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# **Employment**

United Kingdom

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	$\operatorname{MSc}$ 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**

### As First/Last Author

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

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

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/s10764-013-972 2-8

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

### As Main Author

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/https://doi.org/10.1016/j.biopsych.2023.01.027

Barbu, M. C., Amador, C., Kwong, A. S., Shen, X., Adams, M. J., Howard, D. M., Walker, R. M., Morris, S. W., Min, J. L., Liu, C., van Dongen, J., Ghanbari, M., Relton, C., Porteous, D. J., Campbell, A., Evans, K. L., Whalley, H. C., & McIntosh, A. M. (2022). Complex trait methylation scores in the prediction of major depressive disorder. *eBioMedicine*, 79, 104000. https://doi.org/https://doi.org/10.1016/j.ebiom.2022.104000

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- Shen, X., Caramaschi, D., Adams, M. J., Walker, R. M., Min, J. L., Kwong, A., Hemani, G., Barbu, M. C., Whalley, H. C., Harris, S. E., Deary, I. J., Morris, S. W., Cox, S. R., Relton, C. L., Marioni, R. E., Evans, K. L., McIntosh, A. M., & Genetics of DNA Methylation Consortium. (2022). DNA methylome-wide association study of genetic risk for depression implicates antigen processing and immune responses. *Genome Medicine*, 14(1), 36. https://doi.org/10.1186/s13073-022-01039-5
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- 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*.
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- Davis, K., Adams, M., Breen, G., Coleman, J., Dregan, A., Gaspar, H., Hubel, C., Lee, W., McIntosh, A., Nolan, J., Pearsall, R., & Hotopf, M. (2019). Indicators of mental disorders in UK Biobank a comparison of approaches. *International Journal of Methods in Psychiatric Research*. https://doi.org/10.1002/mpr.1796
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#### **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/10.1007/978-4-43 1-53892-9\_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

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 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**

### Secondary supervisor

2017–2021 Keira Johnston, 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 Undergraduate Research Experience

### Grants

2021–2024 Medical Research Council. DATAMIND: Data Hub for Mental health

Informatics research Development. (2021–2024) £225,575. (Co-I)

Wellcome Trust. Inferring genetic architecture from high-density ge-

nomic data. £2000 (Co-I)

2010 Moray Endowment Fund Award. Selection on human personality.

£2280.

2009 Sasakawa Foundation. Personality in Japanese macaques. £1000.

### Awards

Fulker Award, Behavior Genetics Association (Given to a paper of un-

usual merit that appeared in the most recent volume of Behavior Genet-

ics)

2008 Sir Kenneth Mather Memorial Prize, Genetics Society. (Outstanding

performance in the area of quantitative genetics.)

## Knowledge Exchange

2021 Evidence Submitted to Cross Party Group – Mental Health, Scottish

Parliament

Depression Detectives, 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

### 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,