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Employment

2021–	Senior Research Fellow, Division of Psychiatry, Centre for Clinical Brain Sciences, University of Edinburgh
2017–2021	Data Scientist, Division of Psychiatry, Centre for Clinical Brain Sciences, University of Edinburgh
2006–2007	Laboratory Technician, Drosophila Genetic Resource Center, Kyoto Institute of Technology

Education & Training

2015–2017	Post-doctoral Research Fellow, Division of Psychiatry, Centre for Clinical Brain Sciences, University of Edinburgh
2012–2015	Post-doctoral Research Associate, Department of Animal and Plant Sciences, University of Sheffield
2008–2012	PhD Psychology, University of Edinburgh
2007–2008	MSc Quantitative Genetics & Genome Analysis, University of Edinburgh
1999–2003	AB Theoretical Evolutionary Biology, Cornell University

External Roles

Psychiatric Genomics Consortium

2019–	Open Science Maintainer https://github.com/psychiatric-genomics-consortium
2017–2019	Data Access Committee Representative, Major Depressive Disorder Working Group

Publications

Preprints

Adams, M. J., Lewis, C. M., & McIntosh, A. M. (2024). 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. *medRxiv*. <https://doi.org/10.1101/2024.04.29.24306535>

Adams, M. J., Thorp, J. G., Jermy, B. S., Kwong, A. S. F., Kõiv, K., Grotzinger, A. D., Nivard, M. G., Marshall, S., Milaneschi, Y., Baune, B. T., Müller-Myhsok, B., Penninx, B. W., Boomsma, D. I., Levinson, D. F., Breen, G., Pistis, G., Grabe, H. J., Tiemeier, H., Berger, K., ... Derks, E. M. (2023). Genetic structure of major depression symptoms across clinical and community cohorts. *medRxiv*. <https://doi.org/10.1101/2023.07.05.23292214>

As Lead Author

Studies designed and lead.

Adams, M., Hill, W., Howard, D., Dashti, H., Davis, K., Campbell, A., Clarke, T.-K., Deary, I., Hayward, C., Porteous, D., Hotopf, M., & McIntosh, A. (2019). Factors associated with sharing e-mail information and mental health survey participation in large population cohorts. *International Journal of Epidemiology*. <https://doi.org/10.1093/ije/dyz134>

Adams, M., Howard, D., Luciano, M., Clarke, T.-K., Davies, G., Hill, W., Smith, D., Deary, I., Porteous, D., McIntosh, A., 23andMe Research Team, & Major Depressive Disorder Working Group of the Psychiatric Genomics Consortium. (2019). Genetic stratification of depression by neuroticism: Revisiting a diagnostic tradition. *Psychological Medicine*, 1–10. <https://doi.org/10.1017/S0033291719002629>

Arden, R., & Adams, M. (2016). A general intelligence factor in dogs. *Intelligence*, 55, 79–85. <https://doi.org/10.1016/j.intell.2016.01.008>

Adams, M., Bonaventura, M., Ostner, J., Schulke, O., De Marco, A., Thierry, B., Engelhardt, A., Widdig, A., Gerald, M., & Weiss, A. (2015). Personality structure and social style in macaques. *Journal of Personality and Social Psychology*, 109(2), 338–353. <https://doi.org/10.1037/pspp0000041>

Adams, M., Robinson, M., Mannarelli, M., & Hatchwell, B. (2015a). Social genetic and social environment effects on parental and helper care in a cooperatively breeding bird. *Proceedings of the Royal Society B-Biological Sciences*, 282(1810). <https://doi.org/10.1098/rspb.2015.0689>

Adams, M. (2014). Feasibility and uncertainty in behavior genetics for the nonhuman primate. *International Journal of Primatology*, 35(1), 156–168. <https://doi.org/10.1007/s10764-013-9722-8>

Hatchwell, B., Gullett, P., & Adams, M. (2014). Helping in cooperatively breeding long-tailed tits: A test of Hamilton’s rule. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 369(1642). <https://doi.org/10.1098/rstb.2013.0565>

Adams, M., King, J., & Weiss, A. (2012). The majority of genetic variation in orangutan personality and subjective well-being is nonadditive. *Behavior Genetics*, 42, 675–686. <https://doi.org/10.1007/s10519-012-9537-y>

Reviews & Commentary

Adams, M. J. (2023). Leveraging family relatedness to detect participation bias in genetic studies. *Nature Genetics*. <https://doi.org/10.1038/s41588-023-01440-9>

Arden, R., Bensky, M., & Adams, M. (2016). A review of cognitive abilities in dogs, 1911 through 2016: More individual differences, please! *Current Directions in Psychological Science*, 25(5), 307–312. <https://doi.org/10.1177/0963721416667718>

As Main Author

Provided primary data, analysis, and design.

Grimes, P. Z., Adams, M. J., Thng, G., Edmonson-Stait, A. J., Lu, Y., McIntosh, A., Cullen, B., Larsson, H., Whalley, H. C., & Kwong, A. S. F. (2024). Genetic Architectures of Adolescent Depression Trajectories in 2 Longitudinal Population Cohorts. *JAMA Psychiatry*. <https://doi.org/10.1001/jamapsychiatry.2024.0983>

Yeung, H. W., Stolicyn, A., Shen, X., Adams, M. J., Romaniuk, L., Thng, G., Buchanan, C. R., Tucker-Drob, E. M., Bastin, M. E., McIntosh, A. M., Cox, S. R., Smith, K. M., & Whalley, H. C. (2024). Classification accuracy of structural and functional connectomes across different depressive phenotypes. *Imaging Neuroscience*, 2, 1–24. https://doi.org/10.1162/imag_a_00064

Davyson, E., Shen, X., Gadd, D. A., Bernabeu, E., Hillary, R. F., McCartney, D. L., Adams, M., Marioni, R., & McIntosh, A. M. (2023). Metabolomic investigation of major depressive disorder identifies a potentially causal association with polyunsaturated fatty acids. *Biological Psychiatry*. <https://doi.org/10.1016/j.biopsych.2023.01.027>

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- Grotzinger, A. D., Mallard, T. T., Akingbuwa, W. A., Ip, H. F., Adams, M. J., Lewis, C. M., McIntosh, A. M., Grove, J., Dalsgaard, S., Lesch, K.-P., Strom, N., Meier, S. M., Mattheisen, M., Børghlum, A. D., Mors, O., Breen, G., Meier, S. M., Lee, P. H., Kendler, K. S., ... Schizophrenia Working Group of the Psychiatric Genetics Consortium. (2022). Genetic architecture of 11 major psychiatric disorders at biobehavioral, functional genomic and molecular genetic levels of analysis. *Nature Genetics*. <https://doi.org/10.1038/s41588-022-01057-4>
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- Barbu, M., Harris, M., Shen, X., Stolicyn, A., Green, C., Amador, C., Walker, R., Morris, S., Adams, M., Sandu, A., McNeil, C., Waiter, G., Evans, K., Campbell, A., Wardlaw, J., Steele, D., Murray, A., Porteous, D., McIntosh, A., & Whalley, H. (2021). Epigenome-wide association study of global cortical volumes in Generation Scotland: Scottish Family Health Study. *Epigenetics*. <https://doi.org/10.1080/15592294.2021.1997404>
- Barbu, M., Huider, F., Campbell, A., Amador, C., Adams, M., Lynall, M.-E., Howard, D., Walker, R., Morris, S., van Dongen, J., Porteous, D., Evans, K., Bullmore, E., Willemsen, G., Boomsma, D., Whalley, H., & McIntosh, A. (2021). Methylome-wide association study of antidepressant use in Generation Scotland and the Netherlands Twin Register implicates the innate immune system. *Molecular Psychiatry*.
- Howard, D., Pain, O., Arathimos, R., Barbu, M., Amador, C., Walker, R., Jermy, B., Adams, M., Deary, I., Porteous, D., Campbell, A., Sullivan, P., Evans, K., Arseneault, L., Wray, N., Meaney, M., McIntosh, A., & Lewis, C. (2021). Methylome-wide association study of early life stressors and adult mental health. *Human Molecular Genetics*. <https://doi.org/10.1093/hmg/ddab274>
- Johnston, K., Ward, J., Ray, P., Adams, M., McIntosh, A., Smith, B., Strawbridge, R., Price, T., Smith, D., Nicholl, B., Bailey, M., & Epstein, M. (2021). Sex-stratified genome-wide association study of multisite chronic pain in UK Biobank. *PLoS Genetics*, 17(4), e1009428. <https://doi.org/10.1371/journal.pgen.1009428>
- Schoorl, J., Barbu, M., Shen, X., Harris, M., Adams, M., Whalley, H., & Lawrie, S. (2021). Grey and white matter associations of psychotic-like experiences in a general population sample UK Biobank. *Translational Psychiatry*, 11(1). <https://doi.org/10.1038/s41398-020-01131-7>
- Shen, X., MacSweeney, N., Chan, S., Barbu, M., Adams, M., Lawrie, S., Romaniuk, L., McIntosh, A., & Whalley, H. (2021). Brain structural associations with depression in a large early adolescent sample (the ABCD study®). *EClinicalMedicine*, 42. <https://doi.org/10.1016/j.eclinm.2021.101204>
- Van Dongen, J., Hagenbeek, F., Suderman, M., Roetman, P., Sugden, K., Chiocchetti, A., Ismail, K., Mulder, R., Hafferty, J., Adams, M., Walker, R., Morris, S., Lahti, J., Küpers, L., Escaramis, G., Alemany, S., Jan Bonder, M., Meijer, M., Ip, H., ... Biobank-based Integrative Omics Study Consortium. (2021). DNA methylation signatures of aggression and closely related constructs:

A meta-analysis of epigenome-wide studies across the lifespan. *Molecular Psychiatry*. <https://doi.org/10.1038/s41380-020-00987-x>

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Howard, D., Folkersen, L., Coleman, J., Adams, M., Glanville, K., Werge, T., Hagenaars, S., Han, B., Porteous, D., Campbell, A., Clarke, T.-K., Breen, G., Sullivan, P., Wray, N., Lewis, C., & McIntosh, A. (2020). Genetic stratification of depression in UK Biobank. *Translational Psychiatry*, 10(1). <https://doi.org/10.1038/s41398-020-0848-0>

Kwong, A., Pearson, R., Adams, M., Northstone, K., Tilling, K., Smith, D., Fawns-ritchie, C., Bould, H., Warne, N., Zammit, S., Gunnell, D., Moran, P., Micali, N., Reichenberg, A., Hickman, M., Rai, D., Haworth, S., Campbell, A., Altschul, D., ... Timpson, N. (2020). Mental health before and during COVID-19 in two longitudinal UK population cohorts. *The British Journal of Psychiatry*, 1–27. <https://doi.org/10.1192/bjp.2020.242>

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Contributed data to secondary analysis or as a consortium member.

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Walters, R., Polimanti, R., Johnson, E., Mcclintick, J., Adams, M., Adkins, A., Aliev, F., Bacanu, S.-A., Batzler, A., Bertelsen, S., Biernacka, J., Bigdeli, T., Chen, L.-s., Clarke, T.-K., Chou,

Y.-l., Degenhardt, F., Docherty, A., Edwards, A., Fontanillas, P., ... Agrawal, A. (2018). Trans-ancestral GWAS of alcohol dependence reveals common genetic underpinnings with psychiatric disorders. *Nature Neuroscience*, 21(12), 1656–1669. <https://doi.org/10.1038/s41593-018-0275-1>

Marioni, R., Ritchie, S., Joshi, P., Hagenaars, S., Okbay, A., Fischer, K., Adams, M., Hill, W., Davies, G., Nagy, R., Amador, C., Läll, K., Metspalu, A., Liewald, D., Campbell, A., Wilson, J., Hayward, C., Esko, T., Porteous, D., ... Gale, C. (2016). Genetic variants linked to education predict longevity. *Proceedings of the National Academy of Sciences*, 113(47), 13366–13371. <https://doi.org/10.1073/pnas.1605334113>

Book Chapters

Weiss, A., & Adams, M. (2013). Differential behavioral ecology. In C. Carere & D. Maestripieri (Eds.), *Animal personalities: Behavior, physiology, and evolution* (pp. 94–123). The University of Chicago Press.

Adams, M. (2011). Evolutionary genetics of personality in nonhuman primates. In M. Inoue-Murayama, A. Weiss, & S. Kawamura (Eds.), *From genes to animal behavior: Social structures, personality, communication by color* (pp. 137–164). Springer. https://doi.org/10.1007/978-4-431-53892-9_6

Weiss, A., & Adams, M. (2010, January). Personality, temperament, and behavioral syndromes. In G. Koob, M. Le Moal, & R. Thompson (Eds.), *Encyclopedia of behavioral neuroscience* (3rd ed., pp. 47–53). Elsevier. <https://doi.org/10.1016/B978-0-08-045396-5.00117-2>

Invited talks

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|------|---|
| 2019 | College of Medicine, University of Malawi |
| 2014 | Institute of Psychiatry, King's College London |
| | Department of Psychology, University of Sheffield |
| | Department of Psychology, University of York |
| 2013 | German Primate Center. Göttingen |

Teaching

Undergraduate

Genetic and Environmental Influences on Behaviour and Mental Health
 Data Science for Health and Biomedical Sciences
 Medical Science 4 seminar on “Psychiatric Genetics”
 Psychology 2 Practical Course (tutor)
 Psychology 3 Methods (tutor)

Postgraduate

Univariate and Multivariate Statistics with R

Workshops

GenomicSEM Module, International Statistical Genetics Workshop

Supervision

Doctoral students

2021	Keira Johnston, Precision Medicine
2023	Melissa Lewins, Precision Medicine

MSc & Honours Students

U of Edinburgh	Quantitative Genetics & Genome Analysis Biomedical Artificial Intelligence Integrative Neuroscience Biomedical Sciences and Medical Sciences
U of Sheffield	Sheffield Undergraduate Research Experience

Grants

2021–2024	Medical Research Council. <i>DATAMIND: Data Hub for Mental health Informatics research Development</i> . (2021–2024) £225,575. (Co-I)
2014	Wellcome Trust. <i>Inferring genetic architecture from high-density genomic data</i> . £2000 (Co-I)
2010	Moray Endowment Fund Award. <i>Selection on human personality</i> . £2280.
2009	Sasakawa Foundation. <i>Personality in Japanese macaques</i> . £1000.

Awards

2012	Fulker Award, Behavior Genetics Association (<i>Given to a paper of unusual merit that appeared in the most recent volume of Behavior Genetics</i>)
2008	Sir Kenneth Mather Memorial Prize, Genetics Society. (<i>Outstanding performance in the area of quantitative genetics.</i>)

Knowledge Exchange

2021	Evidence Submitted to Cross Party Group – Mental Health, Scottish Parliament <i>Depression Detectives</i> , online participant-led research forum.
2020	Consultation on Digital Strategy for Scotland, Scottish Government NHS Research Scotland Mental Health Annual Scientific Meeting

Consulting & Industry Collaborations

23andMe
Baillie Gifford

Open Science

Code repositories

Personal	https://github.com/mja
Group	https://github.com/ccbs-stradl
Consortium	https://github.com/psychiatric-genomics-consortium

Datasets

Wigmore, E., Hafferty, J., Hall, L., Howard, D., Clarke, T.-K., Fabbri, C., Lewis, C., Uher, R., Navrady, L., Adams, M., Zeng, Y., Campbell, A., Gibson, J., Thomson, P., Hayward, C., Smith, B., Hocking, L., Padmanabhan, S., Deary, I., ... McIntosh, A. (2020). Genome-wide association summary statistics of antidepressant treatment resistance meta-analysis, [dataset]. <https://doi.org/10.7488/ds/2791>

Adams, M., McIntosh, A., Campbell, A., Dashti, H., Hill, W. D., Howard, D., Davis, K., Clarke, T.-K., Deary, I., Hayward, C., Porteous, D., & Hotopf, M. (2019). Factors associated with sharing email information and mental health survey participation in large population cohorts, 2006-2017 [dataset]. <https://doi.org/10.7488/ds/2554>

Howard, D., Adams, M., Clarke, T.-K., Hafferty, J., Gibson, J., Shirali, M., Coleman, J., Ward, J., Wigmore, E., Alloza, C., Shen, X., Barbu, M., Xu, E., Whalley, H., Marioni, R., Porteous, D., Davies, G., Deary, I., Hemani, G., ... McIntosh, A. (2019). Genome-wide meta-analysis of depression identifies 102 independent variants and highlights the importance of the prefrontal brain regions, [dataset]. <https://doi.org/10.7488/ds/2458>

Howard, D., Adams, M., Shirali, M., Clarke, T.-K., Marioni, R., Davies, G., Coleman, J., Alloza, C., Shen, X., Barbu, M., Wigmore, E., Gibson, J., 23andMe Research Team, Hagenaars, S., Lewis, C., Ward, J., Smith, D., Sullivan, P., Haley, C., ... McIntosh, A. (2018a). Summary statistics for three depression phenotypes in UK Biobank, [dataset]. <https://doi.org/10.7488/ds/2350>

Adams, M. J., Robinson, M. R., Mannarelli, M.-E., & Hatchwell, B. (2015b). Data from: Social genetic and social environment effects on parental and helper care in a cooperatively breeding bird. <https://doi.org/10.5061/dryad.9nj6s>

Journals

Editorial Boards

2014–2016	Frontiers in Evolutionary and Population Genetics
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Reviewer

American Journal of Primatology, Animal Behaviour, BJPsychOpen, Behavioral Ecology and Sociobiology, Biological Psychiatry, Evolution, Intelligence, International Journal of Primatology, JAMA Psychiatry, Journal of Comparative Psychology, Journal of Research in Personality, Journal of the American Academy of Child and Adolescent Psychiatry, Lancet Psychiatry, Molecular Psychiatry, Proceedings of the Royal Society B, Psychological Science,