAN

**Other:** Microsoft Office, Adobe Photoshop

## Publications

- Cheung, R.W.**, Hartley, C., Monaghan, P. (accepted) The early cue catches the word: how gesture supports cross-situational word learning. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.
- Cheung, R.W.**, Hartley, C., Monaghan, P. (2019) Caregivers use gesture contingently to support infant word learning (under review)
- Cheung, R.W.**, Hartley, C., Monaghan, P. (2019) Environmental effects on parental gesture and infant word learning. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society*, 212-218.
- Humphreys, J., Obeney-Williams, J., **Cheung, R.W.**, Shah, N. (2016) Perinatal psychiatry: a new specialty or everyone's business? *BJPsych Advances* 22(6), 363-372.

## Oral Presentations

- Cheung, R.W.**, Hartley, C., Monaghan, P. (2019) Environmental effects on parental gesture and infant word learning. *Talk presented at CogSci 2019, Montreal, Canada*.
- Cheung, R.W.**, Hartley, C., Monaghan, P. (2019) Environmental effects on parental gesture and infant word learning. *Talk presented at LCICD 2019 (Lancaster Conference on Infant and Early Child Development), Lancaster, UK*.
- Cheung, R.W.**, Hartley, C., Monaghan, P. (2019) Word learning in typical and atypical development. *Talk presented at Department of Linguistics, University of Amsterdam, the Netherlands*.
- Cheung, R.W.** (2017) A Junior Doctor's Perspective on Neuroscience and Psychiatry. *Talk presented with Professor Wendy Burn and Dr Gareth Cuttle, Royal College of Psychiatrists (Gatsby/Wellcome Neuroscience Implementation Project) at Lancashire Care NHS Trust, UK*.
- Cheung, R.**, Constable, T., Mayes, L., Scheinost, D., Crowley, M., Hampson, M. (2016). From Mortal Kombat to Minecraft: Video games, Attention, and Resting State Functional Connectivity in Adolescent Males. *Talk presented at Yale School of Medicine, Yale University, USA*.

## Posters

- Cheung, R.W.**, Hartley, C., Dunn, K., Frost, R.L.A., Monaghan, P. (2019) Environmental effects on parent teaching and infant word learning. *Poster presented at WILD 2019 (Workshop on Infant*

*Language Development*), Potsdam, Germany.

**Cheung, R.W.**, Hartley, C., Dunn, K., Frost, R.L.A., Monaghan, P. (2019) Preliminary results: environmental effects on parent teaching and infant word learning. *Poster presented at LCICD 2018 (Lancaster Conference on Infant and Early Child Development), Lancaster, UK.*

**Cheung, R.W.**, Hartley, C., Monaghan, P. (2018) Environmental effects on parent teaching and infant word learning. Poster presented at the FST Postgraduate Conference, Lancaster, UK.

**Cheung, R.**, Constable, T., Mayes, L., Scheinost, D., Crowley, M., Hampson, M. (2016). From Mortal Kombat to Minecraft: Video games, Attention, and Resting State Functional Connectivity in Adolescent Males. *Poster presented at Yale School of Medicine, Yale University, USA.*

**Cheung W.**, Pramanik K., Warner R., Barton S., Trehan A. (2010) Converting Criticism to Change: Health Services Research in an Emergency Assessment Unit. Poster presented at 4<sup>th</sup> International Society of Acute Medicine Conference, Edinburgh, UK.

## Public Engagement & Research Dissemination

<b>2017 – current</b>	<b>Babylab Lancaster Coffee Mornings</b> (monthly free event for families) <i>Volunteer</i>
<b>2020 – current</b>	<b>REF 2021 ICS</b> (Faculty of Health and Medicine, Lancaster University) <i>Scientific Writer</i>  I work directly with authors to identify and communicate key research impacts for the Research Excellence Framework Impact Case Studies
<b>2019</b>	<b>LCICD 2019</b> (Lancaster Conference: Infant & Early Child Development) <i>Organising committee member</i>
<b>2019</b>	<b>ESRC Festival of Science</b> <i>Volunteer demonstrator for Babylab Lancaster</i>
<b>2019</b>	<b>Campus in the City 2019</b> <i>Volunteer demonstrator</i>
<b>2018</b>	<b>The Communication Trust: Using Evidence on the Ground</b> <i>Consultant with LuCiD and Professor Monaghan</i>  I worked with speech and language therapists across the country, helping them select and evaluate interventions for early language skills (ages 0 – 5). I worked closely with a speech and language team that was piloting interventions for language delay in an Opportunity Area in Derby
<b>2016 - 2018</b>	<b>Royal College of Psychiatrists: Gatsby/Wellcome Trust Neuroscience Project Implementation Group</b> <i>RCPSYCH Appointed Member</i>  I served as a committee member for an implementation group designed to integrate up-to-date neuroscientific research into psychiatry training

## Teaching (portfolio available)

**Summary:** I am a self-driven, highly motivated, and enthusiastic teacher who has extensive experience in teaching both on-the-job and formally in tutorials, lectures, and seminars. I have always designed my own teaching materials (slides, hand-outs, group exercises) based upon curricula, and have used my initiative to ensure these sessions are engaging as well as informative. My additional roles as a representative have afforded me a good sense of pastoral care, and I have consistently positive student feedback for my teaching (available on request).

<b>Awarded 2019</b>	<b>Associate Fellow of the Higher Education Academy</b> (ref. PR169537) Associate Teacher Programme, Lancaster University
<b>2020</b>	<b>Department of Linguistics, Lancaster University, UK</b> 2 <sup>nd</sup> Year 228 Language Acquisition: Language Impairments, Guest Lecturer
<b>2018 - current</b>	<b>Lancaster Medical School, Lancaster University, UK</b> 3 <sup>rd</sup> Year Psychiatry tutorial leader (Mental Health Law, Personality Disorders, Case and Poster presentations)
<b>2017 - current</b>	<b>Department of Psychology, Lancaster University, UK</b> 2 <sup>nd</sup> Year 205 Developmental Psychology Seminars, Associate Lecturer 1 <sup>st</sup> Year 101 Developmental Psychology Seminars, Associate Lecturer 1 <sup>st</sup> Year 101 Skills in Psychology, Associate Lecturer
<b>2013 - 2018</b>	<b>Salford Royal NHS Foundation Trust, UK</b> <b>Tameside and Glossop Acute Services NHS Foundation Trust, UK</b> 3 <sup>rd</sup> – 5 <sup>th</sup> year medical students, University of Manchester I delivered informal teaching throughout my clinical years to medical students on placement, and have had numerous students shadow me alongside doing my day-to-day job
<b>2012 - 2014</b>	<b>Tameside and Glossop Acute Services NHS Foundation Trust, UK</b> Junior doctor (FY1) tutorials: coroner's court, acute on-call conditions 5 <sup>th</sup> Year (final) medical student tutorials, University of Manchester: OSCE stations, history taking, clinical examinations, acute presentations/management of disease, interpreting ABGs/test results
<b>2009 - 2011</b>	<b>Medi-Quest Ethics &amp; Law Tutoring, Salford Royal NHS Foundation Trust UK</b> Group-based tutorials for secondary school students (14 – 18-years-old)

## Representative Roles

<b>current</b>	<b>Postgraduate Research Student Representative</b> (Lancaster University)
<b>2016</b>	<b>Junior Doctor Representative &amp; Local Negotiating Committee Representative</b> (Pennine Care NHS Trust)
<b>2012 - 2014</b>	<b>Foundation Trainee Representative</b> (Tameside and Glossop Acute Services NHS Foundation Trust)

## **Volunteer Work & Other Interests**

**2010 - 2011**      **Mediscope** (Manchester Medical School Magazine) Editorial & Writing Team

**2008 - 2012**      **Barnabus Manchester** (homeless and red light district outreach) – weekly volunteer

Languages: English (native); Cantonese (dim sum level); German (A1 level)

Music: Piano (grade 7), cello (grade 5), guitar (self taught)