Alex Siu Fung Kwong

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Education

PhD in Advanced Quantitative Methods, University of Bristol	2016 – 2019
Thesis: Genetic & Environmental Contributions to Trajectories of Depressive Symptoms	
Funding: Economic and Social Research Council SWDTP +3 Years Studentship	
MSc by Research, Experimental Psychology, University of Bristol	2013 - 2015
Thesis: Effects of 7.5% carbon dioxide (CO ₂) on real world behaviours	
BA (Hons) Psychology with Philosophy, Upper Second-Class Honours, University of Reading	2010 - 2013
Dissertation: Saccades and Facial Expressions of Emotion	

Academic Appointments

Present appointments:

Wellcome Senior Research Fellow, Division of Psychiatry, University of Edinburgh	2024 – present
Edinburgh Scientific Academic Track Fellow (Tenure Track), University of Edinburgh	2024 – present
Senior Research Associate in Psychiatric Genetic Epidemiology, University of Bristol	2019 – present
Previous appointments:	
Research Fellow, Division of Psychiatry, University of Edinburgh	2019 – 2024
Research Assistant, Centre for Multilevel Modelling, University of Bristol	2017 - 2019
Teaching Assistant, School of Geographical Sciences, University of Bristol	2017 – 2019
Research Associate, Social and Community Medicine, University of Bristol	2015 – 2016
Teaching Assistant, School of Experimental Psychology, University of Bristol	2013 - 2015

Research Grants and Fellowships (£1,064,030 as PI)

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Gambling Harms Research Innovation Fund Strategic Award – PI (£50,000)	2024 - 2025
Wellcome Early Career Award – PI (£748,017)	2024 - 2028
Wellcome Mental Health Data Prize – Prototype Phase – PI (£99,828)	2023 - 2024
Wellcome Mental Health Data Prize – Discovery Phase – PI (£40,000)	2022 - 2023
EBI/Wellcome ISSF Mental Health Research Next Step – PI (£10,009)	2022 - 2023
EBI/Rosetrees Trust Mental Health in Young People Grant – PI (£11,020)	2020 - 2021
ESRC Postdoctoral Fellowship – PI (£105,156)	2020 - 2021

Other Grants and Travel funds

MRC Precision Medicine PhD Studentship for Sam Bentwood – PI (~£99,500)	Incoming 2024 – 2028
MRC Precision Medicine PhD Studentship for Poppy Grimes – PI (~£94,600)	2022 - 2026
UKRI Adolescent Mental Health Methodology Call – Collaborator – (£300,000)	2022 - 2024
Policy Bristol - PI (£2200)	2020
ESRC Travel Funding (£600)	2019
MQ Conference Travel Award (£300)	2019
CLOSER Conference Travel Award (£300)	2017
Social Science Genetics Association Consortium Travel Award (~£2500)	2017
ESRC Studentship - Advanced Quantitative Methods - 3 Years - PI (~£65,287)	2016 - 2019

Publication Summary

I have published 53 manuscripts to date (7 as first author, 3 as senior author), with a further 15 manuscripts currently under review (3 as first author; 2 as senior author). These manuscripts are published across multiple disciplines in top journals such as *JAMA Psychiatry*, *Lancet Psychiatry*, *Nature*, *Nature Genetics*, *British Journal of Psychiatry*, *Nature Communications* and *Journal of Child Psychology and Psychiatry*. A full list of publications is given below.

Teaching Experience

Lectures:

<u> Lectur cor</u>	
Introduction to Repeated Measures (<u>Module design</u> , lead – 1 Lecture. Level: PhD+), University of Edinburgh	2021
Common Mental Health Disorders (<i>Delivered – 1 Lecture. Level: MSc+</i>), University of Bristol	2019
Introduction to Causal Epidemiology (Co-lead - 1 Lecture, Level: PhD+), UF Pelotas, Brazil	2010

Analysis of Repeated Measures (<i>Module design</i> , lead – 1 lecture. Level: PhD+), UF Pelotas, Brazil	2019
Introduction to Statistics (<i>Module design</i> , lead – 2 Lectures. Level: PhD+), SACTRC, Sri Lanka	2019
Analysis of Repeated Measures (<i>Module design</i> , lead – 1 Lecture. Level: PhD+), SACTRC, Sri Lanka	2019
Analysis of Repeated Measures (<i>Module design</i> , lead – 3 Lectures. Level: PhD+), HSRC, South Africa	2019

Workshops led

TIDAL/Harmony Longitudinal Workshop, University College London

2023

Completed PhD student supervision

<u>Melisa Chuong</u> (Psychiatry – UoE – Secondary supervisor)	2018 – 2022
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Gene - Environment interplay in depression

Passed with minor corrections

Niamh MacSweeney (Psychiatry – UoE – Secondary supervisor)

2019 - 2023

In search of bio-psycho-social markers for the recurrence of adolescent depression

Passed with minor corrections

<u>Melissa Lewins</u> (Psychiatry – UoE – Secondary supervisor)

2018 - 2023

Genomic and phenotypic risk factors for the clinical progression of depressive symptoms

Passed with minor corrections

Holly Fraser (Digital and Population Health – UoB – Secondary supervisor)

2020 - 2024

Trajectories of mental health and antidepressant responses: a machine learning approach

Passed with corrections

Ongoing PhD student supervision

Sam Bentwood (Psychiatry - UoE - Lead supervisor)

Incoming 2024 – present

Examining the causes and consequences of sub-types of depression across the life course

Poppy Grimes (Psychiatry – UoE – Lead supervisor)

2022 - present

Characterising the nature of mental health trajectories across adolescent development through the integration of genomic, biomarkers, neuroimaging and environmental risk factors

<u>Eileen Xu</u> (Psychiatry – UoE – Secondary supervisor)

2021 – present

Towards an integrated biopsychosocial model of youth depression

Reesha Zahir (Psychiatry – UoE – Secondary supervisor)

2020 – present

Investigating the mechanisms underpinning sleep and links to mental ill health in autistic children and adolescents

<u>Amelia Edmondson-Stait</u> (Psychiatry – UoE – Secondary supervisor)

2020 – present

Altered immune function across major psychiatric disorders

Completed MSc by research student supervision

Boyang Yu (Psychiatry – UoE – Lead supervisor)

2022 - 2023

Intergenerational transmission of mental health: The mediating effects of offspring self-esteem and attachment *Passed with merit*

Other supervision

I have previously supervised five MSc dissertation students to completion, 1 undergraduate dissertation student to completion and three PhD mini-project students to completion.

Open Science and Knowledge Exchange

I am a keen advocate of open science and reproducibility. Manuscripts that I have led are accompanied with analytical code and posted on my GitHub (https://github.com/kwongsiufung). I also promote work that is co-produced with young people and people with lived experience. I currently lead a youth and lived experience advisory group as part of my Wellcome Mental Health Data Prizes, who help lead research questions, guide dissemination and partake in voluntary data science training.

Research Impact and Awards

Scientific contributions to policy briefings

6. Eating disorder symptoms and self-harm are linked to higher levels of depression and anxiety during the COVID-19 pandemic. Policy Bristol (2021). http://www.bristol.ac.uk/policybristol/policy-briefings/covid-19_eating-disorders_self-harm

- 5. Office for Health Improvement and Disparities (Formerly Public Health England):
- COVID-19 mental health and wellbeing surveillance: https://www.gov.uk/government/publications/covid-19-mental-health-and-wellbeing-surveillance-spotlights
- **4.** COVID-19 health data research. HDRUK (August 2020). https://www.hdruk.ac.uk/wp-content/uploads/2020/08/200804-Health-Data-Research-UK-COVID-19-fortnightly-update-paper-final.pdf
- **3.** COVID-19 health data research. HDRUK (June 2020). https://www.hdruk.ac.uk/wp-content/uploads/2020/06/200623-Health-Data-Research-UK-COVID-19-weekly-update-paper.pdf
- **2.** COVID-19 health data research. HDRUK (May 2020). https://www.hdruk.ac.uk/wp-content/uploads/2020/05/200519-Health-Data-Research-UK-COVID-19-weekly-update-paper.pdf
- **1.** How depression relates to academic achievement in adolescence and early adulthood: identifying high risk points. Policy Bristol (2019). DOI: ow.ly/tuBX50y1S3w.

Media appearances

Coronavirus: young people more anxious during lockdown.

https://www.bbc.co.uk/news/uk-england-bristol-53150138

Awards

- **3.** British Journal of Psychiatry Prize for Editor's Choice 2022 for 'Mental health before and during the COVID-19 pandemic in two longitudinal UK population cohorts'.
- 2. Nominated for best poster at World Congress of Psychiatric Genetics 2020.
- **1.** Finalist in the Journal of Youth and Adolescence emerging scholar best article awards 2020. https://doi.org/10.1007/s10964-020-01327-6

Academic Citizenship

Co-lead of Psychiatry journal club, Division of Psychiatry, University of Edinburgh

ALSPAC internal manuscript reviewer, Bristol Medical School, University of Bristol

ALSPAC internal researcher panel, Bristol Medical School, University of Bristol

2020 – 2022

2020 – present

Peer-reviewed journal reviews

Journal of Child Psychology and Psychiatry, Molecular Psychiatry, British Journal of Psychiatry, Psychopathology and Behavioral Assessment, Psychological Medicine, Behaviour Genetics, Journal of Youth and Adolescence, Journal of Child Psychology and Psychiatry Advances.

Research output

Peer reviewed publications (not including consortium papers) 2024

- **49.** Adams, M. J., Thorp, J. G., Jermy, B. S., **Kwong, A. S. F.,** ... Derks, E. M. Genome-wide meta-analysis of ascertainment and symptom structures of major depression in case-enriched and community cohorts (in press at Psychological Medicine). <u>Preprint</u>.
- **48.** Xu, E., MacSweeney, N., Thng, G., Barbu, M., Shen, X., **Kwong, A. S. F.,** Romaniuk, L., Mcintosh, A., Lawrie, S., Whalley, H. (in press at JCPP Advances). Predicting early adolescent depression using a model developed in Brazil: IDEA-RS in the ABCD study.
- **47.** Grimes, P. Z., Adams, M. J., Thng, G., Edmondson-Stait, A. J., Yi, L., McIntosh, A. M., Cullen, B., Larsson, H., Whalley, H. C., **Kwong, A. S. F.** (2024). Genetic Architectures of Adolescent Depression Trajectories Across Two Longitudinal Population Cohorts. JAMA Psychiatry. <u>Manuscript</u>.
- **46.** Major-Smith, D., **Kwong, A. S. F.,** Timpson, N. J., Heron, J., Northstone, K. (2024). Releasing synthetic data from the Avon Longitudinal Study of Parents and Children (ALSPAC): Guidelines and applied examples. Wellcome Open Research 9:57. <u>Manuscript</u>.

<u> 2023</u>

- **45.** Lees, V., Hay, R., Bould, H., **Kwong, A. S. F.,** Major-Smith, D., Kounali, D., Perason, R. (2023). The impact of routines on emotional and behavioural difficulties in children and on parental anxiety during COVID-19. Front. Child Adolesc. Psychiatry, 2. <u>Manuscript</u>.
- **44.** Fraser, H., White, G., Matthews, S., Rai, D., Davidson, B., Pearson, R. M., McConville, R., **Kwong, A. S. F.** (2023). Medication use for depression and anxiety: Data collected from 28/29-year-old offspring in the Avon Longitudinal Study of Parents and Children. Wellcome Open Research 8:237. <u>Manuscript</u>.
- **43.** Prince, C., Joinson, C., **Kwong, A. S. F.**, Fraser, A., Heron, J. (2023). The relationship between timing of onset of menarche and depressive symptoms from adolescence to adulthood. Epidemiology and Psychiatric Sciences, 32, E60. Manuscript.
- **42.** McElroy, E., Herrett, E., Patel, K., ... **Kwong, A. S. F.,** ... Patalay, P., on behalf of the Longitudinal Health and Wellbeing Collaborative. (2023). Living alone and mental health: parallel analyses in longitudinal population surveys

- and electronic health records prior to and during the COVID-19 pandemic. BMJ Mental Health. 26:e300842. Manuscript.
- **41.** MacSweeney, N., Perrine, L., Zafar, S., ... **Kwong, A. S. F.**, ... Whalley, H. C. (2023). Keeping up with the kids: Towards a more ecologically valid study of irritability in youth depression and its underlying neural circuitry. Frontiers in Behavioral Neuroscience. **Manuscript**.
- **40.** Armitage, J. M., **Kwong, A. S. F.,** Tseliou, F., Sellers, R., Blakey, R., Anthony, R., Rice, F., Thapar, A., Collishaw, S. (2023). Time Trends in Mental Health Trajectories Across Childhood and Adolescence, Findings from Two UK Cohorts. Lancet Psychiatry. *10*(7), 509-516. <u>Manuscript</u>.
- **39.** MacSweeney, N., Shen, X., ... **Kwong, A. S. F.,** ... Whalley, H. C. (2023). The role of neurobiology in the association between pubertal timing and depression risk in an early adolescent sample (the ABCD Study®): A registered report. Dev Cog Neuroscience 60, 101223. <u>Manuscript</u>.
- **38.** Shakeshaft, A., Blakey, R., **Kwong, A. S. F.**, Riglin, L., Davey-Smith, G., Stergiakouli, E., Tilling, K., Thapar, A. (2023). Mental-health before and during the COVID-19 pandemic in adults with neurodevelopmental disorders. Journal of Psychiatric Research 159, 230-239. Manuscript.
- **37.** Cheetham, N. J., Kibble, M., Wong, A., ... **Kwong, A. S. F.,** ... Steves, C. J. (2023). Antibody levels following vaccination against SARS-CoV-2: associations with post-vaccination infection and risk factors in two UK longitudinal studies. eLife. 12:e80428. <u>Manuscript</u>.
- **36.** Bowyer, R., Huggins, C., Toms, R., ... **Kwong, A. S. F.,** ... Silverwood, R. (2023). Characterising patterns of COVID-19 and long COVID symptoms: Evidence from nine UK longitudinal studies. Eur J Epidemiol. <u>Manuscript</u>.

2022

- **35.** Edmondson-Stait, A. J., Shen, X., Adams, M. J. ... **Kwong, A. S. F.,*** Whalley, H. C. (2022). Early-life inflammatory markers and subsequent episodes of depression and psychotic experiences in the ALSPAC birth cohort. Brain, Behavior and Immunity Health. 26, 100528. <u>Manuscript</u>. * *joint senior author*
- **34.** Maddock, J., Parson, S., Di Gessa, G., ... **Kwong, A. S. F.,** ... Katikireddi, S. V. (2022). Inequalities in healthcare disruptions during the Covid-19 pandemic: Evidence from 12 UK population-based longitudinal studies. BMJ open, *12*(10), e064981. Manuscript.
- **33.** Thompson, E., Stafford, J., ... **Kwong, A. S. F.,** ... Patalay, P. (2022). Psychological distress, depression, anxiety, and life satisfaction following COVID-19 infection: evidence from 11 UK longitudinal population studies. The Lancet Psychiatry, *9*(11), 894-906. Manuscript.
- **32.** Baldwin, J. R., Sallis, H., Schoeler, T., ... **Kwong, A. S. F.,** ... Pingault, J. (2022). A genetically informed Registered Report on adverse childhood experiences and mental health. Nature Human Behaviour, 7, 269–290. <u>Manuscript</u>.
- **31.** Chuong, T. M. S., Adams, M. J., **Kwong, A. S. F.,** Haley, C. S., Amador, C., McIntosh, A. M. (2022). Genome-by-Trauma Interaction Effects in Depression. JAMA Psychiatry, 79(11), 1110–1117. <u>Manuscript</u>.
- **30.** Wels, J., Booth, C., Wielgoszewska, B., ... **Kwong, A. S. F.,** ... Ploubidis, G. B. (2022). Association of COVID-19 employment disruption with mental and social wellbeing: evidence from nine UK longitudinal studies. Social Science and Medicine 308. <u>Manuscript</u>.
- **29.** Culpin, I., Heuvelman, H., Rai, D., Pearson, R. M., Joinson, C., Heron, J., Evans, J., **Kwong, A. S. F.** (2022). Father absence and trajectories of offspring mental health across adolescence and young adulthood: findings from a UK-birth cohort. Journal of Affective Disorders 314, 150-159. <u>Manuscript</u>.
- **28.** Thng, G., Shen, X., Stolicyn, A., ... **Kwong, A. S. F.,** ... Whalley, H. C. (2022). Comparison of personalised brain-based risk scores versus polygenic risk scores for depression across the lifespan. Eur Psychiatry 65, e44. <u>Manuscript</u>.
- **27.** Thompson, E. J., Williams, D. M., ... **Kwong, A. S. F.,** ... Steves, C. J., (2022). Long COVID burden and risk factors in 10 UK longitudinal studies and electronic health records. Nat Commun 13, 3528. <u>Manuscript</u>.
- **26.** Barbu, M. B., Amador, C., **Kwong**, **A. S. F.**, ... McIntosh, A. M. (2022). Complex trait methylation risk scores in the prediction of major depressive disorder. eBioMedicine 79, 104000. Manuscript.
- **25.** Shen, X., Caramaschi, D., Adams, M. J., ... **Kwong, A. S. F.,** ... McIntosh, A. M. (2022). DNA methylome-wide association study of polygenic risk scores for depression implicating antigen processing and immune responses. Genome Med 14, 36. <u>Manuscript</u>.
- **24.** Patel, K., Robertson, E., **Kwong**, **A. S. F.**,* ... Katikireddi, S. V. (2022). Psychological Distress Before and During the COVID-19 Pandemic: Sociodemographic Inequalities in 11 UK Longitudinal Studies. JAMA Netw Open 5 (4) e227629. Manuscript. * **joint first author**
- **23.** Elhakeem, A., Tilling, K. M., Hughes, R. A., ... **Kwong, A. S. F.**, ... Lawlor, D. A. (2022). Using linear and natural cubic splines, SITAR, and latent trajectory models to characterise nonlinear longitudinal growth trajectories in cohort studies. BMC Med Res Methodol 22, 68. <u>Manuscript</u>.
- **22.** Choi, K., Kim, H., Basu, A., **Kwong, A. S. F.,** Hernandez-Diaz, S., Wyszynski, D., Koenan, K. (2022). COVID-19 impacts on exercise, sleep, and diet and associations with mental health during pregnancy: A cross-national study. Journal of Affective Disorders Reports. 7, 100288. <u>Manuscript</u>.

2021

- **21.** Warne, N., Heron, J., Mars, B., **Kwong, A. S. F.**, Solmi, F., Pearson, R., Moran, P., Bould, H. (2021). Disordered eating and self-harm as risk factors for poorer mental health during the COVID-19 pandemic: A population-based cohort study. J Eat Disord. 9, 155. <u>Manuscript</u>.
- **20.** Culpin, I., Hammerton, G., Bornstein, M. H., ... **Kwong, A. S. F.**, Pearson, R. M. (2021). Maternal postnatal depression and offspring depression at age 24 years in a UK-birth cohort: the mediating role of maternal nurturing behaviours concerning feeding, crying and sleeping. Wellcome Open Res 2021, 6:187. <u>Manuscript</u>.
- **19.** Di Gessa, G., Maddock, J., Green, M. J., ... **Kwong, A. S. F.,** ... Porteous, D., & Patalay, P. (2021). Pre-pandemic mental health and disruptions to healthcare, economic, and housing outcomes during the COVID -19 pandemic: evidence from 12 UK longitudinal studies. British Journal of Psychiatry. 220 (1), 21–30. <u>Manuscript</u>.
- **18.** Cadman, T., **Kwong, A. S. F.**, Moran, P., O'Mahen, H., Culpin, I., Lawlor, D. A., Pearson, R. M. (2021). Joint associations of parental personality traits and socioeconomic position with trajectories of offspring depression: findings from up to 6925 families in a UK birth cohort. J Child Psychol Psychiatry Advances. <u>Manuscript</u>.
- **17.** Rajyaguru, P., **Kwong, A. S. F.**, Braithwaite, E. C., Pearson, R. M. (2021). Maternal and Paternal Depression and Child Mental Health Trajectories: Evidence from the Avon Longitudinal Study of Parents and Children. BJPsych Open, 7(5), e166. <u>Manuscript</u>.
- **16.** Paul, E., **Kwong, A. S. F.,** Moran, P., Pawlby, S., Howard, L. M., Pearson, R. M. (2021). Maternal thoughts of self-harm and their association with future offspring mental health problems. Journal of Affective Disorders. 293, 422-428. Manuscript.
- **15.** Altschul, C., Fawns-Ritchie, C., **Kwong, A. S. F.,** Hartley, L., ... Porteous, D. (2021). Face covering adherence is positively associated with good mental health and wellbeing: a longitudinal analysis of the CovidLife surveys. Wellcome Open Res. 6:62. Manuscript.
- **14.** Higbee, D. H., Nava, G., **Kwong**, **A. S. F.**, Dodd, J. W., Granell, R. (2021). The impact of asthma on mental health & wellbeing during COVID-19 lockdown. European Respiratory Journal. 58 (1). <u>Manuscript</u>.
- **13.** Costantini, I., **Kwong, A. S. F.,** Smith, D., Lewcock, M., Lawlor, D. A., Moran, P., Tilling, K., Golding, J., Pearson, R. M. (2021). Locus of control and negative cognitive styles in adolescence as risk factors for depression onset in young adulthood: findings from a prospective birth cohort study. Front. Psychol. 12:599240. <u>Manuscript</u>.
- **12. Kwong, A. S. F.**, Morris, T. T., Pearson, R. M., Rice, F., Stergiakouli, E., Tilling, K. M. (2021). Polygenic Risk for Depression, Anxiety and Neuroticism are Associated with the Severity and Rate of Change in Depressive Symptoms Across Adolescence. J Child Psychol Psychiatry. *62*(12), 1462-1474. <u>Manuscript</u>.
- **11.** Lopéz-Lopéz, J., **Kwong, A. S. F.**, Washbrook, L., Tilling, K. M., Fazel, M. S., Pearson, R. M. (2021). Depressive symptoms and academic achievement in UK adolescents: a cross-lagged analysis incorporating genetic information. Journal of Affective Disorders. 284, 104-113. <u>Manuscript</u>.
- **10.** Warrier, V., **Kwong, A. S. F.,** Luo M., ... Cecil, C. M. (2021). Gene-environment correlations and causal effects of childhood maltreatment on physical and mental health: a genetically informed approach. Lancet Psychiatry, 8(5), 373-386. Manuscript.

<u> 2020</u>

- **9. Kwong, A. S. F.**, Pearson, R. M., Adams, M. J., Northstone, K., ... Porteous, D., Timpson, N. J. (2020). Mental health before and during COVID-19 in two UK longitudinal population cohorts. The British Journal of Psychiatry, *218*(6), 334-343. Manuscript.
- **8.** Kwong, A. S. F., Pearson, R. M., Smith, D., Northstone, K., Lawlor, D.A., Timpson, N. J. (2020). Longitudinal Evidence for Persistent Anxiety in Young Adults Despite Easing of COVID-19 Restrictions. Wellcome Open Res, 5:195. Manuscript.
- **7.** Attwood A., Ludwig C., Penton-Voak I., Poh J., **Kwong A. S. F.**, Munafò M. R. (2020). Effects of 7.5% carbon dioxide inhalation on gait. Psychological Research. 85, 2444–2452. <u>Manuscript</u>.
- **6.** Hollis, B., Day, F. D., Busch, A. S., ... **Kwong, A. S. F.,** ... Ong, K. K., Perry, J. R. B., (2020). Genomic Analysis of Male Puberty Timing Highlights Shared Genetic Basis with Hair Colour and Lifespan. Nat Commun. 11, 1536. <u>Manuscript</u>.
- **5.** Lopéz-Lopéz, J., **Kwong, A. S. F.**, Pearson, R. M., Tilling, K. M., Fazel, M. S., Washbrook, L., Kidger, J., Hammerton, G. (2020). Trajectories of Depressive Symptoms and Education and Employment Outcomes. BJPsych Open, 6(1), E6. <u>Manuscript</u>.

<u> 2019</u>

4. Kwong, A. S. F. (2019). Examining the Longitudinal Nature of Depressive Symptoms in the Avon Longitudinal Study of Parents and Children (ALSPAC). Wellcome Open Res. 4: 126. <u>Manuscript</u>.

- **3. Kwong**, **A. S. F.**, Lopéz-Lopéz, J., Hammerton, G., Manley, D., Timpson, N. J., Leckie, G., Pearson, R. M. (2019). Genetic and Environmental Risk Factors Associated with Trajectories of Depressive Symptoms from Adolescence to Young Adulthood. JAMA Network Open. *2* (6), e196587. Manuscript.
- **2. Kwong**, **A. S. F.**, Manley, D., Timpson, N. J., Pearson, R. M., Heron, J., Sallis, H., Stergiakouli, E., Davis, O., Leckie, G. (2019). Identifying Critical Points of Trajectories of Depressive Symptoms from Childhood to Young Adulthood. Journal of Youth and Adolescence. 48, 815-827. <u>Manuscript</u>.

<u> 2015</u>

1. Attwood, A. S., Catling, J. C., **Kwong**, **A. S. F.**, Munafò, M. R. (2015). Effects of 7.5% Carbon Dioxide (CO₂) Inhalation and Ethnicity on Face Memory. Physiology and Behavior, 147, 97-101. <u>Manuscript</u>.

Peer reviewed consortium publications

- **4.** Lammi, V., Nakanishi, T., Jones, S. E., **Kwong**, **A. S. F.**, ... Ollila, H. M. (in press at Nature Genetics). Genomewide Association Study of Long COVID. Preprint.
- **3.** Costello, R. E., Tazare, J., Piehlmaier, D., ... **LH&W NCS (or CONVALESCENCE) Collaborative**, The OpenSAFELY collaborative. Ethnic differences in the indirect effects of the COVID-19 pandemic on clinical monitoring and hospitalisations for non-COVID conditions in England: a population-based, observational cohort study using the OpenSAFELY platform. eClinMed, 61. 102077. Manuscript.
- **2.** The COVID-19 Host Genetics Initiative. (2023). A second update on mapping the human genetic architecture of COVID-19. Nature, 621, E7–E26. Manuscript.
- **1.** Allotey, J., Whittle, R., Snell, K. I. E., ... **IPPIC Collaborative Network**. (2022). External validation of prognostic models to predict stillbirth using International Prediction of Pregnancy Complications (IPPIC) Network database: individual participant data meta-analysis. Ultrasound Obstet Gynecol. **59**: 209-219. Manuscript.

Manuscripts currently under consideration for publication *denotes joint first or senior author

- **1. Kwong**, **A. S. F.**,* Edmonson-Stait, A., Xu, E., ... Whalley, H. C. (submitted to International Journal of Epidemiology). Software Application Profile: TIDAL Tool to Implement Developmental Analysis of Longitudinal data.
- **2. Kwong, A. S. F.**, Northstone, K., Pearson, R. M., McIntosh, A. M., Timpson, N. J. (revise and resubmit at BJPsych Open). Tracking population mental health before and across stages of the COVID-19 pandemic in young adults. Preprint.
- **3. Kwong**, **A. S. F.**, Maddalena, J. M., Croft, J., Heron, J., Leckie, G. (under review at SSM: Population health). Early Childhood Trauma and Trajectories of Depressive Symptoms. <u>Preprint</u>.
- **4.** Edmondson-Stait, A., Davyson, E., Shen, X., Adams, M. J., Khandaker, G. M., Miron, V., McIntosh, A. M., Lawrie, S., **Kwong, A. S. F.**,* Whalley, H. C. (submitted to European Journal of Psychiatry). Associations between IL-6 and trajectories of depressive symptoms across the life course: Evidence from ALSPAC and UK Biobank cohorts. Preprint.
- 5. Grimes, P. Z., Murray, A. L., Smith, K., Allegrini, A. G., Piazza, G., Larsson, H., Epskamp, S. Whalley, H. C., Kwong, A. S. F.* Network Temperature as a Metric of Stability in Depression Symptoms Across Adolescence. (submitted to Psychological Medicine). Preprint.
- **6.** Paul, E., Kounali, D., **Kwong, A. S. F.,** Smith, D., ... Pearson, R. M. (revise and resubmit at Elife). Trajectories of child emotional and behavioural difficulties before and during the COVID-19 pandemic in a longitudinal UK cohort. Preprint.
- 7. Chuong, T. M. S., Adams, M. J., **Kwong, A. S. F.**, Haley, C. S., Amador, C., McIntosh, A. M. (submitted to Genetic Epidemiology). Methodological Considerations When Using Polygenic Scores to Explore Parent-Offspring Genetic Nurturing Effects. Preprint.
- **8.** Adams, M. J., Streit, F., Awasthi, S., ... **Kwong, A. S. F.,** ... McIntosh, A. M. (revise and resubmit at Cell). Genome-wide study of major depression in 685,808 diverse individuals identifies 697 independent associations, infers causal neuronal subtypes and biological targets for novel pharmacotherapies. <u>Preprint</u>.
- **9.** Fraser, H., **Kwong, A. S. F.**, Brooks, M., Davidson, B., McConville, R, Pearson, R. M. (under review *npj* Mental Health Research). Modelling the risk ecosystem of depression using machine learning in a population of young adults. Preprint.
- **10.** Underwood, J. F, G., Madley-Dowd, P., Dardani, C., Hull, L., **Kwong, A. S. F.,** Pearson, R. M., Hall, J., Rai, D. (revise and resubmit at Nature Mental Health). Childhood trauma as a mediator between autistic traits and depression: evidence from the ALSPAC birth cohort. <u>Preprint</u>.
- 11. Pearson, R. M., Braithwaite, E. C., Cadman, T., ... **Kwong, A. S. F.**, Jones, H. Sallis. H. (submitted to Scientific Reports). The proportion of genetic similarity for liability for neuroticism in mother-child and mother-father dyads is associated with reported relationship quality. Preprint.

- **12.** Kweon, H., Burik, C. A., Ning, Y., ... **Kwong, A. S. F.**, ... Koellinger, P. D. (revise and resubmit at Nature Human Behavior). Associations between common genetic variants and income provide insights about the socioeconomic health gradient. <u>Preprint</u>.
- **13.** Davyson, E., Shen, X., Huider, F., ... **Kwong, A. S. F.**, ... McIntosh, A. M. (submitted to Biological Psychiatry). Antidepressant Exposure and DNA Methylation: Insights from a Methylome-Wide Association Study. <u>Preprint</u>.
- **14.** Strom, N. I., Verhuist, B., Bacuna, S., ... **Kwong, A. S. F.,** ... Hettema, J. M. (submitted to Nature Genetics). Genome-wide association study of major anxiety disorders in 122,341 European-ancestry cases identifies 58 loci and highlights GABAergic signaling. <u>Preprint</u>.
- **15.** Tsang, R. S. M., Stow, D., **Kwong, A. S. F.,** Donnelly, N., ... Khandaker, G. M. (submitted to Molecular Psychiatry). Immunometabolic Blood Biomarkers of Developmental Trajectories of Depressive Symptoms: Findings from the ALSPAC Birth Cohort. **Preprint**.

Invited talks

Division of Psychiatry, University of Cambridge	2024
Zangwill Club, University of Cambridge	2024
Longitudinal Data Workshop, University of Dundee	2023
Neuroscience Day, University of Edinburgh, Edinburgh	2021
British Journal of Psychiatry and UCL, University College London, Online	2021
Royal College of Psychiatrists, South-West Division, Online	2020
Massachusetts General Hospital, Harvard, Boston	2019
ESRC Knowledge Exchange Event, University of Bristol	2019
ESRC SDAI Workshop, Jean Golding Institute, University of Bristol	2018

<u>Conference contributions – talks</u>

Behavior Genetics Association – **London 2024**: Using Repeated Measures of Depression to Improve the Precision and Power of Genome-Wide Association Studies (GWAS).

World Congress of Psychiatric Genetics – **Montreal 2023:** Leveraging Genetics to Examine the Causal Role of Adolescent Depression on Later Adult Outcomes.

World Congress of Psychiatric Genetics – **Online 2021:** Examining targetable pathways between genetic risk for depression and adolescent onset depression: the mediating role of adverse childhood experiences

MQ Mental Health Data Science Meeting — **Online 2021:** Examining mental health inequalities during COVID-19 in the National Core Study - Longitudinal Health and Wellbeing programme: Co-ordinated analysis across 12 longitudinal studies and electronic health records

MQ Mental Health Data Science Meeting – **Online 2020:** Mechanisms underlying poorer mental during the COVID-19 pandemic in two longitudinal UK cohorts.

MQ Mental Health Data Science Meeting – **Online 2020:** Mental health before and during the COVID-19 pandemic in two longitudinal UK cohorts.

MQ Mental Health - **Online 2020:** Mental health during COVID-19.

Global MHINT - Bristol 2019: Trajectories of Depressive Symptoms Across Development

SLLS – **Milan 2018:** Polygenic Risk Scores and Trajectories of Depressive Symptoms: The Benefits of Repeat Measures Analysis.

CLOSER - **London 2017**: Trajectories of Depressive Symptoms from Childhood to Young Adulthood: Evidence of Gender Differences from the Avon Longitudinal Study of Parents and Children (ALSPAC).

CLOSER - **London 2017**: A longitudinal study of neighbourhood effects on trajectories of depressive symptoms using data from the Avon Longitudinal Study of Parents and Children (ALSPAC).

<u>Conference contributions – posters</u>

Behavior Genetics Association – **London 2024**: Leveraging Genetics to Examine the Causal Role of Adolescent Depression on Later Adult Outcomes using One and Two Sample Mendelian Randomization.

World Congress of Psychiatric Genetics - **Florence 2022:** Association Between Polygenic Risk for Major Depressive Disorder & Developmental Depression Phenotypes.

World Congress of Psychiatric Genetics - **Online 2021:** Polygenic Risk for Depression, Anxiety and Neuroticism are Associated with the Severity and Rate of Change in Depressive Symptoms Across Adolescence.

World Congress of Psychiatric Genetics - **Online 2020:** Using Repeated Measures of Depression to Improve the Precision and Power of Genome-Wide Association Studies (GWAS).

*Nominated for best poster.

MQ Mental Health – **London 2019:** Heterogeneity of Depressive Symptoms Across Adolescence; Antecedents and Later Psychopathology.

Munich International Symposium – **Munich 2018:** Risk Factors for Higher Trajectories of Depressive Symptoms from Adolescence to Young Adulthood.

MRC Integrative Epidemiology Unit Review – **Bristol 2018:** Social, Psychological and Biological Predictors of Trajectories of Depressive Symptoms

MRC Integrative Epidemiology Unit Review – **Bristol 2018:** Polygenic Risk Scores and Depressive Symptoms: The Benefits of Repeat Measures Analysis.

Bristol Population Health Symposium – **Bristol 2018**: Polygenic Risk Scores and Depressive Symptoms: The Benefits of Repeat Measures Analysis.

Longitudinal Developmental Science - **Liverpool 2017**: Trajectories of Depressive Symptoms from Childhood to Young Adulthood: Evidence of Gender Differences from the Avon Longitudinal Study of Parents and Children (ALSPAC).

British Association of Psychopharmacology - **Bristol 2015**: Effects of 7.5% carbon-dioxide inhalation on force control and temporal accuracy.

British Association of Psychopharmacology – **Cambridge 2014**: Effects of 7.5% carbon-dioxide inhalation on exploratory decision making in healthy volunteers: evidence from a multi-armed bandit task.

Quantitative Training

Mediation and Interaction Analysis, University of Bristol (UoB)	2017
Summer Institute in Social Science Genomics, Russell Sage Foundation, USA	2017
Multilevel Modelling in STATA, Centre for Multilevel modelling (UoB)	2017
Linear and Logistic Regression, Social and Community Medicine (UoB)	2017
Analysis of Repeated Measures, Social and Community Medicine (UoB)	2017
Multilevel modelling using MLwiN, Centre for Multilevel modelling (UoB)	2017
Systematic reviews and Meta-analysis, Social and Community Medicine (UoB)	2017
Linear regression using Stata, Centre for Multilevel modelling (UoB)	2017
Genetic Epidemiology, Social and Community Medicine (UoB)	2016
Introduction to Linux, Social and Community Medicine (UoB)	2016
Introduction to Stata, Social and Community Medicine (UoB)	2016
Introduction to R, Social and Community Medicine (UoB)	2016
Introduction to Medical Statistics, Social and Community Medicine (UoB)	2016

Analytical skills:

Software: Stata, Mplus, R, SPSS, Linux, ArcGIS

Methods: Longitudinal Analysis, Multilevel Modelling, Genome-Wide Association Studies, Epigenome-Wide Association Studies, Growth Mixture Modelling, Mediation and Moderation Analysis, Data Simulation, Spatial Mapping