

Ryan Wei Shien Wee, BSc MBBS PhD

Incoming NIHR Academic Clinical Fellow in Neurology, London (South Thames)

Employment

Royal Free Hospital NHS Foundation Trust

London, United Kingdom

Academic (Specialised) Foundation Programme

August 2022 – Present

- Year 2 rotations at the Royal Free Hospital in A&E, Intensive Care and research in Neurology
- Year 1 rotations at Barnet Hospital in Psychiatry, General Surgery and Geriatrics

Education

University College London

London, United Kingdom

MB PhD Program

September 2013 – July 2022

- MBBS with Triple Distinctions in Medical Sciences, Clinical Sciences and Clinical Practice
- PhD in Neuroscience (supervisor: Dr Andrew MacAskill). Thesis title: “Ventral hippocampal circuits for the state-dependent control of feeding behavior”
- 8-week elective in Neurology and Stroke with Professor Werring (Queen Square, London)

University College London

London, United Kingdom

Pre-clinical Medicine

September 2013 – July 2016

- BSc (Intercalated) Medical Sciences with Neuroscience, 1st Class Honors

Academic Honours and Awards:

June 2022	AP & G Rees Year 6 SSC Prize in Neurology for best essay
June 2022	Dean's List Faculty of Medical Sciences (top 5% of performers in Finals)
Mar 2022	Philip Seth Belasco 1st Prize for performance in Medicine in Finals
Jan 2021	Cordwainers Prize (£1000) – best MB/PhD thesis of the year
Aug 2019	Guarantors of Brain Travel Award (£1000) to attend the Society of Neuroscience conference, Chicago, IL
June 2019	Runner-up for best research poster prize at the UCL Neuroscience Symposium (2 nd place out of 93 posters, £100 award)
Apr 2018	Howard Hughes Medical Institute Scholarship (USD1395) to attend the Cold Spring Harbor course 'Ion Channels in Synaptic and Neural Circuit Physiology', New York
Aug 2017	The William Marsden Scholarship – ranked 1 st in the Year 4 MBBS examinations
Feb 2017	UCL Overseas Research and UCL Graduate Research Scholarships for PhD study at UCL as an international student
June 2016	The Charlotte Dixon Prize – ranked 1 st in the iBSc Neuroscience examinations
June 2016	Dean's List – graduated in the top 5% of the Faculty of Medical Sciences cohort
Nov 2015	UCL Faculty Undergraduate Scholarship for Excellence – awarded to the academically most outstanding second-year undergraduate in the UCL Faculty of Medical Sciences
June 2015	Meyerstein Scholarship (£300) for overall performance in Years 1 and 2 of the MBBS Programme
June 2015	The Cordwainers Prize and Dixon and Paraskevaides Prize (£1000) – ranked 1 st in the Year 2 MBBS examinations

- | | |
|-----------|---|
| Mar 2015 | MRC Summer Studentship for 3 months as a summer student in the lab of Dr Marco Tripodi, MRC LMB, Cambridge, UK |
| June 2014 | The Paraskevaides, Brookes and Windham Baring Prize (£300) – ranked 3 rd in the Year 1 MBBS examinations |

National and international presentations

1. **Wee R**, Ozer M, Anwar L. Prevalence and outcomes of first episode psychosis with substance misuse within an outpatient setting. RCPsych International Congress. July 2023. (Presenting/First author; poster presentation, 2nd place poster prize (Service Evaluation/QI/Audit/Case Study category))
2. **Wee RWS**, Nash A, Angus-Leppan H. Deep phenotyping of frontal lobe epilepsy compared to other epilepsy syndromes. Association of British Neurologists Conference (virtual). May 2021. (Presenting/First author; oral presentation; supported by an ABN bursary)
3. **Wee RWS**, Tripathi R, Jolly S, Richardson WD. Entorhinal neurons derive from precursors expressing a glial progenitor marker, BNA Festival of Neuroscience (virtual). April 2021. (Presenting/First author; poster presentation)
4. **Wee RWS**, MacAskill AF. A hunger-sensitive hippocampal circuit regulates the decision to eat. BNA Festival of Neuroscience (virtual). April 2021. (Presenting/First author; poster and oral presentation; supported by BNA bursary)
5. **Wee RWS**, MacAskill AF. Hippocampal circuits for the hunger-dependent control of feeding behaviour, poster presentation, Endo 2021 (virtual). March 2021. (Presenting/First author; poster presentation)
6. **Wee RWS**, Tripathi R, Jolly S, Richardson WD. Entorhinal neurons derive from precursors expressing a glial progenitor marker, Virtual Glia Symposium (virtual). March 2021. (Presenting/First author; poster presentation)
7. **Wee RWS**, MacAskill, Input-output mapping of ventral hippocampal circuits, poster presentation, Society for Neuroscience conference, Chicago, IL October 2019. (Presenting/First author; poster presentation, supported by Guarantors of Brain Travel Grant)
8. **Wee RWS**, MacAskill AF. Hippocampal circuits for the state-dependent control of feeding behaviour, poster presentation, UCL Neuroscience Symposium. London, UK, June 2019. (Presenting/First author; poster presentation, runner-up prize for best poster)

Local presentations

1. Deep phenotyping of frontal lobe epilepsy compared to other epilepsy syndromes. Neuroscience Clinical Meeting, Royal Free Hospital, London, UK. October 2021. Invited speaker.

2. A hunger-sensitive hippocampal circuit regulates the decision to eat. NPP Shorts, UCL Department of Neuroscience, Physiology and Pharmacology, London, UK, March 2021. Invited speaker.
3. Hippocampal circuits for the state-dependent control of feeding behaviour. Upsyne Evening Talks, Sainsbury Wellcome Centre For Neural Circuits and Behaviour. London, UK, October 2019. Invited speaker.
4. Hippocampal circuits for the state-dependent control of feeding behaviour. Clinical Research Fellows Networking Meeting. Francis Crick Institute, London, UK, June 2019.
5. Hippocampal circuits for the control of feeding based on the internal state. Crick-UCL Graduate Student Symposium. Francis Crick Institute, London, UK, Feb 2019.

Publications

1. **Wee RWS**, Mishchanchuk K, AlSubaie R, Church TW, Gold MG, MacAskill AF. Internal-state-dependent control of feeding behavior via hippocampal ghrelin signaling. *Neuron*. 2023 Nov 10:S0896-6273(23)00797-3. doi: 10.1016/j.neuron.2023.10.016. Epub ahead of print. PMID: 37977151.
2. **Wee RWS**, Nash A, Angus-Leppan H. Deep phenotyping of frontal lobe epilepsy compared to other epilepsy syndromes. *J Neurol*. 2023 Jun;270(6):3072-3081. doi: 10.1007/s00415-023-11639-9. Epub 2023 Feb 27. PMID: 36847847.
3. Sánchez-Bellot C, AlSubaie R, Mishchanchuk K, **Wee RWS**, MacAskill AF. Two opposing hippocampus to prefrontal cortex pathways for the control of approach and avoidance behaviour. *Nat Commun*. 2022 Jan 17;13(1):339. doi: 10.1038/s41467-022-27977-7. PMID: 35039510.
4. Al-Subaie R, **Wee RWS**, Ritoux R, Mishchanchuk M, Regester D, MacAskill AF. 2021. Control of parallel hippocampal output pathways by amygdalar long-range inhibitory projections. *Elife*. 10:e74758. doi: 10.7554/eLife.74758. PMID: 34845987.
5. **Wee R**, Soh E, Giles D. Teaching data science to medical trainees. *Clin Teach*. 2021 Aug;18(4):384-385. doi: 10.1111/tct.13391. Epub 2021 Jun 7. PMID: 34101355.
6. **Wee RWS**, MacAskill AF. 2020. Biased Connectivity of Brain-wide Inputs to Ventral Subiculum Output Neurons. *Cell Rep* 30:3644–3654.e6. doi:10.1016/j.celrep.2020.02.093. PMID: 32187537

Competencies and personal skills

- >5 years experience in coding, machine learning and statistical analysis in Python (fluency in the Matplotlib, Pandas, Numpy, Scipy, Scikit-learn, statsmodels packages)
- ~1 year experience in SQL, R and MATLAB for data analysis
- HTML and CSS for web development