## Drew M Altschul

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**EDUCATION** 

The University of Edinburgh, Edinburgh, Scotland

PhD in Psychology, 2017

Brandeis University, Waltham, Massachusetts

MS in Neuroscience, 2010

Massachusetts Institute of Technology, Cambridge, Massachusetts

BS in Brain and Cognitive Sciences, 2008

RESEARCH EXPERIENCE The University of Edinburgh, Edinburgh, Scotland

Department of Psychology

Research Associate, with Mental Health Data Science Scotland

August 2018 - present

Research Fellow, with Prof Ian Deary

August 2017 - present

PCD PhD Scholar, supervised by Dr Alexander Weiss

& Prof Ian Deary

September 2013 - July 2017

Columbia University, New York, NY

Department of Psychology

Laboratory Manager, with Prof Herbert Terrace

June 2010 - June 2013

The University of Cape Town, Cape Town, South Africa Cognitive Ethology Research Group/Baboon Research Unit

Field Researcher, with Dr Rahel Noser September 2009 - April 2010

Brandeis University, Waltham, MA

Department of Neuroscience

Postgraduate Research Student August 2008 - May 2009

Massachusetts Institute of Technology, Cambridge, MA

Department of Brain and Cognitive Sciences

Undergraduate Researcher, with Prof Earl Miller May 2006 - May 2008

TEACHING EXPERIENCE The University of Edinburgh, Edinburgh, Scotland

Writing Tutor, PPLS School Writing Centre September 2016 - July 2017

Tutor, MSc Univariate and Multivariate Statistics September 2013 - January 2017

Tutor, Year 3 Criticial Analysis September 2014 - January 2017

Lab Tutor, Year 1 Psychology February 2015 - April 2015

# Columbia University, New York, NY

Course Organizer, Animal Cognition Seminar

September 2010 - June 2013

## Massachusetts Institute of Technology, Cambridge, MA

Teaching Assistant, Animal Behavior

September 2007 - January 2008

#### SKILLS

OUTREACH

Co-organizer, Communication Roundtable International Primatological Congress, August 2016 Organizer, Big Brother is Nudging You Edinburgh International Science Festival, April 2016 Presenter, Science Night at the Zoo Edinburgh International Science Festival, April 2016 Organizer, The Great Ape Debate Edinburgh International Science Festival, April 2015 Demonstrator, Museum Late National Museum of Scotland, February 2015

#### Positions Held

Chair, Authorship Committee, Many Primates Collaboration November 2018 - present Co-organizer, Doing Bayesian Data Analysis Reading Group September 2018 - present

Symposium Organizer, European Conference on Behavioural Biology

January 2018 - August

2018

Member, Early Career Committee, American Society of Primatologists July 2015 - present Tutor Representative, Department of Psychology October 2015 - July 2017 Coordinator, Individual Differences Journal Club September 2014 - July 2016

### AWARDS

- 2016 Public Library of Science, Publication Assistance Award
- 2015 Great Britain Sasakawa Foundation, Research Training Travel Grant
- 2014 British Society for the Psychology of Individual Differences, Best Presentation
- 2013 Edinburgh Global Research Scholarship
- 2013 Principal's Career Development PhD Scholarship
- 2008 Sigma Xi, The Scientific Research Honors Society
- 2008 Umaer Basha Undergraduate Research Opportunities Fund
- 2007 John Reed Undergraduate Research Opportunities Fund

#### **PUBLICATIONS**

#### In preparation

Many Primates, ... Altschul, D.M., ... Establishing an infrastructure for collaboration in primate cognition research.

Altschul, D.M., Sinn, D., Hopkins, W.D., Weiss, A. Psychological and physiological stress across cultures and species: personality's impact on biological ageing in American and Japanese humans, and chimpanzees.

Altschul, D.M., Deary, I.J. Games playing protects against cognitive decline, from youth to old age: a comprehensive study of four samples.

Altschul, D.M., Iveson, M.H., Deary, I.J. Identifying the predictors loneliness in adults aross two generations: an exploratory and confirmatory machine learning study.

**Altschul, D.M.**, Wraw, C., Der, G., Gale, C., Deary, I.J. Sex differences in weight gain from adolescence to middle-age: using machine learning to highlight cognitive, behavioral, and socioeconomic factors.

Jensen, G., **Altschul, D.M.**, Terrace, H.S. Comparative transfer of serial representation in humans and rhesus macaques.

**Altschul, D.M.**, Wraw, C., Der, G., Gale, C., Deary, I.J. Changes in depression scores across three decades: the relationships with sex, early-life cognitive function, and sociodemographics.

**Altschul, D.M.**, Gale, C., Deary, I.J. Early-life cognitive function, sociodemographics, and physical and mental health in adults of Cebu, Philippines.

**Altschul**, **D.M.**, Starr, J.M., Deary, I.J. Blood pressure and cognitive function in the Lothian Birth Cohort of 1936.

#### Submitted

Wilson, V.A.D., Freeman, H.D., Parr, L.A., LeFevre, C.E., Ochiai, T., Inoue-Murayama, M., Matsuzawa, T., Weiss, A., **Altschul, D.M.** Assessment of facial metrics in chimpanzees: effects of age, sex, and personality. *Evolution & Human Behaviour, 1st review*.

**Altschul, D.M.**, Jensen, G., Terrace, H. S. Concept learning of ecological and artificial stimuli in rhesus macaques. *Cognition, 1st revision*. (Preprint available at https://peerj.com/manuscripts/4614/).

Morgan, V., Altschul, D.M., Terrace H.S. (2017). Strategic and graduated metacognitive judgments by monkeys. *Journal of Comparative Psychology, 1st revision.* 

**Altschul, D.M.**, Hopkins, W.D., Weiss, A. Biomarkers and allostatic load compared between humans and captive chimpanzees. *Royal Society Open Science, 1st revision.* 

**Altschul, D.M.**, Robinson, L.M., Coleman, K. , Capitanio, J., Wilson, V.A.D. An exploration of the relationships among facial dimensions, age, sex, dominance status and personality in rhesus macaques (Macaca mulatta). *International Journal of Primatology, 2nd revision*.

#### Published

Altschul, D.M., Wraw, C., Der, G., Gale, C., Deary, I.J. Hypertension development by midlife and the roles of pre-morbid cognitive function, sex, and their interaction. *Hypertension, in press.* 

**Altschul**, **D.M.**,\* Morton, F.B.\* Guidelines for using extraction methods in data reduction analyses of social relationship structures. *Animal Behaviour*, in press.

**Altschul, D.M.** Leveraging multiple machine learning techniques to predict major life outcomes from a small set of psychological and socioeconomic variables: a combined bottom-up/top-down approach. *Socius, in press.* 

**Altschul, D.M.**, Hopkins, W.D., Herrelko, E.S., Inoue-Murayama, M., Matsuzawa, T., King, J.E., Ross, S.R., Weiss, A. Personality links with lifespan in chimpanzees. *eLife*, 7, e33781.

Altschul, D.M., Starr, J.M., Deary, I.J. (2018) Cognitive function is associated with later life blood glucose in the Lothian Birth Cohort of 1936. *Diabetologia*, 61,1946–1955.

**Altschul**, **D.M.** (2017) A replication of sexual dimorphisms in size and longevity in a simulated baboon population. *Evolution*, 71(10), 2533-2534.

**Altschul, D.M.**, Wallace, E.K., Sonnweber, R.S., Tomonaga, M., Weiss, A. (2017). Chimpanzee intellect: personality, performance, and motivation with touchscreen tasks. *Royal Society Open Science*, 4(5).

Altschul, D.M., Jensen, G., Terrace, H. S. (2017). Perceptual category learning of photographic and painterly stimuli in rhesus macaques (*Macaca mulatta*) and humans. *PLoS One*, 12(9), e0185576.

Altschul, D.M.,\* Robinson, L.M.,\* Wallace, E.K., Úbeda, Y., Llorente, M., Machanda, Z., Slocombe, K.E., Leach, M.C., Waran, N.K., Weiss, A. (2017). Chimpanzees with positive welfare are happier, extraverted, and emotionally stable. *Applied Animal Behaviour Science*, 191, 90-97

Wallace, E.K., **Altschul, D.M.**, Pavonetti, S.P., Benti, B., Koerfer, K., Waller, B., Slocombe, K.S. (2017). Is music enriching for group-housed captive chimpanzees? *PLoS One*, 12(3), e0172672.

**Altschul, D.M.**, Terrace, H. S., Weiss, A. (2016). Serial cognition and personality in macaques. *Animal Behavior and Cognition*, 3(1), 46.

Weiss, A., Altschul, D. (2016). Methods and applications of animal personality research. In J. Call (Ed.), Handbook of Comparative Psychology. Washington DC: American Psychological Association.

Jensen, G., **Altschul**, **D.** (2015). Two perils of binary categorization: why the study of concepts can't afford true/false testing. *Frontiers in psychology*, 6.

Avdagic, E., Jensen, G., **Altschul, D.**, Terrace, H. (2014). Rapid cognitive flexibility of rhesus macaques performing psychophysical task-switching. *Animal Cognition*, 17 (3), 619-631.

Jensen, G., **Altschul**, **D.**, Danly, E., Terrace, H.S. (2013). Rhesus macaques use a common representation space to solve distinct problems. *PLoS One*, 8 (7), e70285.

Jensen, G., Altschul, D., Terrace, H. (2013). Monkeys would rather see and do: preference for agentic control in rhesus macaques. *Experimental Brain Research*, 229 (3), 429-442.

#### Presentations

Altschul, D.M. (2018). Statistical power and its relevance to studies of primate behavior and cognition. Invited presentation, given at the International Primatological Society Congress, Nairobi, Kenya.

Altschul, D.M. (2018). Personality links with lifespan in chimpanzees. Presented at the International Primatological Society Congress, Nairobi, Kenya.

Altschul, D.M. (2018). Personality links with lifespan in chimpanzees. Presented at the European Conference on Behavioural Biology, Liverpool, UK.

Altschul, D.M., Brosnan, S., Morton, F. B., Beran, M., Parrish, A., Weiss, A. (2017). Personality and self-control in non-human primates. Presented at the Scottish Primate Research Group Meeting, Brechin, UK.

Altschul, D.M. (2016). How to Lasso: Least absolute shrinkage and selection operator. Presented at EdinbR, Edinburgh, UK.

Altschul, D.M., Jensen, G., Terrace, H. S. (2016). Concept learning of ecological and artifical visual stimuli in humans and captive rhesus macaques. Presented at International Primatological Society Congress, Chicago, IL, USA.

Altschul, D. M., King, J. E., Inoue-Murayama, M., Ross, S. R., Weiss, A. (2016). Longevity and personality in captive chimpanzees *(Pan troglodytes)*. Presented at Chimpanzee Symposium, Chicago, IL, USA. (Preprint available at https://peerj.com/manuscripts/10810/).

Altschul, D.M., Sonnweber, R.S., Wallace, E.K., Weiss, A. (2016). Chimpanzee motivation, personality, and intellect: evidence from touchscreen tasks. Presented at the Scottish Primate Research Group Meeting, Brechin, UK.

Altschul, D.M., Weiss, A. (2015). Individual differences in chimpanzee (*Pan troglodytes*) personality, learning, and engagement in touch screen tasks. Presented at the American Society of Primatologists Meeting, Bend, OR, USA. In *American Journal of Primatology*, 77, 93. 111 River St, Hoboken, 07030-5774, NJ, USA: Wiley-Blackwell.

Altschul, D.M., Sinn, D., Weiss, A. (2015). A comparative outlook on chimpanzee metabolic health: a personality and biomarker study. Presented at the Scottish Primate Research Group Meeting, Brechin, UK.

Altschul, D.M., Sinn, D., Weiss, A. (2014). Personality and blood chemistry associations with cardiovascular health in chimpanzees (*Pan troglodytes*). Presented at the American Society of Primatologists Meeting, Decatur, GA, USA. In *American Journal of Primatology*, 76, 61. 111 River St, Hoboken, 07030-5774, NJ, USA: Wiley-Blackwell.

Altschul, D.M., Jensen, G., Terrace, H.S. (2014). Perceptual concept learning using ecological and artificial stimuli in monkeys. Presented at the European Conference on Behavioural Biology, Prague, Czech Republic.

Altschul, D.M., Jensen, G., Terrace, H.S. (2014). Perceptual concept learning using ecological and artificial stimuli in monkeys. Presented at the British Society for the Psychology of Individual Differences, London, UK.