

## EDUCATION

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- Oct 2018 to present  
Sep 2016 - Jun 2018
- Doctoral Candidate - Neuroscience, University of Melbourne**  
**Master of Research - Neuroscience**, Université de Bordeaux
- » Ranked 1<sup>st</sup> in the cohort (received 'Mention Très Bien' (highest honours))
  - » Study emphases: Cognitive neuroscience, Pathophysiology of psychiatric disorders, M.R.I, Functional neuroanatomy, Statistics (using R)
- Jul 2011 - Mar 2013
- Post-graduate degree in Business Management (MBA)**, MICA, Ahmedabad
- » Study emphases: marketing, market research, consumer behaviour
  - » Master thesis: studying the behavioural response of women to the use of the colour pink in advertisements directed towards females
- Jul 2008 - Jun 2011
- Bachelor of Science (Honours) - Biochemistry**, University of Delhi
- » First Division (Highest class)
  - » Study emphases: Human physiology, metabolism, immunology, cell biology, molecular biology, genetics
- May 2008
- Rishi Valley School, ISC**
- » Ranked 1<sup>st</sup> in the cohort (science) - graduated with proficiency in Mathematics (94%), Biology (95%), Chemistry (92%) and Physics (86%)

## PUBLICATIONS

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- June 2020
- [in prep]* **D Rakesh**, S Whittle, 'Abuse- and neglect-associated alterations in within-salience network functional connectivity trajectory mediate the relationship between childhood maltreatment and problematic substance use during adolescence'
- June 2020
- [under review]* **D Rakesh**, C Bastin, Ben J. Harrison, CG Davey, NB Allen, S Muller, S Whittle, 'Feelings of shame and guilt are associated with distinct neural activation in youth'
- June 2020
- [under review]* **D Rakesh**, C Kelly, N Vijayakumar, A Zalesky, N Allen, S Whittle, 'Unraveling the consequences of childhood maltreatment: deviations from typical functional neurodevelopment mediate the relationship between maltreatment history and depressive symptoms'
- June 2020
- [under review]* **D Rakesh**, J Lv, A Zalesky, NB Allen, M Yucel, D Lubman, S Whittle, 'Altered whole-brain functional connectivity patterns associated with substance use disorders and problematic substance use during adolescence'
- May 2020
- [in revision]* **D Rakesh**, C Diaz Arteché, 'Using neuroimaging to predict brain age: insights into typical and atypical development and risk for psychopathology', *Journal of Neurophysiology, NeuroForum*
- April 2020
- [in revision]* E Pozzi, N Vijayakumar, **D Rakesh**, S Whittle, 'Neural correlates of emotion regulation in adolescents and young adults: A meta-analytic study', *Biological Psychiatry*
- April 2020
- D Rakesh**, NB Allen, S Whittle, 'Emotion processing and regulation in youth depression and substance use: a systematic review of functional neuroimaging studies', *Developmental Cognitive Neuroscience*
- Feb 2020
- D Rakesh**, SM Lakouraj, K Fernando, 'Functional dedifferentiation of the brain during healthy aging', *The Journal of Neurophysiology, NeuroForum*
- March 2019
- M Cabanas, C Pistono, L Pugrenier, **D Rakesh**, Y Jeantet, M Garret and Y H. Cho, 'Neurophysiological and behavioral effects of anti-orexinergic treatments in a mouse model of Huntington's disease', *Neurotherapeutics*
- Feb 2019
- M Cabanas, M Piquemal, C Pistono, S Arnaud, **D Rakesh**, M Garret, Y H. Cho, 'Correlation between huntingtin aggregates and behavioral changes in R6/1 mice', *The Journal of Huntington's Disease*

## CONFERENCES

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- June 2020
- Upcoming poster presentation at **OHBM 2020**, 'Unraveling the consequences of childhood maltreatment: deviations from typical functional

November 2019	neurodevelopment mediate the relationship between maltreatment history and depressive symptoms" <i>Symposium presentations at <b>Australian Cognitive Neuroscience Society 2019, Society for Mental Health Research 2019</b> and oral presentation at Students of Brain Research Annual Symposium (SOBR) 2019</i> 'Altered whole-brain functional connectivity patterns associated with substance use disorders and problematic substance use during adolescence'
Aug/Oct 2019	<i>Poster presentations at <b>Biological Psychiatry Australia 2019 and University of Melbourne Psychiatry Symposium 2019</b></i> 'Altered whole-brain functional connectivity patterns associated with substance use disorders and problematic substance use during adolescence'
May 2017	Poster presented at NeuroFrance, organized by the French Neuroscience Society Cabanas M, <b>D Rakesh</b> , Jeantet Y, Cho YH, 'Manipulation of the orexinergic system: a new therapeutic approach to Huntington's disease?'

## HONOURS AND AWARDS

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February 2020	<b>Graham Burrows Travel Scholarship (\$4500)</b> - awarded by the University of Melbourne to one student annually
October 2019	<b>'Best Poster Presentation Award'</b> (out of 98 posters), Biological Psychiatry Australia, 2019
August 2019	<b>'Best Poster Presentation Award'</b> , Department of Psychiatry Annual Research Symposium, University of Melbourne
May 2018	<b>Nick Christopher PhD Scholarship (\$6000p.a. *3 years)</b> , awarded by the University of Melbourne to two highest ranked incoming PhD students in the Melbourne Medical School
Nov 2018	<b>Rowden White Scholarship (\$6500)</b> , awarded by the University of Melbourne to talented, high quality PhD students
Jun 2018	<b>Ranked 1<sup>st</sup> in the program</b> - Masters by Research, Neuroscience
Jun 2018	<b>'Best Oral Presentation Award'</b> for the best oral presentation given by a young scientist, at 'International Scientific Day', the annual student symposium (organised by the Neuroscience in Bordeaux Association (NBA))
May 2018	<b>Melbourne Research Scholarship (69,000p.a. * 3.5 years</b> - full fee remission of \$39,000p.a. + \$30,000p.a. living allowance) awarded to high achieving PhD students
May 2018	<b>Trinity College Dublin PhD Studentship Award (€21,000p.a. * 3 years</b> - full fee remission of €14,500p.a. + €6500p.a. living allowance), awarded to high achieving PhD students *Declined in order to accept the MRS

## TEACHING AND SUPERVISION

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2020	<b>Teaching Associate (tutor)</b> , Biological Psychology, Melbourne School of Psychological Sciences, University of Melbourne
2019	<b>Co-supervisor</b> of 1) year-long honours research project (student: Kavisha Fernando) on examining aberrations in whole-brain functional connectivity in subclinical psychosis and 2) 6-month Master's thesis (student: Fenna Menonides) on the neural correlates of guilt and shame architecture in subclinical psychosis, University of Melbourne
2019	<b>Teaching Associate (tutor)</b> , Cognitive Psychology, Melbourne School of Psychological Sciences, University of Melbourne

## RESEARCH EXPERIENCE

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Oct 2018 to present	<b>Doctoral Candidate - Neuroscience, University of Melbourne</b> » Studying adolescent brain development in order to identify neural biomarkers for psychopathology in adolescence and emerging adulthood » Supervisor: A/Prof. Sarah Whittle
Jan 2018 - Jun 2018	<b>Master Thesis</b> (full-time) » Studied synaptic plasticity at CA3-CA3 recurrent collaterals <i>in vivo</i> .

- » Techniques: *in vivo* patch-clamp electrophysiology, optogenetics, stereotaxic surgery, immunohistochemistry. Supervisor: Prof. Christophe Mulle (IINS, CNRS).
- Jan 2017 - Jun 2017      **Master Thesis** (full-time)
- » Studied the effect of the restoration of the sleep/wake cycle, by antagonising the orexinergic system, on the cognitive and motor capabilities of mouse model of Huntington's disease. Supervisor: A/Prof. Yoon H. Cho (INCLIA, CNRS).

## PROFESSIONAL EXPERIENCE

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- Nov 2015 - Aug 2016      **Manager - Marketing**, Nykaa, Mumbai
- » Analysing market research data and digital consumer behaviour
  - » Launch of the Nykaa private label and formulating the IMC
- Jul 2013 - Nov 2015      **Assistant Manager - Marketing**, L'Oréal
- » Responsible for all brand growth targets and brand financials for Vichy, India
  - » Understanding and analysing market research data
  - » Conducted consumer panels, focus group discussions and other research to derive consumer insights
  - » Designed and implemented a 360° Integrated Marketing Campaign

## EXTRA-CURRICULAR ACTIVITIES

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### Positions of Responsibility

- 2020-      **Academic Board's Higher Degrees by Research Committee member** - Graduate Student Association nominated member of a senior university committee that makes decisions on HDRs, **University of Melbourne**
- 2019      **Academic Board's Academic Programs Committee member** - Graduate Student Association nominated member of a senior university committee that makes decisions on academic programs, **University of Melbourne**
- 2019-2020      **Executive Committee Member**, Students of Neuropsychiatry Research (SONR) graduate group, **University of Melbourne**
- 2011-2013      **Senior Editor and President**, Literary Committee, **MICA, Ahmedabad, India**
- 2010- 2011      **Vice President**, English Debating Society, SVC, **University of Delhi**  
**Editor in Chief**, Science Magazine, 'Expressions', SVC, **University of Delhi**

### Internships and Volunteer Work

- July 2017 - Aug 2017      **Intern**, with Dr. Anil Kumar (M.D. Psychiatry)
- » Assisted in assessing patients and acquiring history
- Dec 2014 - Apr 2015      **Mentor**, Green Batti Project, Mumbai
- » Mentored a child from an underprivileged background through academic and personal difficulties
- Apr 2012 - Jun 2012      **Intern**, L'Oréal, Mumbai
- » Studied online behaviour of L'Oréal consumers in order to devise a strategy
- Dec 2010 - Apr 2011      **Education Volunteer**, Naz Foundation, Delhi
- » Taught children with HIV and conducted AIDS awareness campaigns
- May 2009      **Intern**, C.A.R.E (Cooperative for Assistance and Relief Everywhere)
- » Rural health initiative to implement the Integrated Child Development Scheme (ICDS), a centrally sponsored scheme to ensure proper growth and development of children in rural, tribal and slum areas of rural Jharkhand, India.
- June 2009      **Rural auditor**, M.N.R.E.G.A under Jean Dreze
- » Raised awareness about 'Right to Employment', minimum wage and the Mahatma Gandhi National Rural Employment Guarantee Act, and audited the scheme's implementation while living in rural Jharkhand, India

<b>Skills</b>	MATLAB, Python, R, Microsoft Excel, Prism, Adobe Illustrator, Adobe Indesign, Adobe Lightroom
<b>Interests and Activities</b>	Portrait photography, debating, writing poetry, yoga, mridangam, bird-watching, reading, handball, Carnatic vocals
<b>Languages</b>	English (native), Hindi (native), French (B2), Bengali (B1), Urdu (B2)