

CURRICULUM VITAE

PERSONAL DETAILS

Name & Title: Adrian Mark Owen, OBE, FRSC, Ph.D.
Professor in Cognitive Neuroscience & Imaging

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Nationality: British

EDUCATION

1985-1988 Experimental Psychology B.Sc. (Hons).
Department of Psychology, University College London.

1989-1992 Ph.D. Frontostriatal Mechanisms in Planning and Attention
Institute of Psychiatry, University of London.

EMPLOYMENT HISTORY

1988-1992.
Research Neuropsychologist, Department of Experimental Psychology, University of Cambridge, U.K.

1993-1995.
Post-Doctoral Fellow, Cognitive Neuroscience Unit, Montreal Neurological Institute, Montreal, Canada.

1996-1997.
Senior Research Associate, Department of Psychiatry, University of Cambridge, U.K.

1997-2010.
Senior Scientist & Assistant Director,
MRC Cognition and Brain Sciences Unit, Cambridge, U.K.

2011- 2018
Canada Excellence Research Chair in Cognitive Neuroscience and Imaging, Department of Psychology and the Department of Physiology & Pharmacology, University of Western Ontario, Canada.

2018 – present
Professor in Cognitive Neuroscience and Imaging,
Department of Physiology & Pharmacology and the Department of Psychology, University of Western Ontario, Canada.

OTHER ACADEMIC/RESEARCH POSITIONS HELD

1997-2011

Associate Lecturer, Department of Psychiatry, University of Cambridge, U.K.

1998-2005

Assistant Director for Activation Studies, Wolfson Brain Imaging Centre, Cambridge, U.K.

1995-2000

Vice-President, International Society for Behavioural Neuroscience

2000-2001

Visiting Professor, University of Belgrade, Serbia

2000-2011

Official Fellow, Clare Hall College, Cambridge, U.K.

2012-present

Faculty Affiliate, National Core for Neuroethics, University of British Columbia, Canada

2012-present

Member, Rotman Institute of Philosophy, University of Western Ontario, Canada

2013-present

International Scientific Advisory Committee, Institute of Cognitive Neurology, Buenos Aires, Argentina

2014-2020

Co-Director and Koerner Fellow, CIFAR Azrieli Program in Brain Mind and Consciousness

2016-2017

Co-Scientific Director, BrainsCAN, Canada First Research Excellence Fund (CFREF)

2020-present

Co-Director and Koerner Fellow, CIFAR Brain Mind and Consciousness Program

2019-present

Scientist, Robarts Research Institute, Canada

2021-present

Scientific Advisory Council, VineX

2022-present

Cognitive Neuroscience and Imaging Representative, Research Advisory Committee of the Western Institute of Neuroscience, Canada

2023-present

Fellow, Canadian Academy of Health Sciences (CAHS), Canada

HONORS AND AWARDS

1996. Pinsent-Darwin Research Fellowship, University of Cambridge, Cambridge, England.

2008 Max Perutz Prize Committee

2010. Voted 50th ‘Most Important person in British Science and Engineering’. The Times, London, UK.

2013 - Hellmuth Prize for Achievement in Research Award, Western University, London, Canada

2015 –Judge, Ontario Final of the 3 Minute Thesis (3MT) Competition

2019 – Awarded Officer of the Most Excellent Order of the British Empire (OBE), Buckingham Palace, London, UK.

2022 – Elected Fellow of the Royal Society of Canada (FRSC)

EDITORIAL/GRANT RESPONSIBILITIES

1997-2005

Deputy Editor-In-Chief, *European Journal of Neuroscience*.

2006-2012

Associate Editor, *Journal of Neuroscience*.

2007-present

Editorial Advisory Board, *Annals of the New York Academy of Sciences*

2007-2012

Wellcome Trust Neuroscience and Mental Health Funding Committee

2010-present

European Academy of Neurology, Higher Cortical Functions Committee

2010-present

European Academy of Neurology, Coma and Chronic Disorders of Consciousness Committee

2012-2016

Wellcome Trust Peer Review College

2012-2017

Gairdner Awards Medical Review Panel

2014-present

Canadian Institutes of Health Research (CIHR) Peer Review Committee

2014-present

The Year in Cognitive Neuroscience Editorial Advisory Board

2017-present

College of Reviewers, Canadian Institutes of Health Research (CIHR)

RESEARCH GRANTS

Owen, A.M. (2002-2004) Role of the frontopolar cortex in cognition. EU-Marie Curie Grant for Dr Kalina Christoff, £73,508.

Slabosz, A.M., Owen, A. (2004-2006). Investigating Cognitive Heterogeneity in Parkinson's Disease: A Combined Neuropsychological, Neuropharmacological and Functional Neuroimaging Approach. Wellcome Trust Travelling Research Fellowship, £91,783.

Barker, R., Owen, A.M., Robbins, T. (2004-2007) Defining the cognitive deficits in a population based incident cohort of early Parkinson's disease and their relationship to frontostriatal activation and COMT activity. Parkinson's Disease Society UK, £143,445.

Owen, A.M. (2007-2009) fMRI studies in Parkinson's Disease. Cambridge Centre for Brain Repair, £15,000.

Owen, A.M. (2007-2009) Neurophysiological impacts across SensCam subjects with different memory disorders: comparing fMRI and PET brain scans of Alzheimer's, Amnesia, and healthy subjects. Microsoft Research Cambridge, £9,188.

Cusack R. & Owen A.M. (2008) Automatic Analysis for Neuroimaging. MRC Technology Development Gap Fund, £33,100.

Owen, A.M. (2008-2009) Web-based Cognitive Brain Training & Rehabilitation. MRC Development Gap Fund, £75,000.

Owen, A.M. (2008-2010) Looking for the Neural Basis of Human Consciousness through levels of awareness. EU-Marie Curie Grant for Dr Tristan Bekinschtein, £130,095.

Owen, A.M., Coleman, M. and Pickard J.D. (2008-2012) Detecting awareness in the vegetative and minimally conscious states: Novel clinical applications. MRC Translational Grant, £761,361.

Burn, D.J. Barker, R.A., Tiernan, J.T., Chinnery, P.F., Sawcer, S., Coleman, S., Robbins, T.W., Brayne, C., Owen, A.M., Brooks, D.J. (2009-2014). Predicting Dementia in Parkinson's disease: A Genotypic and Phenotypic study. The Parkinson's Disease Society UK, £1.18 million.

Schiff, N., Owen, A.M., Laureys S. (2009-2012) Recovery of consciousness after severe brain injury. The James S. McDonnell Foundation, \$3.8 million USD.

Kubler, A.M., Owen, A. M., Goebel, R., Laureys, S. Kotchoubey, B., Mattia, D., Babiloni, F. et al. (2009 – 2013) Deployment of Brain-Computer Interfaces for the Detection of Consciousness in Non-Responsive Patients (DECODER) 3.9 million Euros.

Owen, A.M. (2011-2018) From Cognitive Neuroscience to Clinical Practice. CERC-\$10M CAD.

Illes, J., Owen, A.M., Ribrary, U., Stoessl, A.J. (2011-2014) Neuroimaging for disorders of consciousness: charting the Canadian ethics landscape. CIHR, \$300,000 CAD.

Owen, A.M. (2013-2014) From cognitive neuroscience to clinical practice. CFI. \$1.6million CAD.

Cusack, R., Owen, A.M., Daley, M., Gelman, N., Thompson, T., Han, V., Lee, D., Levin, S. (2012-2015) Assessing neonatal brain function with fMRI. NSERC CHRP, \$545,139 CAD.

Owen, A.M. (2012-2017) Decoding mental states with fMRI and EEG. NSERC, \$280,000 CAD.

Mitchell, D., Owen, A.M., Goodale, M., Culham, J., Joanisse, M. & Ansari, D. (2012) Eye tracking and 3D visualization: NSERC RTI (Research Tools and Instruments), \$109,066 CAD.

Menon, R., Owen, A.M., Ansari, D., Chronik, B., Culham, J., Cusack, R., Everling, S., Goodale, M., Han, V. & Williamson, P. (2012) Centre for Functional and Metabolic Mapping. CFI, \$6,235,244 CAD.

Petrella, R., Gill, D., Hachinski, V., Liu-Ambrose, T., Owen, A.M. & Shoemaker, K. (2013-2016) Healthy mind, healthy mobility. CIHR Operating Grant, \$356,547 CAD.

Schiff, N., Claassen, J., Laureys, S., Pickard, J., Owen, A.M., et al. (2013-2017) A collaborative study of recovery of consciousness after severe brain injury, James S. McDonnell Grant, \$6,445,351 CAD

Owen, A.M., Cusack, R. & Young, G.B. (2013-2018) Using neuroimaging to assess cognitive function after serious brain injury. CIHR Operating Grant, \$1,031,710 CAD.

Weijer, C., Owen, A.M. et al. (2014-2018) The ethics of neuroimaging after serious brain injury. CIHR, \$343,720 CAD.

Owen, A. M. (2014) Simultaneous and synchronized EEG and fMRI in sleep. NSERC, \$145,503 CAD

Owen, A.M. (2014) From cognitive neuroscience to clinical practice. CFI – IOF \$58,559 CAD.

Hutchison, J.S., Turgeon, A.F., Emery, C.A., Gagnon, I., Wellington, C.L., Riopelle, R.J. Owen, A.M. et al. (2015-2019) Canadian Traumatic Brain Injury Research Consortium. CIHR, \$1,824,513 CAD.

Owen, A.M., Saksida, L.M., et al. (2016-2023) BrainsCAN: Brain health for life. CFREF, \$66M CAD.

Owen, A.M. (2018-2023) Lifestyle and Cognition: A Large-Scale Intervention Approach. NSERC Discovery Grant, \$200K.

Goodale, M., Joanisse, M., Johnsrude, I., Owen, A.M., et al. (2018) New horizons in human cognitive neuroscience research at the Brain and Mind Institute. CFI and ORF, \$3,806,874 CAD.

Zatorre, R., Owen, A.M. Patel, Nai, Halpern, A. (2018-2020) Auditory imagery: Probing the contents of consciousness via inter-individual neural coupling. CIFAR Catalyst grant, \$104,000 CAD.

Menon, D., Owen, A.M. (2018-2020) Brainstem arousal systems: effects on consciousness and cognition. CIFAR Catalyst grant, \$191,000 CAD.

St Lawrence, K., Owen, A.M., et al., (2018-2019) Communicating with patients with disorders of consciousness by translating thoughts into light. BrainsCAN Accelerator Program, \$56,180 CAD.

Doyon, J., Zatorre, R., Baillet, S., Chakravarty, M., de Villers Sidani, E., Fellows, L., Sharp, M., Carrier, J., Owen, A.M. Brain plasticity mediating improved memories through online and offline stimulation

- methods in healthy adults and patients with a chronic neurological condition. Discovery Fund for Interdisciplinary Research – CFREF (HBHL), \$1,499,850 CAD.
- Owen, A.M., Kouider, S. (2018-2020) Neural responsiveness in sleep vs. disorders of consciousness. CIFAR Catalyst grant, \$161,447.65 CAD.
- Owen, A.M. & Blain-Moraes, S. (2019-2022) Establishing neurophysiological evidence for the treatment of brain injury in intensive care units. McGill/Western Collaboration Grant (MWCG), \$360,000 CAD.
- Owen, A.M. (2019-2026) Improving diagnosis and prognosis in acute brain injury: a multimodal imaging approach. CIHR Foundation grant, \$3,302,950 CAD.
- Batterink, L., Owen, A.M., Stojanoski, B., Grahn, J., Muller, L., Joanisse, M. (2020) EEG equipment for studies of sleep and cognition. NSERC RTI, \$149,920 CAD.
- Culham, J., Diedrichsen, J., Owen, A.M., Katchabaw, M. (2020-2022) Naturalistic Cognitive Neuroscience Through Immersive Virtual Games. New Frontiers in Research Fund, \$250,000 CAD.
- Owen, A.M., Menon, D.K. (2020-2021) Cognitive Outcomes after COVID-19 Infection. Manulife CIFAR Population Health & Wellbeing Grant Program, \$50,000 CAD.
- St Lawrence, K.S., Boulton, M., Debicki, D., Diop, M., Murkin, J., Owen, A.M. (2021-2026) Development of a non-invasive optical device to guide individualized neurointensive care. CIHR Project Grant, \$825,000 CAD.
- Evans, A.C., Owen, A.M., Blain-Moraes, S., Johnsrude, I., et al. (2021-2024) An EEG platform for national and international EEG-based neuroscience (EEGNet). Brain Canada Foundation Platform Support Grant, \$1,844,900 CAD.
- Swartz, R., Almekhlafi, M., Appireddy, R., Buck, B., Coutts, S., Dainty, K., Demchuk, A., Dowlatshahi, D., Field, T., Ganesh, A., Goyal, M., Hill, M., Lindsay, M., Mandzia, J., Owen, A.M., Pikula, A., Rabin, J., Roberts, A., Sajobi, T., Shamy, M., Shankar, J., Sharma, M., Sujanthan, S., Thavorn, K., Hunter, G. (2021-2026) AcT-Cog: Online cognitive assessment in the Alteplase compared to Tenecteplase (AcT) trial. CIHR Project Grant, \$450,000 CAD (over 3 yrs).
- Duerden, E., Brossard-Racine, M., Nicolson, R., Ogilvie, J., Owen, A.M., (Co-PI), Nichols, E., Sherrington, A., Mohsenzadeh, Y. (2022-2023) Online cognitive testing: new horizons in brain-health assessment in children. New Frontiers in Research Fund, \$237,970 CAD.
- MacDonald, P, Dagher, A, Owen, A.M. et al. (2022-2023) Establishing the first MRI biomarkers in PD: A significant Innovation in PD research and practice. CFREF McGill-Western BrainsCAN grant, \$2,244,000 CAD.
- Duclos, C., Blain-Moraes, S., Edlow, B., Norton, L, Owen, A.M. (2022-2027) A point-of-care neurophysiological index of recovery from coma in the intensive care unit. CIHR Project Grant, \$1,101,600 CAD.
- Duerden, E., St.Lawrence, K., Carson, J., Shoemaker, K., Culham, J., Owen, A.M., de Ribaupierre, S., Nouri, M., Ganesan, R., Peters, S., Mohsenzadeh, Y., Bhattacharya, S., Joanisse, M., Diop, M. (2022-2026) SPRINT: fnirS Platform foR brain moNiToring, analytics and data repository. Brain Canada Platform Support Grant, \$1,311,531 CAD.

Huang, S, Patriquin, C., Pavenski, K., Thiessen, J., Lee, T., Bharatha, A., Jurkiwicz, M., Mandzia, J., Subramanian, P, Owen, A.M. The impact of blood brain barrier and white matter injuries in patients with iTTP (2022) Answering TTP Foundation, \$195,590 CAD.

Ball, I., Walter, E., Smith, S., Vogt, K., Allan, A., Parry, N., Owen, A.M., Rochweg, B., Turgeon, A., Honarmand, K., Chilton, S.N., Priestap, F. (2023-2025) Beta Blockers in Traumatic Brain Injury (BETRR). AMOSO Innovation Fund, \$95,500 CAD.

Gofton, T., Owen, A.M., Kazazian, K., Pasternak, S., Leligdowicz, A., Debicki, D. (2023-2025) The SStatus Eplepticus Prognosis Study (STEP Study). AMOSA Innovation Fund, \$149,420 CAD.

Saksida, L., Bussey, T., Li, Y., Owen, A.M., Prado, M., Prado, V., Sullivan, J. (2023-2025) MouseTRAP: The Mouse Translational Research Accelerator Platform. Brain Canada Platform Support Grant, \$1,425,000 CAD.

Menon, R., Durcan, T., Everling. S., Galia, L., Gold, R.E., Khan, A., Prado, M., Prado, V., Saksida, L., Bartha, R., Brandon, M., Bussey, T., Cashman, N., Chakravarty, M., Clery, J., Dagher, A., Finger, E., Fon, E., Huot, P., MacDonald, P., Owen, A., Pruszyński, A., Schmitz, T., Sullivan, J., Watts, J., et al. (2023 – 2029) TRIDENT: TRanslational Initiative to DE-risk NeuroTherapeutics, NFRFT (New Frontiers in Research Fund – Transformation), \$24,000,000 CAD.

Lu, K.P., Li, S., Allan, A., Andrews, T., Arts, E., Bartha, R., Dekaban, G.A., Feegan, B., Hegele, R., Zhou, S.A., Owen, A.M. et al. (2023 – 2024) Western Biotherapeutics Centre (WBC) , Canadian Foundation for Innovation CFI, \$4,522,372. CAD.

MEDIA/CONTRIBUTIONS TO PUBLIC UNDERSTANDING OF SCIENCE

My research has regularly attracted international attention from the media and has been widely discussed on TV, radio, in print and online.

Television

Includes BBC News, Channel 4 News, ITV News, Sky News, Anderson Cooper 360° (CNN), “60 Minutes” documentary (CBS), Channel 4 documentary, BBC2 “Awakenings” documentary, BBC ‘Inside Out’ documentary, History Channel ‘Science of The Soul’ documentary, BBC1 Horizon Special 2009, BBC1 ‘Bang Goes The Theory’ programme, Consultant for BBC ‘Science Lab’, ‘How Science Changed Our World’ (BBC), Panorama (BBC), Canada AM (CTV), The National (CBC), The Agenda (TVO), Global News, Dutch News, PBS News.

Radio

Includes “Frontiers” documentary (Radio 4), BBC World Service ‘Outlook’ documentary, NPR Radio (USA), BBC Radio 1, 2, 3 and 4 news features, ABC Radio, Australia, ‘Today’ Programme (Radio 4), CBC ‘Q’ with Jian Ghomeshi, Quirks and Quarks (CBC1), CBC Ontario Morning, CBC News ‘The Current’.

Newsprint Includes describing our research have appeared in Macleans Magazine, The New Yorker, The Times, The Sunday Times, The Economist, The Observer Magazine, The Guardian, The Independent, The Financial Times, The Daily Telegraph, The Daily Mail, The Express, The Sun, The Scotsman, The New York Times, The Wall Street Journal, The Washington Post, Chicago Tribune, Scientific American, New Scientist, The Boston Globe, Discovery Magazine, Le Soir, El Mundo, The Sydney Morning Herald, China Daily. Voted ‘Scientist to Watch’ in 2008 by The Financial Times, Readers Digest.

Online

Includes Nature (podcast), Macleans Magazine, Science Magazine, The Guardian (podcast), BBC News plus numerous website commentaries, blogs, articles and comments across the WWW.

Museums

My work has featured prominently in two exhibits at the Science Museum, London U.K. in 1999 ('The Memory Machine') and 2007 ('Neurobiotics'). It was also part of the 'States of Mind: Tracing the Edges of Consciousness' exhibition at the Wellcome Collection, Wellcome Trust London, U.K. (2016).

Pop Culture

My research has inspired four fictional novels to date; "Locked In", by Marcia Muller, "Afterwards" by Rosamund Lupton, "And Then It Happened", by Linda Green and "One Station Away" by Olaf Olafsson. It featured prominently in "The UnDead" by Dick Teresi. It has also been the focus of a BBC Radio play by Wally K. Daly "Me who? Who me?", has been mentioned by the character Sheldon Cooper in an episode of 'The Big Bang Theory' (CBS, 2012), and by Jay Leno on 'The Late Show'. It has also been used to motivate the plot in three TV shows, 'Perception' (2013), 'The X-Files' (2016) and Grey's Anatomy (2021) and was the basis for a good-natured joke on the BBC's show 'QI' with Sandi Toksvig (2019). My psychological research has also been used as the basis for numerous popular cartoons, which have appeared in the Guardian (2010), The Irish Times (2010) and others.

RECENT INVITED LECTURES (2010-)**2010**

Keynote Address, The Organisation for Human Brain Mapping, Barcelona, Spain
 LoveBox Festival, London, UK
 Secret Garden Party Festival, London, UK
 Humanist's Society, Cambridge, UK
 BCBT Keynote Lecture, University of Barcelona, Spain
 Spinoza Center for Neuroimaging – Opening Lecture, Amsterdam, Netherlands
 Ordine dei Medici of Nuoro Conference Keynote, Sardinia, Italy
 Poptech, Maine, USA
 Taylor Prize Lecture, University of Western Ontario, London, Canada
 Clare Hall Faculty Lecture, University of Cambridge, Cambridge, UK
 Western Alumni Lecture, The Cavalry and Guards Club, London, UK
 Leaders Forum, University of Western Ontario, London, Canada

2011

Western Alumni Lecture, University of Western Ontario, London, Canada
 University Graduate Career Day, University of Western Ontario, London, Canada
 Biomedical Research Imaging Centre (BIRC), University of Western Ontario, London, Canada
 L.O.V.E. Conference Lecture, Niagara Falls, Canada
 TedX UWO, Grand Theatre, London, Canada
 Classes without Quizzes Lecture, London Public Library, London, Canada
 Psychiatry Dept seminar, University of Western Ontario, London, Canada
 Schulich Alumni Lecture, University of Toronto, Canada
 Partners In Research Address, Lamplighter Inn, London, Canada
 Dalhousie University (3 lectures), Halifax, Canada
 James S. McDonnell Foundation meeting, Miami, US
 Biochemistry Dept seminar, University of Western Ontario, London, Canada
 Western Alumni Lecture, Provincial Legislative Building, Queen's Park, Toronto, Canada
 Brain Matters 2 Conference Keynote, Montreal, Canada

London Medical Alumni Reception, The Hunt Club, London, Canada
 The Cheltenham Science Festival, Cheltenham, UK
 Visit and Talk with Queen Beatrix, The Royal Palace, Amsterdam, The Netherlands
 Toronto Sick Kids International Conference, Toronto, Canada
 The British High Commission, Ottawa, Canada
 Sao Paulo, Brazil, (an audience with the Dalai Lama)
 Public Debate with Roger Highfield, The Royal Institution, London UK
 City Symposium, London Library, London, Canada
 Brain Research Centre UBC Hospital, British Columbia, Canada
 University of British Columbia, British Columbia, Canada
 Western Alumni Event, British Columbia, Canada
 Rotman Institute of Philosophy, London, Canada

2012

JUMP Research Seminar Series, Western University, London, Canada (Jan)
 Advanced Seminar in Neuroscience, University of Alberta, Alberta, Canada (Jan)
 Western University, Department of Pathology, London, Canada (Jan)
 Kiwanis Club of London, London, Canada (Feb)
 Paediatric Grand Rounds, University Hospital, London, Canada (Feb)
 Michael J. Quinn Memorial Lecture, University of British Columbia, Vancouver, Canada (Feb)
 NIH Neuroscience Seminar Series, NIH, Maryland, USA (Feb)
 Psychology 2011-2012 Colloquium Series, Yale University, Connecticut, USA (Feb)
 Brock University, St. Catharines, Canada (Mar)
 Rotman Rounds 2012, Toronto, Canada (Mar)
 Brain Awareness Week Lecture, University of Manitoba, Manitoba, Canada (Mar)
 McMaster University Scientific Colloquium, Hamilton, Canada (Mar)
 Michigan State University Distinguished Speaker Series in Cognitive Science, Mich., USA (Apr)
 New Opportunities in TBI Research Workshop, CIHR INMHA, Toronto, Canada (Apr)
 David Colman Symposium, McGill University, Montreal, Canada (May)
 CAN – ACN Plenary Symposium, Canadian Association for Neuroscience, BC, Canada (May)
 Annual Clinical Day in Family Medicine, Western University, London, Canada (May)
 Neuroscience Grand Rounds lecture series, Vermont, Burlington, USA (Nov)
 Regional Meeting for the Canadian Association of Research Ethics Board (CAREB), London, Canada (Dec)

2013

Finding Consciousness Workshop, Duke University, North Carolina, USA (Jan)
 25th Annual Meeting of the Spring Conference on Behaviour and Brain, BC, Canada (Feb)
 Rotman Research Institute 23rd Annual Neuroscience Conference, Toronto, Canada (Mar)
 7th Annual Meeting of the American Society of Functional Neuroradiology, SC, USA (Mar)
 Caltech Brain, Mind & Society Seminar Series, California, USA (Mar)
 11th Annual 2013 HCTP Annual Interdisciplinary, Toronto, ON, Canada (Mar)
 Queen's University Psychology Seminar Series, Kingston, ON, Canada (Mar)
 3 Lectures at Minnesota Center for Philosophy of Science, Minnesota, USA (Apr)
 Department of Physics & Astronomy Seminar Series, Western University, Canada (Apr)
 UofT Seniors College Symposium, Toronto, ON, Canada (Apr)
 New Frontiers Seminar Series, UofT, Toronto, ON, Canada (Apr)
 Neuronus 2013, Krakow, Poland (May)

2014

UHN Toronto Rehabilitation Institute TBI Conference, Toronto, ON, Canada
 Parkwood Hospital Grand Rounds, London, ON, Canada
 IBIA World Congress on Brain Injury Plenary Session, San Francisco, CA, USA

St Michael's Hospital Research Rounds, Toronto, ON, Canada
 The Hospital for Sick Children Grand Rounds, Toronto, ON, Canada
 25th Anniversary Celebration of the British Neuropsychological Society, Oxford, UK
 GEOPD 2014, University of British Columbia, Vancouver, B.C.
 Functional Neuroimaging Unit 10th Anniversary, University of Montreal, Montreal, QB
 Royal College of Physicians of Edinburgh Neurology Symposium, Edinburgh, Scotland
 Forum for consciousness research, Oslo University, Oslo, Norway
 Department of Medical Neuroscience, Dalhousie University, Halifax, Nova Scotia
 NYU Conference on Borderline States of Consciousness, New York, USA

2015

Annual St. Bartholomew's Hospital Neuroscience Symposium - London UK
 University of Waterloo Psychology Colloquium, Waterloo, ON, Canada
 Anatomy & Cell Biology Department Symposium, Western University, London, Canada
 BNA 2015 Festival of Neuroscience, Edinburgh, Scotland
 ASSC19 Symposium, Paris, France
 Rehabilitation Institute of Chicago, Chicago, USA
 Western Alumni, Ottawa, Canada
 St. Lawrence University, NY, USA
 The UA Global Summit 2015, Dublin, Ireland

2016

The Harvey Club, London, Canada
 University of Edmonton, Alberta
 Society for Neuroscience's Southwestern Ontario Chapter (SONA), Waterloo, Canada
 Canadian Science Writers' Association, Guelph, Canada
 Durham University Neuroimaging Centre, Institute of Advanced Study's theme 'Evidence
 Gordon Research Conference, Maine, USA
 Brain Injury Canada Conference, Toronto, Canada
 The Canadian Association of Neuropathologists (CANP) annual meeting in Niagara-On-The-Lake,
 Canada

2017

Gairdner Lecture, Thunder Bay, Canada
 Harley Hotchkiss Memorial Lecture Series, University of Lethbridge, Alberta, Canada
 Science Museum, London, UK
 Brain Injury Canada Conference, Saint John, NB, Canada
 Annual Brenda Milner Lecture in Cognitive Neuroscience, Montreal, Canada
 ASSC 2017, Beijing, China
 New Live Scientist Festival, London, UK
 Cheltenham Literary Festival, UK
 Manchester Science Festival, UK

2018

Night of Ideas, Art Museum at the University of Toronto, Canada
 Baycrest Rotman Research Institute Conference, TBI and Concussion, Toronto, Canada
 Mind Science Foundation, San Antonio, Texas, USA
 See the Line – Scientific Workshop, London, Canada
 Memory Disorders Research Society meeting, Toronto, Canada
 8th Annual Mental Health Symposium, Department of Psychiatry, London, Canada

2019

International Neuropsychological Society, New York, USA

International Scientific Conference on Neuroethics (SINe), Milan, Italy
 Brain Balance Convention, Las Vegas, NV, USA
 Parkwood Hospital, Lunch and Learn, London, Canada
 The Walrus, Gatineau, QB, Canada
 HCA Healthcare UK: Prolonged Disorders of Consciousness, London, UK
 XXIV World Congress of Neurology, Dubai, UAE

2020

Generator, Roy Thomson Hall, Toronto, Canada
 One Book One London, London Public Library, London, Canada
 PGY1 Psychiatry Neuro public lecture (Virtual), LHSC, London, Canada
 Neuroscience Symposium (Virtual), University of Montreal, Quebec, Canada
 International Brain Injury Association (IBIA) Webinar (Virtual), USA
 Queen's University CNS Research Day Symposium (Virtual), Canada
 Association des Psychiatres du Quebec Virtual Conference (Virtual), Quebec, Canada

2021

3rd annual Neuroscience Research Day (NRD), Western University, Canada
 CIFAR BMC Virtual Talk, Toronto, Canada (Virtual)
 Neurocritical Care Society, World Coma Day, Canada (Virtual)
 University of Calgary, Guest Lecture on Consciousness, Canada (Virtual)
 University of Columbia, Guest Lecture Series, NY, USA (Virtual)
 University of Windsor Colloquium Series, Canada (Virtual)
 Western University, Kinesiology Graduate Student Research Conference, Canada (Virtual)
 University of Calgary, Promoting Healthy Brain Aging and Preventing Dementia International Symposium, Canada (Virtual)
 McGill University, 1st Canadian Consciousness Research (Virtual) Symposium, Canada
 OBIA, Emerging Evidence around Covid-19 and Brain Injury Webinar, Canada (Virtual)
 Western University, See the Line 2021, London, Canada (Virtual)
 University of Ljubljana, SiNAPSA Neuroscience Conference, Ljubljana, Slovenia (Virtual)

2022

MEDCAN Educational Seminar, Toronto, Canada (Virtual)
 University of Coimbra, NeoPsych Conference, Portugal (Virtual)
 University of Calgary, Neuroanatomy Seminar, Calgary, Canada (Virtual)
 University of Connecticut, BIRC Speaker Series, USA (Virtual)
 NIH Clinical Neuroscience Grand Rounds, Johns Hopkins University, USA (Virtual)
 HBHL Symposium 2022 (with Dr Stefanie Blain-Moraes), McGill University, Montreal, Canada
 British Neuropsychiatry Association Plenary, University of Cambridge, UK (Virtual)
 BrainsCAN Communication in Neuroscience Day, Western University, Canada
 The Royal Society Science and the Law Seminar Series, London, UK
 Canadian College of Neuropsychopharmacology 2022 Virtual Meeting, Montreal, Canada (Virtual)
 ECNS Conference, Mount Saint Vincent University, Halifax, Canada (Virtual)
 Toronto Acquired Brain Injury Network Conference, Toronto, Canada

2023

Western Student Research Conference, London, Canada
 Northumberland Learning Connection speaker series, London, Canada
 PSYCHAPPLIED, London, UK
 Discovery Day, Western University, London, Canada
 OHBM symposium, Montreal, Canada
 Royal Society Science in the Interests of Justice Conference, London, UK

PUBLICATIONS

h-index (2023) = 119 (Google Scholar)

Refereed Journals

1. **Owen, A.M.**, Downes, J.D., Sahakian, B.J., Polkey, C.E. and Robbins T.W. Planning and spatial working memory following frontal lobe lesions in Man. *Neuropsychologia*, 28 (10): 1021-1034, 1990.
2. Almeida, O.P., Forstl, H., Howard, R., **Owen, A.M.**, and Levy R. Aspectos psiquiatricos e neurologicos da síndrome de capgras e de outros distúrbios de identificação correlatos. *Revista ABP-APAL (Associação Brasileira de Psiquiatria-Asociación Psiquiátrica de la América Latina)* 13(2): 63-67, 1991.
3. Forstl, H. Almeida, O.P., **Owen, A.M.**, Burns, A. and Howard, R. Psychiatric, neurological and medical aspects of misidentification syndromes: A review of 260 cases. *Psychological Medicine*, 21(4): 905-910, 1991.
4. **Owen, A.M.**, Roberts, A.C., Polkey, C.E., Sahakian, B.J. and Robbins T.W. Extra-dimensional versus intra-dimensional set shifting performance following frontal lobe excisions, temporal lobe excisions or amygdalo-hippocampectomy in Man. *Neuropsychologia*, 29(10): 993-1006, 1991.
5. Lange, K.W., Robbins, T.W., Marsden, C.D., James, M., **Owen, A.M.** and Paul, G.M. L-Dopa withdrawal in Parkinson's disease selectively impairs cognitive performance in tests sensitive to frontal lobe dysfunction. *Psychopharmacology*, 107, 2-3: 394-404, 1992.
6. **Owen, A.M.**, James, M., Leigh, P.N., Summers, B.A., Marsden, C.D., Quinn, N.P., Lange, K.W. and Robbins, T.W. Fronto-striatal cognitive deficits at different stages of Parkinson's disease. *Brain*, 115 (Pt 6): 1727-1751, 1992.
7. Robbins, T.W., James, M., Lange, K., **Owen, A.M.**, Quinn, N. and Marsden, C.D. Cognitive performance in Multiple System Atrophy. *Brain*, 115 (Pte 1): 271-291, 1992.
8. Sahakian, B.J. & **Owen, A.M.** Computerized assessment in Neuropsychiatry using CANTAB: discussion paper. *Journal of the Royal Society of Medicine*, 85 (7): 399-402, 1992.
9. David, A., **Owen, A.M.** and Forstl, H. An annotated summary and translation of "On the self-awareness of focal brain diseases by the patient in cortical blindness and cortical deafness" by Gabriel Anton (1899). *Cognitive Neuropsychology*, 10(3): 263-272, 1993.
10. Forstl, H. & **Owen, A.M.** David A. Gabriel Anton and 'Anton's symptom': "on focal diseases of the brain which are not perceived by the patient" (1898). *Neuropsychiatry, Neuropsychology and Behavioral Neurology*, 6: 1-6, 1993.
11. **Owen, A.M.**, Beksinska, M., James, M., Leigh, P.N., Summers, B.A., Marsden, C.D., Quinn, N.P., Sahakian, B.J. and Robbins, T.W. Visuo-spatial memory deficits at different stages of Parkinson's disease. *Neuropsychologia*, 31 (7): 627-644, 1993.

12. **Owen, A.M.**, Roberts, A.C., Hodges, J.R., Summers, B.A., Polkey, C.E., and Robbins T.W. Contrasting mechanisms of impaired attentional set-shifting in patients with frontal lobe damage or Parkinson's disease. *Brain*, 116 (Pte 5): 1159-1179, 1993.
13. **Owen, A.M.**, David, A.S. and Forstl, H. Anton's syndrome after Anton. *Neuropsychiatry, Neuropsychology and Behavioral Neurology*, 6: 6-8, 1993.
14. Sahakian, B.J., **Owen, A.M.**, Morant, N.J., Eagger, S.A., Boddington, S., Crayton, L., Crockford, H.A., Crooks, M.M., Hill, K. and Levy, R. Further analysis of the effects of tetrahydroaminoacridine (THA) in Alzheimer's disease on attentional and mnemonic function using CANTAB. *Psychopharmacology (Berl)*, 110(4): 395-401, 1993.
15. Robbins, T.W., James, M., **Owen, A.M.**, Lange, K.W., Lees, A.J., Leigh, P.N., Marsden, C.D., Quinn, N.P. and Summers, B.A. Cognitive deficits in Progressive Supranuclear Palsy, Parkinson's disease and Multiple System Atrophy in tests sensitive to frontal lobe dysfunction. *Journal of Neurology, Neurosurgery and Psychiatry*, 57: 79-88, 1994.
16. Robbins, T.W. James, M., **Owen, A.M.**, Sahakian, B.J., McInnes, L. and Rabbitt, P.M. Cambridge Neuropsychological Test Automated battery (CANTAB): a factor analytic study of a large sample of normal elderly volunteers. *Dementia*, 5 (5): 266-281, 1994.
17. **Owen, A.M.**, Sahakian, B.J., Hodges, J.R., Summers, B.A., Polkey, C.E. and Robbins, T.W. Dopamine-dependent fronto-striatal planning deficits in early Parkinson's disease. *Neuropsychology*, 9: 126-140, 1995.
18. **Owen, A.M.**, Sahakian, B.J., Semple, J., Polkey, C.E., and Robbins, T.W. Visuo-spatial short term recognition memory and learning after temporal lobe excisions, frontal lobe excisions or amygdalo-hippocampectomy in man. *Neuropsychologia*, 33, (1): 1-24, 1995.
19. **Owen A.M.**, Beksinska, M., James, M., Leigh, P.N., Summers, B.A., Marsden, C.D., Quinn, N.P., Sahakian, B.J. and Robbins T.W. Visuo-spatial memory deficits at different stages of Parkinson's disease. In *1995 Year Book Of Neurology And Neurosurgery*. W.G. Bradley and R.H. Wilkins, (Eds.) Mosby, St. Louis, U.S.A., 1995.
20. Baker, S.C., Rogers, R.D., **Owen A.M.**, Frith, C.D., Dolan, R.J., Frackowiak, R.S.J. and Robbins T.W. Neural systems engaged in planning: A PET study of the Tower of London Task. *Neuropsychologia*, 34(6): 515-526, 1996.
21. **Owen A.M.**, Evans, A.C. and Petrides, M. Evidence for a two-stage model of spatial working memory processing within the lateral frontal cortex: a positron emission tomography study. *Cerebral Cortex*, 6(1): 31-38, 1996.
22. **Owen A.M.**, Doyon, J., Petrides, M. and Evans, A.C. Planning and spatial working memory examined with positron emission tomography (PET). *European Journal of Neuroscience*, 8: 353-364, 1996.
23. **Owen, A.M.**, Morris, R.G., Sahakian, B.J., Polkey, C.E. and Robbins, T.W. Double dissociations of memory and executive functions in working memory tasks following frontal lobe excisions, temporal lobe excisions or amygdalo-hippocampectomy in man. *Brain*, 119 (Pt 5): 1597-1615, 1996.

24. **Owen, A.M.** Milner, B., Petrides, M., and Evans, A. A Specific Role for the Right Parahippocampal Region in the Retrieval of Object-Location: A Positron Emission Tomography Study. *Journal of Cognitive Neuroscience*, 8: 588-602, 1996.
25. **Owen, A.M.**, Milner, B., Petrides, M. and Evans, A.C. Memory for Object-Features versus Memory for Object-Location: A Positron Emission Tomography Study of Encoding and Retrieval Processes. *Proceedings of the National Academy of Sciences*, 93: 9212-9217, 1996.
26. Doyon, J., **Owen A.M.**, Petrides, M., Sziklas, V. and Evans, A.C. Functional anatomy of visuomotor skill learning in human subjects examined with positron emission tomography. *European Journal of Neuroscience*. 8(4): 637-648, 1996.
27. Veale, D, Sahakian, B.J., **Owen, A.M.** and Marks, I. Specific cognitive deficits in tests sensitive to frontal lobe dysfunction in a sub-group of patients with Obsessive Compulsive Disorder. *Psychological Medicine*, 26(6): 1261-1269, 1996.
28. **Owen, A.M.**, Iddon, J.L., Hodges, J. R., Summers, B.A. and Robbins, T.W. Spatial and Non-Spatial Working Memory at Different Stages of Parkinson's Disease, *Neuropsychologia*, 35(4): 519-532, 1997.
29. **Owen, A.M.** The functional organization of working memory processes within human lateral frontal cortex: The contribution of functional neuroimaging. *European Journal of Neuroscience*, 9(7): 1329 - 1339, 1997.
30. **Owen, A.M.** Tuning in to the temporal dynamics of brain activation using functional magnetic resonance imaging (fMRI). *Trends in Cognitive Sciences*, 1: 123-125, 1997.
31. **Owen, A.M.** Cognitive planning in humans: neuropsychological, neuroanatomical and neuropharmacological perspectives. *Progress in Neurobiology*, 53: 431-450, 1997
32. Pantelis, C., Barnes, T.R.E., Nelson, H.E., Tanner, S., Weatherley, L., **Owen, A.M.** and Robbins, T.W. Frontal-striatal cognitive deficits in patients with chronic schizophrenia. *Brain*, 120 (10): 1823-1843, 1997.
33. Menon, D.K., **Owen, A.M.**, Williams, E., Minhas, P.S., Allen, C.M.C., Boniface, S. and Pickard, J.D. Cortical processing in the persistent vegetative state. *Lancet*, 352(9123): 200, 1998.
34. **Owen, A.M.** Memory: dissociating multiple memory processes. *Current Biology*, 8(23): R850-852, 1998.
35. **Owen, A.M.**, Doyon, J., Dagher, A., Sadikot A. and Evans, A.C. Abnormal Basal-Ganglia Outflow in Parkinson's Disease Identified with Positron Emission Tomography: Implications for Higher Cortical Functions. *Brain*, 121, (Pte 5): 949-65, 1998.
36. **Owen, A.M.**, Stern, C. E., Look, R. B., Tracey, I., Rosen, B. R. and Petrides, M. Functional organization of spatial and non-spatial working memory processes within the human lateral frontal cortex. *Proceedings of the National Academy of Sciences*, 95(13): 7721-7726, 1998.
37. Robbins, T.W., James, M., **Owen, A.M.**, Sahakian, B.J., Lawrence, A.D., McInnes, L. and Rabbitt, P. A study of performance on tests from the CANTAB battery sensitive to frontal lobe dysfunction in a large sample of normal volunteers: implications for theories of executive function and

- cognitive ageing. Cambridge Neuropsychological Test Automated Battery. *Journal of the International Neuropsychological Society*, 4(5): 474-490, 1998.
38. Rushworth, M.F.S. and **Owen, A.M.** The functional organisation of the lateral frontal cortex: conjuncture or conjecture in the electrophysiology literature? *Trends in Cognitive Sciences*, 2: 46-53, 1998.
 39. **Owen, A.M.**, Herrod, N.J., Menon, D.K., Clark, J.C., Downey, S.P.M.J., Carpenter, T.A., Minhas, P.S., Turkheimer, F.E., Williams, E.J., Robbins, T.W., Sahakian, B.J., Petrides, M. and Pickard, J.D. Redefining the functional organisation of working memory processes within human lateral prefrontal cortex. *European Journal of Neuroscience*, 11(2): 567-574, 1999.
 40. Dagher, A., **Owen, A.M.**, Boecker, H. and Brooks, D.J. Mapping the network for planning: a correlational PET activational study with the Tower of London task. *Brain*, 122 (Pte 10): 1973-1987, 1999.
 41. Doyon, J., **Owen, A.M.**, Jackson, P. L., Lafleur, M., Cesaro, P. and Remy, P. Analysis des effets therapeutiques au plan moteur et cognitif des greffes de cellules mesencephaliques dopaminergiques chez les patients atteints de la maladie de parkinson. *Medecine/Sciences*, 1(5): XX-XXIII. 1999.
 42. **Owen, A.M.** & Doyon, J. The cognitive neuropsychology of Parkinson's disease: a functional neuroimaging perspective. *Ad. Neurol.*, 80: 49-56, 1999.
 43. Johnsrude, I.S., **Owen, A.M.**, Crane, J., Milner, B. and Evans, A.C. A cognitive activation study of memory for spatial relationships. *Neuropsychologia*, 37(7): 829-841, 1999.
 44. Johnsrude, I.S., **Owen, A.M.**, Zhao, V.W. and White, N.M. Conditioned preference in humans: A novel experimental approach. *Learning and Motivation*, 30: 250-264, 1999.
 45. **Owen, A.M.**, Doyon, J., Dagher, A. and Evans, A.C. Abnormal basal-ganglia outflow in Parkinson's disease identified with positron emission tomography: implications for higher cortical functions. *Focus on Parkinson's Disease*, pp18-19, 1999.
 46. Rogers, R. D., **Owen, A.M.**, Middleton, H. C., Williams, E.J., Pickard, J. D., Sahakian, B. J. and Robbins, T. W. Choosing between small, likely rewards and large, unlikely rewards activates inferior and orbital prefrontal cortex. *Journal of Neuroscience*, 20(19): 9029-9038, 1999.
 47. Menon, D.K., **Owen, A.M.**, Williams, E.J. and Pickard, J.D. Response from Menon, Owen and Pickard. *Trends In Cognitive Sciences*, 3(2): 44-46, 1999.
 48. Pantelis, C., Barber, F. Z., Barnes, T.R.E., Nelson, H.E., **Owen, A.M.** and Robbins, T.W. Comparison of set-shifting ability in patients with schizophrenia and frontal lobe damage. *Schizophrenia Research*, 37(3): 251-270, 1999.
 49. Hodgson, T. L., Bajwa, A., **Owen, A.M.** and Kennard, C. The strategic control of gaze direction in the Tower of London Task. *Journal of Cognitive Neuroscience*, 12(5): 894-907, 2000.
 50. Mehta, M. A., **Owen, A.M.**, Sahakian, B. J., Mavaddat, N., Pickard, J. D. and Robbins, T. W. Methylphenidate enhances working memory by modulating discrete frontal and parietal lobe regions in the human brain. *Journal of Neuroscience*, 20(6): RC65, 2000.

51. Lee, A.C.H., Robbins, T.W., Pickard, J. D. and **Owen, A.M.** Asymmetric frontal activation during episodic memory: the effects of stimulus type on encoding and retrieval. *Neuropsychologia*, 38 (5): 677-692, 2000.
52. Stern, C. E., **Owen, A.M.**, Tracey, I, Look, R. B., Petrides, M. and Rosen, B. R. Activity in ventrolateral and mid-dorsolateral prefrontal cortex during non-spatial visual working memory processing: evidence from functional magnetic resonance imaging. *Neuroimage*, 11(5 Pte 1): 392-399, 2000.
53. Johnsrude, I.S., **Owen, A.M.**, White, N.M., Zhao, V.W. and Bohbot, V. Impaired preference conditioning after anterior temporal-lobe resection in humans. *Journal of Neuroscience*, 20(7): 2649-2656, 2000.
54. **Owen, A.M.**, Lee, A.C.H. and Williams, E.J. Dissociating aspects of verbal working memory within the human frontal lobe: further evidence for a 'process-specific' model of lateral frontal organization. *Psychobiology*, 28(2): 146-155, 2000.
55. **Owen, A.M.** The role of the lateral frontal cortex in mnemonic processing; The contribution of functional neuroimaging. *Experimental Brain Research*, 133(1): 33-43, 2000.
56. Vandenberghe, R., Duncan, J., Arnell, K.M., Bishop, S.J., Herrod, N. J., **Owen, A.M.**, Minhas, P.S., Dupont, P., Pickard, J.D. and Orban, G.A. Maintaining and shifting attention within left or right hemifield. *Cerebral Cortex*, 10(7): 706-713, 2000.
57. Johnsrude, I.S., Giraud, A.L., Morosan, P., Brett, M., **Owen, A.M.** and Zilles, K. Functional Imaging of the auditory system: The use of positron emission tomography. Proceedings of the 4th Annual Congress of Otorhinolaryngology Head and Neck Surgery, 35-42, 2000.
58. Duncan, J. & **Owen, A.M.** Common regions of the human frontal lobe recruited by diverse cognitive demands. *Trends in Neurosciences*, 23 (10): 475-483, 2000.
59. Lee, A.C.H., Robbins, T.W. and **Owen, A.M.** Episodic memory meets working memory in the frontal lobes: functional neuroimaging studies of encoding and retrieval, *Critical Reviews in Neurobiology*, 14 (3-4): 165-197, 2000.
60. Simons, J., Graham, K., **Owen, A.M.**, Patterson, K. and Hodges, J. R. Perceptual and semantic components of memory for objects and faces: A PET study. *Journal of Cognitive Neuroscience*, 13(4): 430-443, 2001.
61. Rowe, J. B., **Owen, A.M.**, Johnsrude, I. S. and Passingham, R. E. Imaging the mental components of a planning task. *Neuropsychologia*, 39(3): 315-327, 2001.
62. Bor, D., Duncan, J. and **Owen, A.M.** The role of spatial configuration in tests of working memory explored with functional neuroimaging. *Journal of Scandinavian Psychology*, 42(3): 217-224, 2001.
63. Dagher, A., **Owen, A.M.**, Boecker, H. and Brooks, D.J. The role of the striatum and hippocampus in motor planning: a PET activation study in Parkinson's disease. *Brain*, 124 (pte 5): 1020-1032, 2001.
64. Hodgson, T.L., Tiesman, B., **Owen, A.M.** and Kennard, C. Abnormal gaze strategies during problem solving in Parkinson's disease. *Neuropsychologia*, 40(4): 411-422, 2001.

65. **Owen, A.M.**, Menon, D.K., Johnsrude, I.S., Bor, D., Scott S.K., Manly, T., Williams E.J., Mummery, C. and Pickard, J.D. Detecting residual cognitive function in persistent vegetative state (PVS) *Neurocase*, 8(5): 394-403, 2002.
66. Cox, S.M.L., Stefanova, E., Johnsrude, I.S., Robbins, T. W. and **Owen, A.M.** Preference formation and working memory in Parkinson's disease and normal ageing. *Neuropsychologia*, 40(3): 317-326, 2002.
67. Calder. A.J., Lawrence, A., Keane, J., Scott, S., **Owen, A.M.**, Christoffels, I. and Young, A.W. Reading the mind from eye gaze. *Neuropsychologia*, 40(8): 1129-1138, 2002.
68. Brett, M., Johnsrude, I.S. and **Owen, A.M.** The problem of functional localization in the human brain. *Nature Reviews Neuroscience*, 3(3): 243-249, 2002.
69. Lee, A.C.H., Robbins, T.W., Graham, K. and **Owen, A.M.** "Pray or Prey?" dissociation of semantic memory retrieval from episodic memory processes using positron emission tomography and a novel homophone task. *Neuroimage*, 16(3 Pt 1): 724-735, 2002.
70. Lee, A.C.H., Robbins, T.W., Smith, S., Calvert, G., Tracey, I., Matthews, P. and **Owen, A.M.** Evidence for asymmetric frontal lobe involvement in episodic memory from functional magnetic resonance imaging and patients with unilateral frontal lobe excisions. *Neuropsychologia*, 40(13): 2420-2437, 2002.
71. Cools, R., Stefanova, E., Barker, R.A., Robbins, T.W. and **Owen, A.M.** Dopaminergic modulation of high-level cognition in Parkinson's disease: the role of the prefrontal cortex revealed by PET. *Brain*, 125(pte 3): 584-594, 2002.
72. Lee, A.C.H., Graham, K.S., Simons, J., Hodges, J.R., **Owen, A.M.** and Patterson, K. Regional brain activations differ for semantic features but not categories. *NeuroReport*, 13(12): 1497-1501, 2002.
73. Cools, R., Clark, L., **Owen, A.M.**, and Robbins, T.W. Defining the Neural Mechanisms of Probabilistic Reversal Learning Using Event-Related Functional Magnetic Resonance Imaging. *Journal of Neuroscience*, 22(11): 4563-4567, 2002.
74. Bor, D., Duncan, J., Wiseman, R.J. and **Owen, A.M.** Encoding strategies dissociates prefrontal activity from working memory demand. *Neuron*, 37(2): 361-367, 2003.
75. Lewis, S.G.J., Cools, R., Robbins, T.W., Dove, A., Barker, R.A. and **Owen, A.M.** Using executive heterogeneity to explore the nature of working memory deficits in Parkinson's Disease. *Neuropsychologia*, 41(6): 645-654, 2003.
76. Curran, E., Sykacek, P., Stokes, M., Roberts, S.J. Member, IEEE, Penny, W., Johnsrude, I. and **Owen, A.M.** Cognitive tasks for driving a brain-computer interfacing system: a pilot study. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 12(1): 48-54, 2003.
77. Lewis, S.G.J., Dove, A., Robbins, T.W., Barker, R.A. and **Owen, A.M.** Cognitive impairments in early Parkinson's disease are accompanied by reductions in activity in frontostriatal neural circuitry. *Journal of Neuroscience*, 23(15): 6351-6356, 2003.

78. Manly, T., **Owen, A.M.**, McAvinue, L., Datta, A., Lewis, G.H., Scott, S.K., Rorden, C., Pickard, J. and Robertson, I.H. Enhancing the sensitivity of a sustained attention task to frontal damage: convergent clinical and functional imaging evidence. *Neurocase*, 9(4): 340-349, 2003.
79. Gould, R.L., Brown, R.G., **Owen, A.M.**, Ffytche D.H. and Howard, R.J. fMRI BOLD response to increasing task difficulty during successful paired associates learning. *Neuroimage*, 20(2): 1006-1019, 2003.
80. **Owen, A.M.** HERA today, gone tomorrow. *Trends in Cognitive Sciences*, 7(9): 383-384, 2003.
81. Arana, F.S, Parkinson J.A, Hinton, E., **Owen, A.M.** and Roberts A.C. Dissociable contributions of the human amygdala and orbitofrontal cortex to incentive motivation and goal selection. *Journal of Neuroscience*, 23(29): 9632-9638, 2003.
82. Gelling, L., Shiel, A., Elliot, L., **Owen, A.M.**, Wilson. B., Menon, D. K. and Pickard, J.D. Commentary in response to: Sensory stimulation programme to improve recovery in comatose patients. Oh H & Seo W. *Journal of Clinical Nursing*, 12: 394-404, (2003), 13: 125-127, 2004.
83. Lewis, S.G.J., Dove, A., Robbins, T.W., Barker, R.A. and **Owen, A.M.** Striatal contributions to working memory: a functional magnetic resonance imaging study in humans. *European Journal of Neuroscience*, 19(3): 755-760, 2004.
84. Bekinschtein, T., Leiguarda, R., Armony, J., **Owen, A.M.**, Carpintiero, S., Niklison, J., Olmos, L., Sigman, L. and Manes, F. Emotional processing in the minimally conscious state. *Journal of Neurosurgery, Neurology and Psychiatry*, 75: 788, 2004.
85. Ouellet, M-C., Beauchamp, M.H., **Owen, A.M.** and Doyon, J. Acquiring a cognitive skill with a new repeating version of the Tower of London task. *Canadian Journal of Experimental Psychology*, 58(4): 272-288, 2004.
86. Ramnani, N. & **Owen A.M.** Anterior prefrontal cortex: insights into function from anatomy and neuroimaging. *Nature Reviews Neuroscience*, 5(3): 184-194, 2004.
87. **Owen, A.M.** & Slabosz, A. Mechanizm przerzutnosci uwagi - wyuczona nieadekwatnosc. *Studia Psychologiczne Oblicza uwagi*, 42 (1): 71-78, 2004.
88. Bor., D., Cumming, N., Scott, C.E.M. and **Owen, A.M.** Prefrontal cortical involvement in verbal encoding strategies. *European Journal of Neuroscience*, 19(12): 3365-3370, 2004.
89. Laureys, S., **Owen, A.M.** and Schiff, N., Brain function in coma, vegetative state, and related disorders. *Lancet Neurology*, 3(9): 537-546, 2004.
90. **Owen, A.M.** Cognitive dysfunction in Parkinson's disease: the role of frontostriatal circuitry. *The Neuroscientist*, 10(6): 525-537, 2004.
91. **Owen, A.M.** Visual Working Memory: Are we going round in circles? *Current Biology*, 14: R573-R574, 2004.
92. Malhi, G.S., Lagopoulos, J., **Owen, A.M.** and Yatham, L. N. Bipolaroids: Functional imaging in bipolar disorder, *Acta Psychiatr. Scand. Suppl.*, 422: 46-54, 2004.

93. Hinton, E., Parkinson J.A, Holland, A.J., Arana, F.S, Roberts A.C. and **Owen, A.M.** Neural contributions to the motivational control of appetite in humans. *European Journal of Neuroscience*, 20(5): 1411-1418, 2004.
94. Lewis, S.G.J., Foltynie, T., Blackwell, A.D., Robbins, T.W., **Owen, A.M.** and Barker, R.A. Heterogeneity of Parkinson's disease in the early clinical stages using a data driven approach. *Journal of Neurosurgery, Neurology and Psychiatry*, 76(3): 343 – 348, 2005.
95. Gould, R.L., Brown, R.G., **Owen, A.M.**, Bullmore, E.T., Williams, S.C.R. and Howard, R.J. Functional neuroanatomy of successful paired associate learning in Alzheimer's disease. *American Journal of Psychiatry*, 162(11): 2049-2060, 2005.
96. Simons, J.S., Gilbert, S.J., **Owen, A.M.**, Fletcher, P.C. and Burgess, P.W. Distinct roles for lateral and medial anterior prefrontal cortex in contextual recollection. *Journal of Neurophysiology*, 94(1): 813-820, 2005.
97. Simons, J.S., **Owen, A.M.**, Fletcher, P.C., and Burgess, P.W. Anterior prefrontal cortex and the recollection of contextual information. *Neuropsychologia*, 43(12): 1774-1783, 2005.
98. Lewis, S.G.J., Slabosz, A., Robbins, T.W., Barker, R.A. and **Owen, A.M.** Dopaminergic basis for deficits in working memory but not attentional set-shifting in Parkinson's disease. *Neuropsychologia*, 43(6): 823-832, 2005.
99. **Owen, A.M.**, Coleman, M.R., Menon, D. K., Johnsrude, I.S., Rodd, J.M., Davis, M.H., Taylor, K. and Pickard, J.D. Residual auditory function in persistent vegetative state: A combined PET and fMRI study. *Neuropsychological Rehabilitation*, 15(3-4): 290-306, 2005.
100. **Owen, A.M.**, McMillan, K.M., Laird, A.R. and Bullmore, E.T. The n-back working memory paradigm: A meta-analysis of normative fMRI studies. *Human Brain Mapping*, 25(1): 46-59, 2005.
101. **Owen, A.M.** Working memory: imaging the magic number four. *Current Biology*, 14(14): R573-4, 2005.
102. Cheesman, A.L., Barker, R.A., Lewis, S.J.G., Robbins, T.W., **Owen, A.M.** and Brooks, D.J. Lateralisation of striatal function: Evidence from 18F-dopa PET in Parkinson's disease. *J. Neurol. Neurosurg. Psychiatry*, 76(9): 1204-1210, 2005.
103. **Owen, A.M.**, Coleman, M.R., Menon, D.K., Berry, E.L., Johnsrude, I.S., Rodd, J M., Davis, M.H. and Pickard, J. D. Using a hierarchical approach to investigate residual auditory cognition in persistent vegetative state. *Progress in Brain Research*, Volume 150: 461-476, Elsevier, London, 2005.
104. Hinton EC, Holland AJ, Gellatly M.S.N., Soni S, Patterson, M., Ghatei, M.A. and **Owen A.M.** Neural representations of hunger and satiety in Prader-Willi syndrome. *International Journal of Obesity*, 30(2): 313-321, 2005.
105. Bor, D., Duncan, J., Lee, A.C.H., Parr, A. and **Owen, A.M.** Frontal lobe involvement in spatial span: converging studies of normal and impaired function, *Neuropsychologia*, 44(2): 229-237, 2006.

106. Hinton, E.C., Holland, A.J., Gellatly, M.S.N., Soni, S. and **Owen, A.M.** An investigation into food preferences and the neural basis of food-related incentive motivation in Prader–Willi syndrome. *Journal of Intellectual Disability Research*, 50 (pt 9): 633-642, 2006.
107. Bor, D. & **Owen, A.M.** Working memory: linking capacity with selectivity, *Current Biology*, 16(4): R136-138, 2006.
108. Hampshire, A. & **Owen, A.M.** Fractionating attentional control using event related fMRI, *Cerebral Cortex*, 16(12): 1679-1689, 2006.
109. Dove, A., Brett, M. Cusack, R. and **Owen, A.M.** Dissociable contributions of the mid-ventrolateral frontal cortex and the medial temporal-lobe system to human memory. *Neuroimage*, 31(4): 1790-1801, 2006.
110. Slabosz, A., Lewis, S.J.G., Smigasiewicz, K., Szymura, B., Barker, R.A. and **Owen, A.M.** Learned irrelevance revisited: the cognitive the role of learned irrelevance in attentional set-shifting impairments in Parkinson's disease. *Neuropsychology*, 20(5): 578-88, 2006.
111. Gould, R.L., Brown, R.G., **Owen, A.M.**, Bullmore, E.T. and Howard, R.J. Task-induced deactivations during successful paired associates learning: An effect of age but not Alzheimer's disease. *Neuroimage*, 31(2): 818-831, 2006.
112. Grahn, J.A. & **Owen, A.M.** Memory: obstacle avoidance in the absence of visual cues. *Current Biology*, 16(7): R247-249, 2006.
113. Unterrainer, J.M. & **Owen, A.M.** Planning and problem solving: from neuropsychology to functional neuroimaging. *Journal of Physiology*, 99(4-6): 308-317, 2006.
114. Christoff, K. & **Owen, A.M.** Improving reverse neuroimaging inference: cognitive domain versus cognitive complexity. *Trends in Cognitive Sciences*, 10(8): 352-353, 2006.
115. Gould, R.L., Arroyo, B., Brown, R.G., **Owen, A. M.**, Bullmore, E.T. and Howard, R.J. Brain mechanisms of successful compensation during learning in Alzheimer disease. *Neurology*, 67: 1011-1017, 2006.
116. Boly, M., **Owen, A.M.** and Laureys, S. To be or not to be...vegetative *Yearbook of Intensive Care and Emergency Medicine*, 918-925, 2007.
117. **Owen, A.M.**, Coleman, M.R., Davis, M.H., Boly, M., Laureys, S. and Pickard, J.D. Detecting awareness in the vegetative state. *Science*, 313: 1402, 2006.
118. **Owen, A.M.** When thoughts become actions: functional neuroimaging in the vegetative state. *Future Neurology*, 1(6): 693-695, 2006.
119. Laureys, S., Giacino, J.T., Schiff, N.D., Schabus, M. and **Owen, A.M.** How should functional imaging of patients with disorders of consciousness contribute to their clinical rehabilitation needs? *Current Opinion in Neurology*, 19: 520-527, 2006.
120. Hon, N., Epstein, R.A., **Owen, A.M.** and Duncan, J. Frontoparietal activity with minimal decision and control. *Journal of Neuroscience*, 26(38): 9805-9809, 2006.

121. Bor, D. & **Owen, A.M.** A common prefrontal-parietal network for mnemonic and mathematical recoding strategies within working memory. *Cerebral Cortex*, 17: 778-786, 2007.
122. Malhi, G.S., Lagopoulos, J., **Owen, A.M.**, Ivanovski, B., Shnier, R. and Sachdev, P. Reduced activation to implicit affect induction in euthymic bipolar patients: An fMRI study. *Journal of Affective Disorders*, 97: 109–122, 2007.
123. Hinton, E.C., Holland, A.J. and **Owen, A.M.** Functional neuroimaging in Prader-Willi syndrome. *Int. J. Obes.*, 31(2): 390-391, 2007.
124. Bor, D. & **Owen, A.M.** Cognitive training: neural correlates of expert skills. *Current Biology*, 17(3): R95-R97, 2007.
125. Boly, M., Coleman, M.R., Davis, M.H., Hampshire, A., Bor, D., Moonen, G., Maquet, P. A., Pickard, J.D., Laureys, S. and **Owen, A. M.** When thoughts become actions: an fMRI paradigm to study volitional brain activity in non-communicative brain injured patients. *Neuroimage*, 36(3): 979-992, 2007.
126. **Owen, A.M.**, Coleman, M.R., Davis, M.H., Boly, M., Laureys, S. and Pickard, J.D. Using functional magnetic resonance imaging to detect covert awareness in the vegetative state. *Archives of Neurology*, 64: 1098-1102, 2007.
127. Williams-Gray, C.H., Hampshire, A., Robbins, T.W., Barker, R.A. and **Owen, A.M.** COMT val158 met genotype influences frontoparietal activity during planning in patients with Parkinson's disease. *Journal of Neuroscience*, 27(18): 4832-4838, 2007.
128. Hampshire, A., Duncan, J. and **Owen, A.M.** Selective tuning of the blood oxygenation level-dependent response during simple target detection dissociates human frontoparietal subregions. *Journal of Neuroscience*, 27(23): 6219-6223, 2007.
129. Coleman, M.R., **Owen, A.M.**, and Pickard, J.D. Functional imaging and the vegetative state. *Advances in Clinical Neurosciences and Rehabilitation*, 7: 35-36, 2007.
130. **Owen, A.M.**, Coleman, M.R., Davis, M.H., Boly, M., Laureys, S., Jolles, D. and Pickard, J.D. Response to Comments on "Detecting awareness in the vegetative state". *Science*, 315: 1221c, 2007.
131. Coleman, M.R., Rodd, J.M., Davis, M.H., Johnsrude, I.S., Menon, D.K., Pickard, J.D. and **Owen, A.M.** Do vegetative patients retain aspects of language comprehension? Evidence from fMRI. *Brain*, 130: 2494-2507, 2007.
132. **Owen, A.M.** & Coleman, M.R. Functional MRI in disorders of consciousness: advantages and limitations. *Current Opinion in Neurology*, 20(6): 632-637, 2007.
133. Davis, M.H., Coleman, M.R., Absalom, A.R., Rodd, J.M., Johnsrude, I.S., Matta B.F., **Owen AM.** and Menon DK. Dissociating speech perception and comprehension at reduced levels of awareness. *Proceedings of the National Academy of Sciences*, 104(41): 16032-16037, 2007.
134. Grahn, J.A., Parkinson, J. and **Owen, A.M.** The cognitive functions of the caudate nucleus. *Progress in Neurobiology*, 86: 141–155, 2008.

135. Dove, A., Manly, T., Epstein, R.A. and **Owen, A.M.** The engagement of mid-ventrolateral prefrontal cortex and posterior brain regions in intentional cognitive activity. *Human Brain Mapping*, 29(1): 107-19, 2008.
136. Hampshire, A., Gruszka, A., Fallon, S. J. and **Owen, A.M.** Inefficiency in self-organised attentional switching in the normal ageing population is associated with decreased activity in the ventrolateral prefrontal cortex. *Journal of Cognitive Neuroscience*, 20(9): 1670-1686, 2008.
137. Williams-Gray, C.H., Hampshire, A., Barker, R. A. and **Owen, A.M.** Attentional control in Parkinson's disease is dependent on COMT Val158Met genotype. *Brain*, 131: 397-408, 2008.
138. Rowe, J., Hughes, L., Eckstein, D. and **Owen, A.M.** Rule-selection and action-selection have a shared neuroanatomical basis in the human prefrontal and parietal cortex. *Cerebral Cortex*, 18(10): 2275-85, 2008.
139. **Owen, A.M.**, Coleman, M.R., Boly, M., Davis, M.H., Laureys, S. and Pickard J.D. The consciousness dilemma: Feel or feel of feeling? *Archives of Neurology*, 65(3): 418-419, 2008.
140. **Owen, A.M.** & Coleman, M. Functional imaging in the vegetative state. *Nature Reviews Neuroscience*, 9: 235-243, 2008.
141. **Owen, A.M.**, Disorders of consciousness. *Ann. N.Y. Acad. Sci.*, 1124: 225-238, 2008.
142. Rowe, J., Eckstein, D., Braver, T. and **Owen, A.M.** How does reward expectation influence cognition in the human brain? *Journal of Cognitive Neuroscience*, 20(11): 1980-1992, 2008.
143. Rowe, J.B., Hughes, L., Ghosh, B.C.P., Eckstein, D., Williams-Gray, C.H., Fallon, S., Barker, R.A. and **Owen, A.M.** Parkinson's disease and dopaminergic therapy – differential effects on movement, reward and cognition. *Brain*, 131: 2094-2105, 2008.
144. Chamberlain, S.R., Menzies, L.A., Hampshire, A., Suckling, J., Fineberg, N.A., Campo, N., Aitken, M., Craig, K., **Owen, A.M.**, Bullmore, E. T. Robbins, T.W. and Sahakian, B.J. Orbitofrontal dysfunction in patients with obsessive-compulsive disorder and their unaffected relatives. *Science*, 321(5887): 421–422, 2008.
145. Coleman, M.R. & **Owen, A.M.** Functional neuroimaging of disorders of consciousness. *International Anesthesiology Clinics*, 46(3): 147-157, 2008.
146. Hampshire, A., Thompson, R., Duncan, J. and **Owen, A.M.** The target selective neural response – similarity, ambiguity and learning effects. *PLOS ONE* 3(6): e2520, 2008.
147. **Owen, A.M.** & Coleman, M. Using neuroimaging to detect awareness in disorders of consciousness. *Functional Neurology*, 23(4): 189-194, 2008.
148. Rowe, J.B., Hughes, L., Williams-Gray, C.H., Bishop, S.J., Fallon, S., Barker, R.A. and **Owen, A.M.** The val158met COMT polymorphism's effect on atrophy in healthy aging and Parkinson's disease. *Neurobiology of Aging*, (6): 1064-8, 2008.
149. Piech, R.M., Hampshire, A., **Owen, A.M.**, and Parkinson, J.A. Modulation of cognitive flexibility by hunger and desire. *Cognition and Emotion*, 23(3): 528-540, 2009.

150. Hampshire, A., Thompson, R., Duncan, J. and **Owen, A.M.** Selective tuning in the right inferior frontal gyrus during target detection. *Cognitive, Affective and Behavioural Neuroscience*, 9 (1): 103-112, 2009.
151. Piech R.M., Lewis J., Parkinson C.H., **Owen A.M.**, Roberts A.C., Downing, P.E. and Parkinson, J.A. Neural correlates of appetite and hunger-related evaluative judgments. *PLOS ONE*, 4(8): e6581, 2009.
152. Piech R.M., Lewis J., Parkinson C.H., **Owen A.M.**, Roberts A.C., Downing, P.E. and Parkinson, J.A. Neural correlates of affective influence on choice. *Brain and Cognition*, 72(2): 282-8, 2009.
153. Grahn, J.A., Parkinson, J.A. and **Owen, A.M.** The role of the basal ganglia in learning and memory: neuropsychological studies. *Behavioural Brain Research*, 199: 53–60, 2009.
154. Berry, E., Hampshire, A., Rowe, J., Hodges, S., Kapur, N., Watson, P., Browne, G., Smyth, G., Wood, K. and **Owen A.M.** The neural basis of effective memory therapy in a patient with limbic encephalitis. *Journal of Neurology, Neurosurgery and Neuropsychiatry*, 80(11): 1202-5, 2009.
155. Chaudrey, A.M., Parkinson, J.A., Hinton, E.C., **Owen, A.M.** and Roberts A.C. Preference judgements involve a network of structures within frontal, cingulate and insula cortices. *European Journal of Neuroscience*, 29: 1047-1055, 2009.
156. Monti. M.M., Coleman, M.R. and **Owen, A.M.** Neuroimaging and the vegetative state: Resolving the behavioural assessment dilemma. *Annals of the New York Academy of Sciences*, 1157: 81-89, 2009.
157. Monti, M.M., Coleman, M.R. and **Owen, A.M.** Executive functions in the absence of behavior: functional imaging of the minimally conscious state. *Progress in Brain Research*, 177: 249-260, 2009.
158. Coleman, M.R., Davis, M.H., Rodd, J.M., Robson, T., Ali, A., Pickard, J.D. and **Owen, A.M.** Towards the routine use of brain imaging to aid the clinical diagnosis of disorders of consciousness. *Brain*, 132: 2541-2552, 2009.
159. Coleman, M.R., Bekinschtein, T., Monti, M.M. and **Owen, A.M.** and Pickard JD. A multimodal approach to the assessment of patients with disorders of consciousness. *Progress in Brain Research*, 177: 231-248, 2009.
160. **Owen, A.M.** Schiff, N.D. and Laureys, S. A new era of coma and consciousness science. *Progress in Brain Research*, 177: 399-411, 2009.
161. Chamberlain, S.R., Menzies, L.A., Hampshire, A., Suckling, J., Fineberg, N.A., Campo, N., Aitken, M., Craig, K., **Owen, A.M.**, Bullmore, E. T. Robbins, T.W. and Sahakian, B.J. Orbitofrontal dysfunction in patients with obsessive-compulsive disorder and their unaffected relatives. *Revista de Toxicomanias*, (61): 21-24, 2010.
162. Monti, M.M., Vanhaudenhuyse, A., Coleman, M.R., Boly, M., Pickard, J.D., Tshibanda, J-F.L., **Owen, A.M.** and Laureys, S. Willful modulation of brain activity and communication in disorders of consciousness. *New England Journal of Medicine*, 362: 579-589, 2010.

163. Hughes, L.E., Barker R.A., **Owen, A.M.** and Rowe J.B. Parkinson's disease and healthy aging: independent and interacting effects on action selection. *Human Brain Mapping*, 31(12): 1886-99, 2010.
164. Hampshire, A., Chamberlain, S. R., Monti, M.M. Duncan, J. and **Owen, A.M.** The role of the right inferior frontal gyrus: inhibition and attentional control. *Neuroimage*, 50: 1313-1319, 2010.
165. Rowe, J.B., Hughes, L.E., Barker, R.A., **Owen, A.M.** Dynamic causal modelling of effective connectivity from fMRI: are results reproducible and sensitive to Parkinson's disease and its treatment? *Neuroimage*. 52(3): 1015-1026, 2010.
166. **Owen, A.M.**, Hampshire, A., Grahn, J.A., Stenton, R., Dajani, S., Burns, A. S., Howard, R. J. and Ballard, C.G. Putting brain training to the test. *Nature*, 465: 775-779, 2010.
167. Monti, M.M. & **Owen, A.M.** The behavior in the brain: using functional neuroimaging to assess residual cognition and awareness after severe brain injury, *Journal of Psychophysiology*, 24(2): 76-82, 2010.
168. Monti M.M. & **Owen A.M.** Looking for consciousness, the aware mind in the motionless body, *The Psychologist*, 23(6): 478-481, 2010.
169. Monti, M.M., Laureys, S. and **Owen, A.M.** Diagnosing the vegetative state, *British Medical Journal*, 341: c3765, 2010.
170. Cruse, D. & **Owen, A.M.** Consciousness revealed: New insights into the vegetative and minimally conscious states. *Current Opinion in Neurology*, 23(6): 656-660, 2010.
171. Monti, M.M., **Owen, A.M.** and Laureys, S. Reply to: Willful modulation of brain activity in disorders of consciousness, *New England Journal of Medicine*, 362: 1937-1938, 2010.
172. Kempton, M., Ettinger, U., Foster, R., Williams, S.C.R., Calvert, G.A., Hampshire, A., Zelaya, F.O., O’Gorman, R.L., McMorris, T., **Owen, A.M.** and Smith, M.S. Dehydration affects brain structure and function in healthy adolescents, *Human Brain Mapping*, 32:71-79, 2011.
173. Fernandez-Espejo, D., Bekinschtein, T., Monti, M.M., Pickard, J.D., Junque, C., Coleman, M.R. and **Owen, A.M.** Diffusion weighted imaging distinguishes the vegetative state from the minimally conscious state, *Neuroimage*, 54(1): 103-12, 2011.
174. Hampshire, A., Thompson, R., Duncan, J. and **Owen, A.M.** Lateral Prefrontal Cortex Subregions Make Dissociable Contributions during Fluid Reasoning. *Cerebral Cortex*, 21(1): 1-10. 2011.
175. Cruse, D., Monti, M.M. and **Owen, A.M.** Neuroimaging in disorders of consciousness: contributions to diagnosis and prognosis. *Future Neurology*, 6(2): 2011.
176. Bekinschtein, T., Manes, F., Villarreal, M., **Owen, A.M.** and Della Maggiore, V. Functional imaging reveals movement preparatory activity in the vegetative state. *Frontiers in Human Neuroscience*, 5: 1-11, 2011.
177. Huntley, J., Bor, D., Hampshire, A., **Owen, A.M.** and Howard, R. Working memory task performance and chunking in early Alzheimer’s disease. *The British Journal of Psychiatry*, 198: 398-403, 2011.

178. Bekinschtein, T.A., Davis, M.H., Rodd, J.M. and **Owen, A.M.** Why clowns taste funny: the relationship between humor and semantic ambiguity. *Journal of Neuroscience*, 31(26): 9665-9671, 2011.
179. Bruno, M.A., Fernandez-Espejo, D., Lehenbre, R., Tshibanda, L., Vanhaudenhuyse, A., Gosseries, O., Lommers, E., Napolitani, M. Noirhomme, Q., Boly, M., Papa, M., **Owen, A.M.**, Maquet, P., Laureys, S. and Soddu, A. Multimodal neuroimaging in patients with disorders of consciousness showing “functional hemispherectomy”. *Progress in Brain Research*, 193: 323-33, 2011.
180. May, J., Calvo-Merino, B., Delahunta, S., McGregor, W., Cusack, R., **Owen, A.M.**, Veldsman, M., Ramponi, C., and Barnard, P. Point in mental space: an interdisciplinary study of imagery in movement creation. *The Journal of Society for Dance Research*, 29(2): 402-430, 2011.
181. Cruse, D., Chennu, S., Chatelle, C., Bekinschtein, T.A., Fernandez-Espejo, D., Pickard, D.J., Laureys, S. and **Owen, A.M.** Bedside detection of awareness in the vegetative state. *Lancet*, 378(9809): 2088-94, 2011.
182. Monti, M.M., Pickard, J.D. and **Owen, A.M.** Visual cognition in disorders of consciousness: from V1 to top-down attention. *Human Brain Mapping*, 34(6): 1245-53, 2012.
183. Hampshire, A., Chaudry, A., **Owen, A.M.**, Roberts, A. Dissociable roles for lateral orbitofrontal cortex and lateral prefrontal cortex during preference driven reversal learning. *Neuroimage*, 59(4): 4102-12, 2012.
184. Cruse, D., Chennu, S., Chatelle, C., Fernández-Espejo, D., Bekinschtein, T. A., Pickard, J. D., Laureys, S., and **Owen, A.M.** The relationship between etiology and covert cognition in the minimally conscious state. *Neurology*, 78(11): 816-22, 2012.
185. Fallon, S., Williams-Gray, C.H., Barker, R.A., **Owen, A.M.** and Hampshire A. Prefrontal dopamine levels determine the balance between cognitive stability and flexibility. *Cerebral Cortex*, 23(2): 361-9, 2012.
186. Fernandez-Espejo, D., Soddu, A., Cruse, D., Palacios, E.M., Junque, C., Vanhaudenhuyse, E., Newcombe, V., Menon, D., Pickard, J., Laureys, S. and Owen, A.M. A role for the default mode network in the bases of disorders of consciousness. *Annals of Neurology*, 72: 335-343, 2012.
187. Chatelle, C., Chennu, S., Noirhomme, Q., Cruse, D., **Owen, A.M.** and Laureys, S. Brain-computer interfacing in disorders of consciousness. *Brain Injury*, 26(12): 1510-1522, 2012.
188. Naci, L., Monti, M., Cruse, D., Kubler, A., Sorger, B., Goebel, R., Kotchoubey, B. and **Owen, A.M.** Brain computer interfaces for communication with non-responsive patients. *Annals of Neurology*, 72(3): 312-323, 2012.
189. Cruse, D., Chennu, S., Fernandez-Espejo, D., Payne, W.L., Young, B. and **Owen, A.M.** Detecting awareness in the vegetative state: Electroencephalographic Evidence for attempted movements to command. *PLOS ONE*, 7(11): e49933, 2012.
190. Hampshire, A., Highfield, R., Parkin, B. and **Owen, A.M.** Fractionating human intelligence. *Neuron*, 76(6): 1225-1237, 2012.
191. **Owen, A.M.** Detecting consciousness: A role for neuroimaging. *Annual Review of Psychology*, 64:109-33, 2013.

192. Hampshire, A., Parkin, B., Cusack, R., Fernandez-Espejo, D., Allanson, J., Kamau, E., Pickard, J.D., and **Owen, A.M.** Assessing residual reasoning ability in overtly non-communicative patients using fMRI. *Neuroimage, Clinical*, 2: 174-183, 2013.
193. Peterson, A., Naci, L., Weijer, C. and **Owen, A.M.** A principled argument, but not a practical one. *AJOB Neuroscience*, 4(1): 52-63, 2013.
194. Cruse, D., Chennu, S., Chatelle, C., Bekinschtein, T.A., Fernandez-Espejo, D., Pickard, J.D., Laureys, S. and **Owen, A.M.** Reanalysis of “Bedside detection of awareness in the vegetative state: a cohort study” – Author’s reply. *Lancet*, 381(9863): 291-2, 2013.
195. Cruse, D., Thibaut, A., Demertzi, A., Nantes, J.C., Bruno, M-A., Gosseries, O., Vanhauzenhuysse, A., Bekinschtein, T., **Owen, A.M.** and Laureys, S. Actigraphy assessments of circadian sleep-wake cycles in the vegetative and minimally conscious states. *BMC Medicine*, 11:18, 2013.
196. Chennu, S., Noreika, V., Gueorguiev, D., Blenkmann, A., Kochen, S., Ibanez, A., Bekinschtein, T. and **Owen, A.M.** Expectation and attention in hierarchical auditory prediction. *Journal of Neuroscience*, 33(27): 11194-11205, 2013.
197. Nombela, C., Rae, C., Rowe, J., Barker, J., Grahn, J. and **Owen, A.M.** How often does music and rhythm improve patients' perception of motor symptoms in Parkinson's disease? *Journal of Neurology*, 260(5): 1404-1405, 2013.
198. Naci, L., Cusack, R., Jia, Z., V., Owen, **A.M.** The brain’s silent messenger – using selective attention to decode human thought for brain-based communication. *Journal of Neuroscience*, 33(22): 9385–9393, 2013.
199. Chennu, S., Alsufyani, A., Filetti, M., **Owen, A.M.** and Bowman, H. The cost of space independence in P300-BCI spellers. *Journal of NeuroEngineering and Rehabilitation*, 10:82, 2013.
200. Peterson, A., Naci, L., Weijer, C., Cruse, D., Fernandez-Espejo, D., Graham, M. and **Owen, A.M.** Assessing decision making capacity in the behaviorally non-responsive patient with residual covert awareness. *AJOB-Neuroscience*, 4(4): 3-14, 2013.
201. Naci, L. & **Owen, A.M.** Making every word count for vegetative patients. *JAMA Neurology*, 70(10): 1235-41, 2013.
202. MacDonald, A.A., Seergobin, K.N., **Owen, A.M.**, Tamjeedi, R., Monchi, O., Ganjavi, H., MacDonald, P.A. Differential effects of Parkinson’s disease and dopamine replacement on memory encoding and retrieval. *PLOS ONE*, 8(9): e74044, 2013.
203. Fallon, S., Hampshire, A., Williams-Gray, C.H., Barker, R. and **Owen, A.M.** Putative cortical dopamine levels affect cortical recruitment during planning. *Neuropsychologia*, 51(11): 2194-201, 2013.
204. Young, G.B., & **Owen, A.M.** Predictors of recovery of responsiveness in prolonged anoxic vegetative state. *Neurology*, 81:1274-1275, 2013.
205. Hampshire, A., MacDonald, A.A. and **Owen, A.M.** Hypoconnectivity and hyperfrontality in retired American football players. *Scientific Reports*, 3: 2972, 2013.

206. Chennu, S., Paola, F., Kamau, E., Monti, M., Allanson, J., Pickard, J.D., **Owen, A.M.** and Bekinschtein, T.A. Dissociable endogenous and exogenous attention in disorders of consciousness. *Neuroimage: Clinical*, 3: 450-461, 2013.
207. Fernandez-Espejo, D. & **Owen, A.M.** Detecting awareness after severe brain injury. *Nature Reviews Neuroscience*, 14(11): 801-9, 2013.
208. Nombela, C., Hughes, L., **Owen, A.M.** and Grahn, J. Into the groove: can rhythm influence Parkinson's disease? *Neuroscience and Biobehavioral Reviews*, 37(10): 2564-2570, 2013.
209. Hampshire, A., Parkin, B., Highfield, R. & **Owen, A.M.** Brief response to Ashton and colleagues regarding Fractionating Human Intelligence. *Personality and Individual Differences*, 60: 16-17, 2013.
210. Gibson, R.M., Chennu, S., **Owen, A.M.**, and Cruse, D. Complexity and familiarity enhance single-trial detectability of imagined movements with electroencephalography. *Clinical Neurophysiology*, S1388-2457(13): 01235-2, 2014.
211. Fernández-Espejo D, Norton L, **Owen AM**. The clinical utility of fMRI for identifying covert awareness in the vegetative state: a comparison of sensitivity between 3T and 1.5T. *PLOS ONE*, 9(4): e95082, 2014.
212. Cruse, D., Beukema, S.T., Chennu, S., Malins, J.G., **Owen, A.M.** and McRae, K. The reliability of the N400 in single subjects: Implications for patients with disorders of consciousness. *Neuroimage*, 4: 788-799, 2014.
213. Weijer, C., Peterson, A., Webster, F., Graham, M., Cruse, D., Fernandez-Espejo, D., Gofton, T., Gonzalez-Lara, L.E., Lazosky, A., Naci, L., Norton, L., Speechley, K., Young, G.B. and **Owen, A.M.** Ethics of neuroimaging after serious brain injury. *BMC Medical Ethics*, 15: 41, 2014.
214. Cruse, D., Norton, L., Gofton, T., Young, G. B., **Owen, A. M.** Positive prognostication from median-nerve somatosensory evoked cortical potentials. *Neurocritical Care*, 21(2): 238-44, 2014.
215. Hampshire, A. & **Owen, A.M.** Re: Comment about 'Fractionating Human Intelligence'. Non-existent flaws in the original article and their relation to limitations of the P-FIT model. *Intelligence*, 46: 333-340, 2014.
216. **Owen, A.M.** Diagnostic accuracy of brain imaging in the vegetative state. *Nature Reviews Neurology*, 10: 370-371, 2014.
217. Peterson, A., Norton, L., Naci, L., **Owen, A.M.** and Weijer, C. Toward a science of brain death. *The American Journal of Bioethics*, 14(8): 29-31, 2014.
218. Graham, M., Weijer, C., Peterson, A., Naci, L., Cruse, D., Fernández-Espejo, D., Gonzalez-Lara, L., and **Owen, A.M.** Acknowledging awareness: Informing families of individual research results for patients in vegetative states. *Journal of Medical Ethics*, 0:1-5, 2014.
219. Cruse, D., Gantner, I., Soddu, A., and **Owen, A. M.** Lies, damned lies, and diagnoses: Estimating the clinical utility of assessments of covert awareness in the vegetative state. *Brain Injury*, 28(9): 1197-201, 2014.

220. MacDonald, A.A., Seergobin, K.N., Tamjeedi, R., **Owen, A.M.**, Provost, J.S., Monchi, O., Ganjavi, H. and MacDonald, P.A. Examining dorsal striatum in cognitive effort using Parkinson's disease and fMRI. *Annals of Clinical and Translational Neurology*, 1(6): 390-400, 2014.
221. Hiebert, N.M., Vo, A., Hampshire, A., **Owen, A.M.**, Seergobin, K.N. and MacDonald, P.A. Striatum in stimulus-response learning via feedback and in decision making. *Neuroimage*, 101: 448-57, 2014.
222. Nombela, C., Rowe, J.B., Winder-Rhodes, S.E., Hampshire, A., **Owen, A.M.**, Breen, D.P., Duncan, G.W., Khoo, T.K., Yarnall, A.J., Firbank, M.J., Chinnery, P.F., Robbins, T.W., O'Brien, J.T., Brooks, D.J., Burn, D.J., the ICICLE-PD study group and Barker, R.A. Genetic impact on cognition and brain function in newly diagnosed Parkinson's disease: ICICLE-PD study. *Brain*, 137(Pt 10): 2743-58, 2014.
223. Das, T., Abeyasinghe, P., Crone, J., Sosnowski, A., Laureys, S., **Owen, A.M.** and Soddu, A. Highlighting the structure-function relationship of the brain with the Ising Model and Graph Theory. *BioMed Research International*, 2014(237898): 1-14, 2014.
224. Naci, L., Cusack, R., Anello, M. and **Owen, A.M.** A common neural code for similar conscious experiences in different individuals. *Proceedings of the National Academy of Sciences*, 111(39): 14277-14282, 2014.
225. Chennu, S., Finoia, P., Kamau, E., Allanson, J., Williams, G. B., Monti, M. M., Noreika, V., Arnatkeviciute, A., Canales-Johnson, A. S., Olivares, F., Cabezas-Soto, D., Menon, D. K., Pickard, J. D., **Owen, A. M.** & Bekinschtein, T. A. Spectral signatures of reorganised brain networks in disorders of consciousness. *PLOS Computational Biology*, 10(10): e1003887, 2014.
226. Ferreira, N., **Owen, A.M.**, Mohan, A., Corbett, A. and Ballard, C. Associations between cognitively stimulating leisure activities, cognitive function and age-related cognitive decline. *Int. J. Geriatric Psychiatry*, 30(4): 422-30, 2014.
227. Gibson, R.M., Fernandez-Espejo, D., Gonzalez-Lara, L.E., Kwan, B.Y., Lee, D.H., **Owen, A.M.** and Cruse, D. Multiple tasks and neuroimaging modalities increase the likelihood of detecting covert awareness in patients with Disorders of Consciousness, *Frontiers in Human Neuroscience*, 8: 950, 2014.
228. Lutkenhoff, E.S., Rosenberg, M., Chiang, J., Zhang R., Pickard, J.D., **Owen, A.M.** & Monti, M.M. Optimized brain extraction script for pathological brains (optiBET). *PLOS ONE*, 9(12): e115551, 2014.
229. MacDonald, A.A., Naci, L, MacDonald, P.A. & **Owen, A.M.** Anesthesia and neuroimaging: Investigating the neural correlates of unconsciousness. *Trends in Cognitive Sciences*, 19(2): 100-107, 2015.
230. Peterson, A., Cruse, D., Naci, L., Weijer, C. & **Owen, A.M.** Risk, diagnostic error, and the clinical science of consciousness. *Neuroimage: Clinical*, 7:588-597, 2015.
231. Cavaliere C, Aiello M, Di Perri C , Fernandez-Espejo D, **Owen AM**, Soddu A. Diffusion tensor imaging and white matter abnormalities in patients with disorders of consciousness. *Frontiers in Neuroscience*, 8:1028, 2015.

232. Monti, M.M., Rosenberg, M., Finioia, P., Kamau, E., Pickard, J.D. and **Owen, A.M.** Thalamo-frontal connectivity mediates top-down cognitive functions in disorders of consciousness. *Neurology*, 2:167-73, 2015.
233. Winder-Rhodes, S., Hampshire, A., Rowe, J., Peelle, J., Robbins, T., **Owen, A.M.** & Barker, R. Association between MAPT haplotype and memory function in Parkinson's disease and healthy aging. *Neurobiology of Aging*, 36(3): 1519-28, 2015.
234. Lee, G., Byram, A.C., **Owen, A.M.**, Ribary, U., Stoessl, J., Townson, A., Stables, C. & Illes, J. Canadian perspectives on the clinical actionability of neuroimaging in disorders of consciousness. *The Canadian Journal of Neurological Sciences*, 42(02): 96-105, 2015.
235. Graham, M., Weijer, C., Cruse, D., Fernandez-Espejo, D., Gofton, T., Gonzalez-Lara, L.E., Lazosky, A., Naci, L., Norton, L., Peterson, A., Speechley, K.N., Young, B & **Owen, A.M.** An ethics of welfare for patients diagnosed as vegetative with covert awareness. *AJOB Neuroscience*, 6: 31-41, 2015.
236. Mak, E., Li, S., Williams, G.B., Firbank, M., Lawson, R., Yarnall, A., Duncan, G., **Owen, A.M.**, Khoo, T., Brooks, D., Rowe, J., Barker, R. & O'Brien, J. Baseline and longitudinal grey matter changes in newly diagnosed Parkinson's disease: ICICLE-PD study. *Brain*, 138(Pt 10): 2974-86, 2015.
237. Gruszka, A & **Owen, A.M.** Temperamental variation in learned irrelevance in humans. *Current Issues in Personality Psychology*, 3(2): 94-104, 2015.
238. Weijer C., Bruni T., Gofton T., Young G.B., Norton L., Peterson A. & **Owen A.M.** Ethical considerations in functional magnetic resonance imaging research in acutely comatose patients. *Brain*, 139(Pt 1): 292-9, 2015.
239. Osborne, N.R., **Owen, A.M.** & Fernández-Espejo, D. The dissociation between command following and communication in disorders of consciousness: an fMRI study in healthy subjects. *Frontiers in Human Neuroscience*, 9:493, 2015.
240. Kirschner, A., Cruse, D., Chennu, S., **Owen, A.M.** & Hampshire, A. A P300 based cognitive assessment battery. *Brain and Behavior*, 5(6): e00336, 2015.
241. Robertson, B., Hiebert, N.M., **Owen, A.M.**, Seergobin, K.N. & MacDonald, P.A. Dorsal striatum mediates cognitive control, not cognitive effort *per se*, in decision-making: An event-related fMRI study. *Neuroimage*, 114: 170-184, 2015.
242. Lutkenhoff, E.S., Chiang, J., Tshibanda, L., Kamau, E., Kirsch, M., Pickard, J., Laureys, S., **Owen, A.M.** & Monti, M. Thalamic and extrathalamic mechanisms of consciousness after severe brain injury. *Annals of Neurology*, 78(1): 68-76, 2015.
243. Fiacconi, C.M., **Owen, A.M.** Using psychophysiological measures to examine the temporal profile of verbal humor elicitation. *PLOS ONE*, 10(9): e0135902, 2015.
244. Fernández-Espejo, D., Rossit, S. & **Owen, A.M.** A thalamocortical mechanism for the absence of overt motor behavior in covertly aware patients. *JAMA Neurology*, 72(12): 1442-50, 2015.

245. Fogel, S.M., Ray, L.B., Binnie, L. & **Owen, A.M.** How to become an expert: A new perspective on the role of sleep in the mastery of procedural skills. *Neurobiology of Learning and Memory*, 125: 236-248, 2015.
246. Corbett, A., **Owen, A.M.**, Hampshire, A., Grahn, J., Stenton, R., Dajani, S., Burns, A., Howard, R., Williams, N., Williams, G., Ballard, C. The effect of an online cognitive training package in healthy older adults: an online randomized controlled trial. *The Journal of Post-Acute and Long-Term Care Medicine (JAMDA)*, 16: 990-997, 2015.
247. Lant, N.D., Gonzalez-Lara, L.E., **Owen, A.M.**, Fernandez-Espejo, D. Relationship between the anterior forebrain mesocircuit and the default mode network in the structural bases of disorders of consciousness. *Neuroimage: Clinical*, 10: 27-35, 2015.
248. Young, G.B. & **Owen, A.M.** Evaluating the potential for recovery of consciousness in the intensive care unit. *Continuum Neurocritical Care*, 21(5): 1397-1410, 2015.
249. Ray, L., Sockeel, S., Soon, M., Bore, A., Myhr, A., Stojanoski, B., Cusack, R., **Owen, A.M.**, Doyon, J., Fogel, S. Expert and crowd-sourced validation of an individualized sleep spindle detection method employing complex demodulation and individualized normalization. *Frontiers in Human Neuroscience*, 9: 507, 2015.
250. Naci, L., Sinai, L., **Owen, A.M.** Detecting and interpreting conscious experiences in behaviorally non-responsive patients. *Neuroimage*, 145(Pt B): 304-313, 2015.
251. Hampshire, A., Hellyer, P.J., Parkin, B., Hiebert, N., MacDonald, P., **Owen, A.M.**, Leech, R., Rowe, J. Network mechanisms of intentional learning. *Neuroimage*, 127: 123-134, 2016.
252. Gill, D.P., Gregory, M.A., Shellington, E.M., Liu-Ambrose, T., Shigematsu, R., Zou, G., Shoemaker, K., **Owen, A.M.**, Hachinski, V., Stuckey, M., Petrella, R.J. Group-based exercise and cognitive-physical training in older adults with self-reported cognitive complaints: The multiplicity, mind-motor (M4) study protocol. *BMC Geriatrics*, 16:17, 2016.
253. Illes, J., **Owen, A.M.**, & Byram, A.C. for the MCS Neuroimaging Workgroup. Operational neuroimaging for disorders of consciousness: The Canadian context. *The Canadian Journal of Neurological Sciences*, 00:1-3, 2016.
254. Abdalmalak, A., Milej, D., Diop, M., Naci, L., **Owen, A.M.**, St. Lawrence, K. Assessing the feasibility of time-resolved fNIRS to detect brain activity during motor imagery. *Proc. SPIE9690, Clinical and Translational Neurophotonics; Neural Imaging and Sensing; and Optogenetics and Optical Manipulation*, 969002, 2016.
255. Guldenmund, P., Gantner, I.S., Baquero, K., Das, T., Demertzi, A., Boveroux, P., Bonhomme, V., Vanhaudenhuyse, A., Bruno, M-A., Gosseries, O., Noirhomme, Q. Kirsch, M., Boly, M., **Owen, A.M.**, Laureys, S., Gómez, F., Soddu, A. Propofol-induced frontal cortex disconnection: a study of resting state networks, total brain connectivity, and mean BOLD signal oscillation frequencies. *Brain Connectivity*, (6) 3: 225-237, 2016.
256. Bayne, T., Hohwy, J. & **Owen, A.M.** Are there levels of consciousness? *Trends in Cognitive Sciences*, 20(6): 405-413, 2016.
257. Tomaiuolo, F., Cecchetti, L., Gibson, R.M., Logi, F., **Owen, A.M.**, Malasoma, F., Cozza, S., Pietrini, P. & Ricciardi, E. Progression from vegetative to minimally conscious state is associated

- with changes in brain neural response to passive tasks: A longitudinal single-case fMRI study. *Journal of the International Neuropsychological Society*, 22: 1-11, 2016.
258. Gruszka, A., Bor, D., Barker, R.R., Necka, E., **Owen, A.M.** The role of executive processes in working memory deficits in Parkinson's Disease. *Polish Psychological Bulletin*, 47(1): 123-130, 2016.
 259. Fernández-Espejo D, **Owen AM.** Peripheral causes of cognitive motor dissociation in patients with vegetative or minimally conscious state - Letter in Reply. *JAMA Neurology*, 73(5): 608-609, 2016.
 260. Fallon, S. J., Hampshire, A., Barker, R. A., & **Owen, A. M.** Learning to be inflexible: enhanced attentional biases in Parkinson's disease. *Cortex*, 82:24-34, 2016.
 261. Beukema, S., Gonzalez-Lara, L.E., Finoia, P., Kamau, E., Allanson, J., Chennu, S., Gibson, R.M., Pickard, J.D., **Owen, A.M.**, Cruse, D. A hierarchy of event-related potential markers of auditory processing in disorders of consciousness. *Neuroimage: Clinical*, 12: 359-371, 2016.
 262. Fiacconi, C.M. & **Owen, A.M.** Using facial electromyography to detect preserved emotional processing in the vegetative state: A proof-of-principle study. *Clinical Neurophysiology*, 127: 3000-3006, 2016.
 263. Byram, A.C., Lee, G., **Owen, A.M.**, Ribary, U., Stoessl, A.J., Townson, A. & Illes, J. Ethical and clinical considerations at the intersection of functional neuroimaging and disorders of consciousness. *Cambridge Quarterly of Healthcare Ethics*, 25: 613-622, 2016.
 264. Huntley, J.D., Hampshire, A., Bor, D., **Owen, A.M.** & Howard, R.J. Adaptive working memory strategy training in early Alzheimer's disease: a randomised controlled trial. *British Journal of Psychiatry*, 210(1): 61-66, 2016.
 265. Huntley, J.D., Hampshire, A., Bor, D., **Owen, A.M.** & Howard, R.J. The importance of sustained attention in early Alzheimer's disease. *International Journal of Geriatric Psychiatry*, 32(8): 860-867, 2016.
 266. Gibson, R., Chennu, S., Fernández-Espejo, D., Naci, L., **Owen, A.**, Cruse, D. Somatosensory attention identifies both overt and covert awareness in disorders of consciousness. *Annals of Neurology*, 80(3): 412-23, 2016.
 267. Fang, Z., Sergeeva, V., Ray, L., Viczko, J., **Owen, A.M.** & Fogel, S. Sleep spindles and intellectual ability: Epiphenomenon or directly related? *Journal of Cognitive Neuroscience*, 14: 1-16, 2016.
 268. Naci, L., Graham, M., **Owen, A. M.** Weijer, C. Covert narrative capacity: A cross-section of the preserved mental life in patients thought to lack consciousness. *Annals of Clinical and Translational Neurology*, 4(1): 61-70, 2016.
 269. Gibson, R., Chennu, S., Fernández-Espejo, D., Naci, L., **Owen, A.**, Cruse, D. Reply to 'Is command following unrelated to top-down attention in consciousness'. *Annals of Neurology*, 81(1): 160-161, 2017.
 270. Sinai, L., **Owen, A.M.**, Naci, L. Mapping preserved real-world cognition in brain-injured patients. *Frontiers in Bioscience*, 22: 815-823, 2017.

271. Cruse, D., Fattizzo, M., **Owen, A.M.**, Fernández-Espejo, D. Why use a mirror to assess visual pursuit in prolonged disorders of consciousness? Evidence from healthy control participants. *BMC Neurology*, 17:14, 2017.
272. Paula, D.R., Ziegler, E., Abeyasinghe, P.M., Das, T.K., Cavaliere, C., Aiello, M., Heine, L., di Perri, C., Demertizi, A., Noirhomme, Q., Charland-Verville, V., Vanhaudenhuyse, A., Stender, J., Gomez, F., Tshibanda, L., Laureys, S., **Owen, A.M.**, Soddu, A. A method for independent component graph analysis of resting-state fMRI. *Brain and Behavior*, 7(3): e00626, 2017.
273. Zheng, Z.S., Reggente, N., Lutkenhoff, E., **Owen, A.M.**, Monti, M.M. Disentangling disorders of consciousness: insights from diffusion tensor imaging and machine learning. *Human Brain Mapping*, 38 (1): 431-443, 2017.
274. Wiseman, R. & **Owen, A.M.** Turning the other lobe: Directional biases in brain diagrams. *I-Perception*, 8(3): 2041669517707769, 2017.
275. Gruszka-Gosiewska, A., Hampshire, A., Barker, R.A., **Owen, A.M.** Normal aging and Parkinson's disease are associated with the functional decline of distinct frontal-striatal circuits. *Cortex*, 93: 178-192, 2017.
276. Brenkel, M., Shulman, K., Hazan, E., Hermann, N., **Owen, A.M.** Assessing capacity in the elderly: comparing the MoCA with a novel computerized battery of executive function. *Dementia and Geriatric Cognitive Disorders*, 7: 249-256, 2017.
277. Abdalmalak, A., Milej, D., Diop, M., Shokouhi, M., Naci, L., **Owen, A.M.** and St. Lawrence, K. Can time-resolved NIRS provide the sensitivity to detect brain activity during motor imagery consistently? *Biomedical Optics Express*, 8(4): 2162-2172, 2017.
278. Mak, E., Su, L., Williams, G.B., Firbank, M.J., Lawson, R.A., Yarnall, A.J., Duncan, G.W., Mollenhauer, B., **Owen, A.M.**, Khoo, T.K., Brooks, D.J., Rowe, J.B., Barker, R.A., Burn, D.J., O'Brien, J.T. Longitudinal whole brain atrophy and ventricular enlargement in non-demented Parkinson's disease. *Neurobiology of Aging*, 55: 78-90, 2017.
279. **Owen, A.M.** Functional neuroimaging after severe anoxic injury in children may reveal preserved, yet covert, cognitive function. *Human Brain Mapping*, 38(10): 4832-4833, 2017.
280. Graham, M., **Owen, A.M.**, Çipi, K., Weijer, C., Naci, L. Minimizing the harm of accidental awareness under general anesthesia. New perspectives from patients misdiagnosed as being in a vegetative state. *Anesthesia and Analgesia*, 126(3): 1073-1076, 2017.
281. Hiebert NM, **Owen AM**, Seergobin KN, and MacDonald PA. Dorsal striatum mediates deliberate decision making, not late-stage, stimulus-response learning. *Human Brain Mapping*, 38 (12): 6133-6156, 2017.
282. Fallon, S.J., Bor, D., Hampshire, A., Barker, R.A. & **Owen, A.M.** Spatial structure normalises working memory performance in Parkinson's disease. *Cortex*, 96: 73-82, 2017.
283. Sergeeva, V., Viczko, J., Ray, L., **Owen, A.M.** & Fogel, S. Sleep-dependent motor sequence memory consolidation in individuals with periodic limb movements. *Sleep Medicine*, 40: 23-32, 2017.

284. Bayne, T, Hohwy, J., **Owen, A.M.** Reforming the taxonomy in disorders of consciousness. *Annals of Neurology*, 82: 866-872, 2017.
285. Abdalmalak, A., Milej, D., Norton, L., Debicki, D.B., Gofton, T., Diop, M., **Owen, A.M.**, St. Lawrence, K. Single-session communication with a locked-in patient by functional near-infrared spectroscopy. *Neurophotonics*, 4(4): 040501, 2017
286. Viczko, J., Sergeeva, V., Ray, L.B., **Owen, A.M.** & Fogel, S.M. Does sleep facilitate the consolidation of allocentric or egocentric representations of implicitly learned visual-motor sequence learning? *Learning & Memory*, 25: 67-77, 2018.
287. Bayne, T, Hohwy, J., **Owen, A.M.** Response to ‘Minimally conscious state or cortically mediated state?’ *Brain*, 141(4): e27, 2018.
288. Brenkel, M., Whaley, K., Herrmann, N., Crawford, K., Hazan, E., Cardiff, L., **Owen, A.M.**, Shulman, K. A case for the standardized assessment of testamentary capacity. *Canadian Geriatrics Journal*, 21(1): 26-31, 2018.
289. Boa Sorte Silva N.C., Gill D.P., **Owen A.M.**, Liu-Ambrose T, Hachinski V, Shigematsu R, Petrella R.J. Cognitive changes following multiple-modality exercise and mind-motor training in older adults with subjective cognitive complaints: The M4 study. *PLOS ONE*, 13(4): e0196356, 2018.
290. Graham, M., **Owen, A. M.**, Weijer, C. Naci, L. Using neuroimaging to detect covert awareness in the severely brain-injured and patients who become accidentally aware under general anesthesia. *Frontiers in Bioscience*, 10: 337-349, 2018.
291. Haugg, A., Cusack, R., Lara-Gonzalez, L., Sorger, B., **Owen, A.M.**, Naci, L. Do patients thought to lack consciousness retain the capacity for internal as well as external awareness? *Frontiers of Neurology*, 9: 492, 2018.
292. Abeyasinghe, P., Ribeiro de Paula, D., Khajehabdollahi, S., Valluri, S.R., **Owen, A.M.**, Soddu, A. Role of dimensionality in predicting the spontaneous behaviour of the brain using the classical ising model and the ising model implemented on the structural connectome. *Brain Connectivity*, doi: 10.1089/brain.2017.0516, 2018.
293. Stojanoski, B., Lyons, K.M., Pearce, A.A.A., Owen, A.M. Targeted training: converging evidence against the transferable benefits of online brain training on cognitive function. *Neuropsychologia*, 117: 541-550, 2018.
294. Fogel, S.M., Ray, L.B., Sergeeva, V., De Koninch, J., **Owen, A.M.** A novel approach to dream content analysis reveals links between learning-related dream incorporation and cognitive abilities. *Frontiers of Psychology*, 9:1398, 2018.
295. Naci L., Haugg A., MacDonald A., Anello M., Houldin E., Naqshbandi S., Gonzalez-Lara L.E., Arango M., Harle C., Cusack R., **Owen A.M.** Functional diversity of brain networks supports consciousness and verbal intelligence. *Scientific Reports*, 8:13259, 2018.
296. Wild, C.J., Nichols, E.S., Battista M.E., Stojanoski, B., **Owen, A.M.** Dissociable effect of self-reported daily sleep duration on high-level cognitive abilities. *Sleep*, 41(12) 2018.
297. Stojanoski, B., Benoit, A., Van Den Berg, N., Ray, L.B., **Owen, A.M.**, Shahidi Zandi, A., Quddus, A., Comeau, F.J.E., Fogel, S.M. Sustained vigilance is negatively impacted by mild and acute sleep

- loss reflected by reduced capacity for decision-making, motor preparation and execution. *Sleep*, 42 (1), 2018.
298. Hiebert, N., **Owen, A.M.**, Ganjavi, H., Mendonca, D., Jenkins, M., Seergobon, K., MacDonald, P. Dorsal striatum does not mediate feedback-based, stimulus-response learning. *Neuroimage*, 185:455-470, 2018.
299. Minett, T., Su, L., Mak, E., Williams, G., Firbank, M., Lawson, R.A., Yarnall, A.J., Duncan, G.W., **Owen, A.M.**, Khoo, T.K., Brooks, D.J., Rowe, J.B., Barker, R.A., Burn, D., O'Brien, J.T. Longitudinal diffusion tensor imaging changes in early Parkinson's disease: ICICLE-PD study. *Journal of Neurology*, 265(7):1528-1539, 2018.
300. Khan, A.R., Hiebert, N.M., Vo, A., Wang, B.T., **Owen, A.M.**, Seergobin, K.N., MacDonald, P.A. Biomarkers of Parkinson's disease: Striatal sub-regional structural morphometry and diffusion MRI. *NeuroImage: Clinical*, pii: S2213-1582(18)30345-0, 2018.
301. Demertzi, A., Tagliazucchi, E., Dehaene, S., Deco, G., Partfeld, P., Raimondo, F., Martial, C., Fernandez-Espejo, D., Rohaut, B., Voss, H.U., Schiff, N.D., **Owen, A.M.**, Laureys, S., Naccache, L., Sitt, J.D. Human consciousness is supported by dynamic complex patterns of brain signal coordination. *Science Advances*, 5:7603, 2019.
302. Fang, Z., Ray, L.B., **Owen, A.M.**, Fogel, S. Brain activation time-locked to sleep spindles associated with human cognitive abilities. *Frontiers in Neuroscience*, 13(46):1-16, 2019.
303. Michel, M., Beck, D., **Owen, A.M.**, et al. Opportunities and challenges for a maturing science of consciousness. *Nature Human Behaviour*, 3: 104-107, 2019.
304. Bruni, T., Graham, M., Norton, L., Gofton, T., **Owen, A.M.**, Weijer, C. Informed consent for functional magnetic resonance imaging research on comatose patients following severe brain injury: balancing the social benefits of research against patient autonomy. *Journal of Medical Ethics*, 0: 1-5, 2019.
305. Hodgson, T.L., Hermens, F., Pennington, K., Pickering, J.S., Ezard, G., Clarke, R., Sharma, J. and **Owen, A.M.** Eye movements in the "Morris Maze" spatial working memory task reveal deficits in strategic planning. *Journal of Cognitive Neuroscience*, 31(4): 497-509, 2019.
306. Stafford, C.A., **Owen, A.M.**, Fernandez-Espejo, D. The neural basis of external responsiveness in prolonged disorders of consciousness. *NeuroImage: Clinical*, 22: 101791, 2019.
307. Van den Berg, N.H., Al-Kuwatli, J., Paulin, J., Ray, L.B., **Owen, A.M.**, Fogel, S.M. Sleep preferentially enhances memory for a cognitive strategy but not the implicit motor skills used to acquire it. *Neurobiology of Learning and Memory*, 161:135-142, 2019.
308. **Owen, A.M.** The Search for Consciousness. *Neuron*, 102(3): 526-528, 2019.
309. Houldin E., Fang Z., Ray L.B., **Owen A.M.**, Fogel S.M. Towards a Complete Taxonomy of Resting State Networks Across Wakefulness and Sleep: An Assessment of Spatially Distinct Resting State Networks Using Independent Component Analysis. *Sleep: Journal of Sleep Research & Sleep Medicine*, 142(3), 2019.

310. Honarmand, K., Malik, S., Wild, C., Gonzalez-Lara, L.E., McIntyre C., **Owen, A.M.**, Slessarev, M. Feasibility of web-based neurocognitive battery for assessing cognitive function in critical illness survivors. *PLOS ONE*, 14(4):e0215203, 2019.
311. Luppi, A.I., Craig, M.M., Pappas, I., Finoia, P., Williams, G.B., Allanson, J., Pickard, J.D., **Owen, A.M.**, Naci, L., Menon, D.K., Stamatakis, E.A. Consciousness-specific dynamic interactions of brain integration and functional diversity. *Nature Communications*, 10 (4616), 2019.
312. Peterson, A., **Owen, A.M.**, Karlawish, J. Alive inside. *Bioethics*, 00:1-11, 2019.
313. Fang, Z., Ray, L.B., Houldin, E., Smith, D., **Owen, A.M.**, Fogel, S.M. Sleep spindle-dependent functional connectivity correlates with cognitive abilities. *Journal of Cognitive Neuroscience*, 1-22, 2019.
314. Abdalmalak, A., St.Lawrence, K., Milej, D., Cohen, D.J.F., Ssali, T., Anazodo, U., Diop, M., **Owen, A.M.** Using fMRI to investigate the potential cause of inverse oxygenation reported in fNIRS studies of motor imagery. *Neuroscience Letters*, 714(134607), 2019.
315. Peterson, A., **Owen, A.M.** Confronting the Gray Zone after Severe Brain Injury. *Emerging Topics in Life Sciences*, <https://doi.org/10.1042/ETLS2019011>, 2019.
316. El-Baba, M., Lewis, D.J., Fang, Z, **Owen, A.M.**, Fogel, S.M., Morton, J.B. Functional Connectivity Dynamics Slow with Descent from Wakefulness to Sleep. *PLoS ONE* 14(12): e0224669. <https://doi.org/10.1371/journal.pone.0224669>, 2019.
317. Tung, J., Speechley, K.N., Gofton, T., Gonzalez-Lara, L.E., Graham, M., Naci, L., Peterson, A.H., **Owen, A.M.**, Weijer, C. Towards the assessment of quality of life in patients with disorders of consciousness. *Quality of Life Research*, <https://doi.org/10.1007/s11136-019-02390-8>, 2019.
318. Sternin, A., Burns, Alistair A.B., **Owen, A.** 35 Years of Computerized Cognitive Assessment of Aging – Where are we now? *Diagnostics*, 9(3): 114, 2019.
319. Varley, T.F., Luppi, A.I., Pappas, I., Naci, L., Adapa, R., **Owen, A.M.**, Menon, D.K., Stamatakis, E.A. Consciousness & brain functional complexity in propofol anaesthesia. *Scientific Reports*, 10(1018), 2020.
320. Hiebert, N.M., Lawrence, M.R., Ganjavi, H., Watling, M., **Owen, A.M.**, Seergobin, K.N, MacDonald, P.A. Striatum-mediated deficits in stimulus-response learning and decision making in OCD. *Frontiers in Psychiatry*, 11(13), 2020.
321. Abdalmalak, A., Milej, D., Lawrence, C.M., Khan, A.R., Mamadou, D., **Owen, A.M.**, St Lawrence, K. Assessing time-resolved fNIRS for brain-computer interface applications of mental communication. *Frontiers in Neuroscience*, 14:105, 2020.
322. Silva, N.C.B.S., Nagamatsu, L.S., Gill, D.P., **Owen, A.M.**, Petrella, R.J. Brain functional connectivity adaptations following multiple-modality exercise and mind-motor training in older adults at risk of dementia. *Frontiers in Aging Neuroscience*, 12(22), 2020.
323. Honarmand, K., Lalli, R.S., Priestap, F., Chen, J.L., McIntyre, C.W., **Owen, A.M.**, Slessarev, M. Natural history of cognitive impairment in critical illness survivors: A systematic review. *American Journal of Respiratory and Critical Care Medicine/AJRCCM*, <https://doi.org/10.1164/rccm.201904-0816CI>, 2020.

324. Popiel, N.J.M, Khajehabdollahi, S., Abeyasinghe, P.M., Riganello, F., Nichols, E., **Owen, A.M.**, Soddu, A. The Emergence of Integrated Information, Complexity, and ‘Consciousness’ at Criticality. *Entropy*, 22 (339), 2020.
325. Peterson, A., **Owen, A.M.**, Karlawish, J. Translating the discovery of covert consciousness into clinical practice. *JAMA Neurology*, doi:10.1001/jamaneurol.2020.0232, 2020.
326. Stafford, C.A., Stojanoski, B., Wild, C.J., Brewer-Deluce, D., **Owen, A.M.** Concussion related deficits in the general population predict impairments in varsity footballers. *Journal of Neurology*, doi.org/10.1007/s00415-020-09749-9, 2020.
327. Nichols, E.S., Wild, C.J., Stojanoski, B., Battista, M.E., **Owen, A.M.** Bilingualism affords no general cognitive advantages: a population study of 11,000 people. *Psychological Science*, DOI: 10.1177/0956797620903113, 2020.
328. **Owen, A.M.** Improving diagnosis and prognosis in disorders of consciousness. *Brain*, 143(4): 1050–1053, 2020.
329. Abeyasinghe, P.M., Aiello, M., Nichols, E.S., Cavaliere, C., Florenzo, S., Masotta, O., Borrelli, P., **Owen, A.M.**, Estraneo, A., Soddu, A. Consciousness and the Dimensionality of DOC Patients via the Generalized Ising Model. *Journal of Clinical Medicine*, 9 (1342), doi:10.3390/jcm9051342, 2020.
330. Kandeepan, S., Rudas, J., Gomez, F., Stojanoski, B., Valluri, S. **Owen, A.M.**, Naci, L., Nichols, E.S., Soddu, A. Modeling an auditory stimulated brain under altered states of consciousness using the generalized ising model. *NeuroImage*, 223, 117367, 2020.
331. Kazazian, K, Norton, L., Gofton, E., Debicki, D., **Owen, A.M.** Cortical function in acute severe traumatic brain injury and at recovery: A longitudinal fMRI case study. *Brain Sciences*, 10(9) 604, 2020.
332. Stojanoski, B., Wild, C.J., Battista, M.E., Nichols, E.S., **Owen, A.M.** Brain training habits are not associated with generalized benefits to cognition: An online study of over 100 “brain trainers”. *Journal of Experimental Psychology: General*, doi: 10.1037/xge0000773, 2020.
333. Boa Sorte Silva, N.C., Gill, D.P., Nagamatsu, L.S., **Owen, A.M.**, Petrella, R.J. Systolic blood pressure dipping may be associated with mobility impairment and brain volume in community-dwelling older adults: An exploratory study. *Experimental Gerontology*, 141, 1-10, 2020.
334. Duclos, C., Norton, L., Laforge, G., Frantz, A., Maschke, C., Badawy, M., Letourneau, J., Slessarev, M., Gofton, T., Debicki, D., **Owen, A.M.**, Blain-Moraes, S. Protocol for the Prognostication of Consciousness Recovery Following a Brain Injury. *Frontiers in Human Neuroscience*, 14(582125), 2020.
335. Comanducci, A., Boly, M., Claassen, J., De Lucia, M., Gibson, R.M., Juan, E., Laureys, S., Naccache, L., **Owen, A.M.**, Rosanova, M., Roessetti, A.O., Schnakers, C., Sitt, J., Schiff, N.D., Massimini, M. Clinical and advanced neurophysiology in the prognostic and diagnostic evaluation of disorders of consciousness: review of an IFCN-endorsed expert group. *Clinical Neurophysiology*, 131(11): 2736-2765, 2020.

336. Laforge, G., Gonzalez-Lara, L.E., **Owen, A.M.**, Stojanoski, B. Individualized Assessment of Residual Cognition in Patients with Disorders of Consciousness. *NeuroImage: Clinical*, 28(102472), 2020.
337. Lyons, K.M, Stevenson, R.A., **Owen, A.M.**, Stojanoski, B. Examining the relationship between measures of autistic traits and neural synchrony during movies in children with and without autism. *NeuroImage: Clinical*, 28 (102477), 2020.
338. Gibson, R.M., Ray, L.B., Laforge, G., **Owen, A.M.**, Fogel, S.M. 24-h polysomnographic recordings and electrophysiological spectral analyses from a cohort of patients with chronic disorders of consciousness. *Journal of Neurology*, 267(12):3650-3663, 2020.
339. Zilio, F., Gomez-Pilar, J., Cao, S., Zhang, J., Zang, D., Qi, Z., Tan, J., Hiromi, T., Wu, X., Fogel, S., Huang, Z., Hohmann, M.R., Formina, T., Synofzik, M., Grosse-Wentrup, M., **Owen, A.M.**, Northoff, G. Are intrinsic neural timescales related to sensory processing? Evidence from abnormal behavioural states. *NeuroImage*, 226:117579, 2021
340. Abeyasinghe, P. Aiello, M., Cavaliere, C., **Owen, A.M.**, Soddu, A. A comparison of diffusion tractography techniques in simulating the generalized Ising model to predict the intrinsic activity of the brain. *Brain Structure and Function*, <https://doi.org/10.1007/s00429-020-02211-6>, 2021.
341. Regev, M., Halpern, A.R., **Owen, A.M.**, Patel, A.D., Zatorre, R.J. Mapping specific mental content during musical imagery. *Cerebral Cortex*, bhab036, <https://doi.org/10.1093/cercor/bhab036>, 2021.
342. Scolding, N., **Owen, A.M.**, Keown, J. Prolonged disorders of consciousness: a critical evaluation of the new UK guidelines. *Brain*, DOI: 10.1093/brain/awab063, 2021.
343. Boa Sorte Silva, N.C., Petrella, A.F.M., Christopher, N., Marriott, C.F.S., Gill, D.P., **Owen, A.M.**, Petrella, R.J. The Benefits of High-Intensity Interval Training on Cognition and Blood Pressure in Older Adults with Hypertension and Subjective Cognitive Decline: Results from the Heart & Mind Study. *Frontiers in Aging Neuroscience*, 1–17, <https://doi.org/10.3389/fnagi.2021.643809>, 2021.
344. Erez, J., Gagnon, M-E., **Owen, A.M.** Differentiating Real-World Autobiographical Experiences without Recourse to Behaviour. *Brain Sciences*, 11 (521), <https://doi.org/10.3390/brainsci11040521>, 2021.
345. Sternin, A., McGarry, L.M., **Owen, A.M.**, Grahn, J.A. The Effect of Familiarity on Neural Representations of Music and Language. *Journal of Cognitive Neuroscience*, doi: https://doi.org/10.1162/jocn_a_01737, 2021.
346. Houldin, E., Fang, Z., Ray, L.B., Stojanoski, B., **Owen, A.M.**, Fogel, S.M. Reversed and increased functional connectivity in non-REM sleep suggests an altered rather than reduced state of consciousness relative to wake. *Scientific Reports*, 11(1): 11943, 2021.
347. Milej, D., Abdalmalak, A., Rajaram, A., Jhajj, A., **Owen, A.M.**, St Lawrence, K. Incorporating early and late-arriving photons to improve the reconstruction of cerebral hemodynamic responses acquired by time-resolved near-infrared spectroscopy. *Journal of Biomedical Optics*, 26(5):056003, 2021.

348. Coulborn, S., Taylor, C., Naci, L., **Owen, A.M.**, Fernandez-Espejo, D. Disruptions in effective connectivity within and between default mode network and anterior forebrain mesocircuit in prolonged disorders of consciousness. *Brain Sciences*, 11:749, 2021.
349. Gonzalez-Lara, L.E., Munce, S.E.P., Christian, J., **Owen, A.M.**, Weijer, C., Webster, F. The multiplicity of caregiving burden: A qualitative analysis of families with prolonged disorders of consciousness. *Brain Injury*, 35(2):200-208, 2021.
350. Gibbings, A., Ray, L.B., Berberian, N., Nguyen, T., Shahidi Zandi, A., **Owen, A.M.**, Comeau, F.J.E., Fogel, S.M. EEG and behavioural correlates of mild sleep deprivation and vigilance. *Clinical Neurophysiology*, 132(1):45-55, 2021.
351. Munce, S., Webster, F., Christian, J., Gonzalez-Lara, L.E., **Owen, A.M.**, Weijer, C. Experiences of family of individuals in a locked in, minimally conscious state, or vegetative state with the health care system. *Brain Injury*, 35(1):8-14, 2021.
352. Nichols, E.S., Wild, C.J., **Owen, A.M.**, Soddu, A. Cognition across the lifespan: age, sex, and sociodemographic influences. *Behavioral Sciences*, 11(4):51, 2021.
353. Abdalmalak, A., Milej, D., Norton, L., Debicki, D.B., **Owen, A.M.**, St Lawrence, K. The Potential Role of fNIRS in Evaluating Levels of Consciousness. *Frontiers in Human Neuroscience*, 15:344, 2021.
354. Fang, Z., Smith, D., Houldin, E., Ray, L., **Owen, A.M.**, Fogel, S. The relationship between cognitive ability and BOLD activation across sleep-wake states. *Brain Imaging and Behaviour*, <https://doi.org/10.1007/s11682-021-00504-w>, 2021.
355. Peterson, A., Webster, F., Gonzalez-Lara, L., Munce, S., **Owen, A.M.**, Weijer, C. Caregiver reactions to neuroimaging evidence of covert consciousness in patients with severe brain injury: a qualitative interview study. *BMC Med Ethics*, 22, 105, 2021.
356. Avan, A., Hachinski, V., **Owen, A.M.**, et al. Brain health: key to health, productivity, and wellbeing. *Alzheimer's & Dementia: The Journal of Alzheimer's Association*, DOI: 10.1002/alz.12478, 2021.
357. Huntley, J.D., Fleming, S.M., Mograbi, D.C, Bor, D., Naci, L., **Owen, A.M.**, Howard, R. Understanding Alzheimer's Disease as a Disorder of Consciousness. *Alzheimer's and Dementia: Translational research and clinical interventions*, <https://doi.org/10.1002/trc2.12203>, 2021.
358. Duclos, C., Maschke, C., Mahdid, Y, Nadin, D., Rokos, A., Arbour, C., Badawy, M., Letourneau, J., **Owen, A.M.**, Plourde, G., Blain-Moraes, S. Brain responses to propofol in advance of recovery from coma and disorders of consciousness: a preliminary study. *American Journal of Respiratory and Critical Care Medicine*, doi: 10.1164/rccm.202105-1223OC, 2021.
359. Gelb, T, Wild, C., **Owen, A.M.** A retrospective investigation of sex differences in cognition in children and young adults. *Western Undergraduate Psychology Journal*, Vol.9, 2021.
360. Popiel, J.M., Metrow, C., Laforge, G., **Owen, A.M.**, Stojanoski, B., Soddu, A. Exploring electroencephalography with a model inspired by quantum mechanics. *Scientific Reports*, 11:19771, 2021.

361. Nichols, E.S., **Owen, A.M.** Letter to the Editors of Psychological Science: Response to Luk et al. (What have we learned about bilingualism?), Regarding Nichols et al. *Psychological Science*, <https://doi.org/10.25384/SAGE.15180457.v1>, 2021.
362. Kazazian, K., Norton, L., Laforge, G., Abdalmalak, A., Gofton, T.E., Debicki, D., Slessarev, M., Hollywood, S., St Lawrence, K., **Owen, A.M.** Improving Diagnosis and Prognosis in Acute Severe Brain Injury: A Multimodal Imaging Protocol. *Frontiers in Neurology: Neurocritical Care*, 12:757219, doi: 10.3389/fneur.2021.757219, 2021.
363. Nichols, E.S., Erez, J., Stojanoski, B., Lyons, K.M., Witt, S.T., Mace, C.A., Khalid, S., **Owen, A.M.** Longitudinal white matter changes associated with cognitive training. *Human Brain Mapping*, 42(14): 4722-4739, 2021.
364. Peterson, A., Mintz, K., **Owen, A.M.** Unlocking the voices of patients with severe brain injury. *Neuroethics*, 15, 9, <https://doi.org/10.1007/s12152-022-09492-0>, 2022.
365. Abdalmalak, A., Novi, S.L., Kazazian, K., Norton, L., Benaglia, T., Slessarev, M., Debicki, D., St.Lawrence, K., Mesquita, R.C., **Owen, A.M.** Effects of Systemic Physiology on Mapping Resting-State Networks Using Functional Near-Infrared Spectroscopy. *Frontiers Neuroscience*, DOI=10.3389/fnins.2022.803297, 2022.
366. Luppi, A.I., Mediano, P.A.M., Rosas, F.E., Allanson, J., Pickard, J.D., Williams, G.B., Craig, M.M., Finoia, P., Peattie, A.R.D., Coppola, P., **Owen, A.M.**, Naci, L., Menon, D.K., Bor, D., Stamatakis, E.A. Whole-Brain Modelling Identifies Distinct but Convergent Paths to Unconsciousness in Anaesthesia and Disorders of Consciousness. *Communications Biology*, 5(384), 2022.
367. Gibbings, A., Ray, L.B., Smith, D., van den Berg, N., Toor, B., Sergeeva, V., Viczko, J., **Owen, A.M.**, Fogel, S.M. Does the early bird really get the worm? How chronotype relates to human intelligence. *Current Research in Behavioral Sciences*, 3(100083), 2022.
368. Jassim, N., **Owen, A.M.**, Smith, P., Suckling, J., Lawson, R.P., Baron-Cohen, S., Parsons, O. Perceptual decision-making in autism as assessed by “spot the difference” visual cognition tasks. *Scientific Reports*, 12:15458, 2022.
369. Naci, L., **Owen, A.M.** Uncovering consciousness and revealing the preservation of mental life in unresponsive brain-injured patients. *Seminars in Neurology*, 42:299-308, 2022.
370. Fogel, S., Ray, L., Fang, Z., Silverbrook, M., Naci, L., **Owen, A.M.** While you were sleeping: Evidence for high-level executive processing of an auditory narrative during sleep. *Consciousness and Cognition*, doi: 10.1016/j.concog.2022.103306, 2022.
371. Coppola, P., Spindler, L.R.B., Luppi, A.I., Adapa, R., Naci, L., Allanson, J., Finoia, P., Williams, G.B., Pickard, J.D., **Owen, A.M.**, Menon, D.K., Stamatakis, E. Network dynamics scale with levels of awareness. *NeuroImage*, 254:119128, 2022.
372. **Owen, A.M.** Improving prognostication after severe brain injury. *The Lancet Neurology*, (8):673-674, 2022.
373. Wild, C. J., Norton, L., Menon, D. K., Ripsman, D. A., Swartz, R. H., **Owen, A. M.** Disentangling the cognitive, physical, and mental health sequelae of COVID-19. *Cell Reports: Medicine*, 3(10):100750, 2022.

374. Coppola, P., Spindler, L.R.B., Adapa, R., Finoia, P.W., Williams, G.B., Allanson, J., Pickard, J.D., **Owen, A.M.**, Naci, L., Menon, D.K., Stamatakis, E.A. The complexity of the stream of consciousness. *Communications Biology*, 5, 1173, 2022.
375. Baena, D., Fang, Z., Ray, L.B., **Owen, A.M.**, Fogel, S.M. Brain activations time locked to slow wave-coupled sleep spindles correlates with intellectual abilities. *Cerebral Cortex*, doi.org/10.1093/cercor/bhac428, 2022.
376. Frantz, A., Incio Serra, N., Lopez Alendariz, A., Duclos, C., **Owen, A.M.**, Blain-Moraes, S. Assessing Cognitive Outcomes in Coma Survivors: A Literature Review. *Brain Sciences*, 13(1): 96, 2023.
377. Deng, F., Taylor, N., **Owen, A.M.**, Cusack, R., Naci, L. Responsiveness variability during anaesthesia relates to inherent differences in brain structure and function of the fronto-parietal networks. *Human Brain Mapping*, <http://doi.org/10.1002/hbm.26199>, 2023.
378. Norton, L., Graham, M., Kazazian, K., Gofton, T., Weijer, C., Debicki, D., Fernandez-Espejo, D., Althenayan, E., **Owen A.M.** Use of Functional Magnetic Resonance Imaging to Assess Cognition and Consciousness in Severe Guillian-Barre Syndrome. *International Journal of clinical and Health Psychology*, 23(2):100347. doi: 10.1016/j.ijchp.2022.100347, 2023.
379. Norton, L., Kazazian, K., Gofton, T., Debicki, DB., Fernandez-Espejo, D., Peelle, J.E., Al Thenayan, E., Young, G.B., **Owen, A.M.** Functional Neuroimaging as an Assessment Tool in Critically Ill Patients. *Annals of Neurology*, 93(1):131-141, 2023.
380. Huntley, J., Bor, D., Fleming, S.M., Mancuso, M., Mediano, P.A.M., Naci, L., **Owen, A.M.**, Rocci, L., Sternin, A., Howard, R. Assessing awareness in severe Alzheimer's disease. *Frontiers in Human Neuroscience*, 16:1035195, doi: 10.3389/fnhum.2022.1035195, 2023.
381. Rankaduwa, S.P., **Owen, A.M.** Psychedelics, Entropic Brain Theory, and the Taxonomy of Conscious States: A Summary of Debates and Perspectives. *Neuroscience of Consciousness*, Volume 2023, Issue 1, 2023, niad001, <https://doi.org/10.1093/nc/niad001>, 2023.
382. Luppi, A., Hansen, J. Y., Adapa, R. M., Carhart-Harris, R. L., Roseman, L., Timmermann, C., Golkowski, D., Ranft, A., Ilg, R., Jordan, D., Bonhomme, V., Vanhauzenhuysse, A., Demertzi, A., Jaquet, O., Ali Bahri, M., Alnagger, N. L., Cardone, P., Peattie, A. R., Manktelow, A., **Owen, A.M.**, et al. In Vivo Mapping of Pharmacologically-induced Functional Reorganisation onto the Human Brain's Neurotransmitter Landscape. *Science Advances*, 9(24), <https://doi.org/10.17863/CAM.96442>, 2023.
383. Cuninghame, S., Jerath, A., Gorsky, K., Sivajohan, A., Francoeur, C., Withington, D., Burry, L., Cuthbertson, B.H., Orser, B., Martin, C., **Owen, A.M.**, Slessarev, M., for the Sedating with Volatile Anesthetics Critically Ill COVID-19 Patients in ICU: Effects on Ventilatory Parameters and Survival study investigators The Effect of Inhaled Anaesthetics on Cognitive and Psychiatric Outcomes in Critically Ill Adults: A Systematic Review & Meta-Analysis. *British Journal of Anaesthesia*, 131(2): 314-327, doi: 10.1016/j.bja.2023.05.004, 2023.
384. Sternin, A., McGarry, L.M., Stojanoski, B., Grahn, J.A., **Owen, A.M.** The effect of repetition on intersubject synchrony assessed with fMRI. *Cortex*, 167: 51-64, <https://doi.org/10.1016/j.cortex.2023.05.020>, 2023

385. Kolisnyk, M., Kazazian, K., Rego, K., Novi, S.L., Wild, C.J., Gofton, T.E., Debicki, D.B., Owen, A.M. & Norton, L. Predicting neurological recovery after severe acute brain injury using resting-state networks. *Journal of Neurology*, <https://doi.org/10.1007/s00415-023-11941-6>, 2023.
386. Maschke, C., Duclos, C., **Owen, A.M.**, Jerbi, K., Blain-Moraes, S. Aperiodic brain activity and response to anesthesia vary in disorders of consciousness. *NeuroImage*, 15:275:120154. doi: 10.1016/j.neuroimage.2023.120154, 2023.
387. Nemirovsky, I.E., Popiel, N.J.M., Rudas, J., Caius, M., Naci, L., Schiff, N.D., **Owen, A.M.**, Soddu, A. An Implementation of Integrated Information Theory in Resting-State fMRI. *Communications Biology*, 6(1):692, doi: 10.1038/s42003-023-05063-y, 2023.
388. Prenger, M., Gilchrist, M., Van Hedger, K., Seergobin, K, **Owen, A.M.**, MacDonald, P. Establishing the roles of the dorsal and ventral striatum in humor comprehension and appreciation with fMRI. *Journal of Neuroscience*, in press.

Book Chapters

1. **Owen A.M.** Computerised assessment of cognitive function in ageing and dementia. In A. Burns, (Ed.) *Ageing and Dementia - A Methodological Perspective*, 86-102, 1993.
2. **Owen A.M.** & Robbins, T.W. Comparative neuropsychology of parkinsonian syndromes. In E.Ch. Wolters and P. Scheltens (Eds.) *Mental dysfunction In Parkinson's disease*. 221-242, 1993.
3. Robbins, T.W., Roberts, A.C., **Owen, A.M.**, Sahakian, B.J., Everitt, B.J., Wilkinson, L., Muir, J.L., De Salvia, M. and Tovee, M. Monoaminergic-dependent cognitive functions of the prefrontal cortex in monkey and man. In A.M. Theiry, J. Glowinski, P.S. Goldman-Rakic, Y. Christen. (Eds.) *Motor and Cognitive Functions of the Prefrontal Cortex*. Springer-Verlag Berlin Heidelberg, pp. 93-111, 1994.
4. Robbins, T.W., James, M. **Owen, A.M.** and Sahakian, B.J. A neural systems approach to the cognitive psychology of ageing: studies with CANTAB on large samples of the normal elderly population. P. Rabbitt (Ed.) *Methodology of Frontal and Executive Function*. Lawrence Erlbaum Associates, East Sussex, U.K., 1997.
5. **Owen A.M.**, Sahakian, B.J. and Robbins, T.W. The role of executive deficits in memory disorders in neurodegenerative disease. In A.I. Troster (Ed.) *Memory in Neurodegenerative disease: Biological, Cognitive and Clinical Perspectives*. Cambridge University Press, 1998.
6. Robbins, T.W., **Owen, A.M.**, and Sahakian, B.J. The neuropsychology of basal ganglia disorders; An integrative cognitive and comparative approach. In M. Ron and A. David (Eds.) *Disorders of Brain and Mind*. Cambridge University Press, 1998.
7. **Owen, A.M.** Functional neuroimaging: recent contributions to neuropsychology, psychiatry and behavioural neurology. In Jose M. Olivares (Ed.) *Investigation en Psiquiatria*, Spain, 1999.
8. Duncan, J. & **Owen A.M.** Dissociative methods in the study of frontal lobe function. *Attention and Performance XVIII*, 567-576, 2000.
9. Dunn, B.D., **Owen, A.M.** and Sahakian, B. J. Neuropsychological assessment of dementia. In J. O' Brien, D. Ames, A. Burns (Eds.) *Dementia*. 2nd Edition, Arnold, 49-60, 2000.

10. Lee, A.C.H., **Owen, A.M.**, Rogers, R., Sahakian, B. J. and Robbins, T.W. Utility of the CANTAB battery in functional neuroimaging. In M. Ernst and J. M. Rumsey (Eds). *Functional Neuroimaging in Child Psychiatry*. Cambridge University Press, Cambridge U.K. 366-378, 2000.
11. **Owen A.M.**, & Doyon, J. The cognitive neuropsychology of Parkinson's disease: A functional neuroimaging perspective. In G. Stern (Ed.). *Parkinson's Disease (Advances in Neurology)*. Lippincott-Raven Press, pp 49-56, 1999.
12. **Owen A.M.** & Robbins, T.W. Attention and working memory in movement disorders. In M. Jahanshahi and R. Brown (Eds.) *The Neuropsychology of Movement Disorders*.
13. Cools, R., Swainson, R., **Owen A.M.** and Robbins, T.W. Cognitive dysfunction in non-demented Parkinson's disease. In ECH Wolters, PH Cheltens, HW Berendse (Eds), *Mental Dysfunction In Parkinson's disease*. Academic Pharmaceutical Productions, Utrecht, The Netherlands. 1999
14. Duncan, J., & **Owen, A.M.** Dissociative methods in the study of frontal lobe function. In: Monsell S, Driver J, (Eds), *Control of cognitive processes* (Vol. XVIII). Cambridge, MA: MIT Press. p 567-76. 2000b
15. Harrison, J. E., Stow, I., and **Owen A.M.**, Parkinson's disease. In *Cognitive Deficits in Neurological Disorders*. J. E. Harrison and A. M. Owen (Eds). Dunitz, London, 2001.
16. **Owen, A.M.** The neuropsychological sequelae of frontal-lobe damage. In *Cognitive Deficits in Neurological Disorders*. J. E. Harrison and A. M. Owen (Eds). Dunitz, London, 2001.
17. Harrison, J.E. & **Owen, A.M.** Cognitive deficits in neurological disorders: methodological considerations. In J. E. Harrison and A. M. Owen (Eds). *Cognitive Deficits in Neurological Disorders*. Dunitz, London, 2001.
18. **Owen A.M.**, Epstein, R. and Johnsrude, I.S. fMRI: Applications to cognitive neuroscience. In P. Jezzard, P.M. Mathews and S. M. Smith (Eds). *Functional Magnetic Resonance Imaging. An Introduction to Methods*. Oxford University Press, Oxford, U.K., 2001.
19. **Owen, A.M.** The neuropsychology and neuropharmacology of cognitive deficits in Parkinson's disease investigated using fMRI. *Proceedings of Mental Dysfunctions in Parkinson's Disease*, 2004.
20. **Owen A.M.** Cognitive planning in humans: new insights from the Tower of London task. In Morris R. G., and Ward, G (Eds). *The Cognitive Psychology of Planning*. Hove: Psychology Press. 2005.
21. Blackwell, A.D., Dunn, B. D., **Owen, A.M.** and Sahakian, B. J. Neuropsychological assessment of dementia. J. O' Brien, D. Ames, A. Burns (Eds). *Dementia*. Arnold. 3rd Edition pp. 45-54. 2005.
22. **Owen, A.M.** The human ventrolateral frontal cortex and intended action. Sebanz, N., & Prinz (Eds), *Disorders of Volition*. MIT Press, pp 329-346, 2006.
23. Boly, M., **Owen, A.M.** and Laureys. S. To be or not to be...vegetative. In J-L Vincent (Ed), *Yearbook of Intensive Care and Emergency Medicine*. 2006.
24. Pickard J., Chir M., Coleman M., Aigbirhio F., Carpenter T.A. and **Owen A.M.**, Head injury: from the Glasgow Coma Scale to quo vadis. *Clinical Neurosurgery*, 53, 53-57, 2006.

25. Absalom, A., Coleman, M., Davis, M., Rodd, J., Johnsrude, I., **Owen, A.M.**, and Menon, D. An fMRI study of the influence of propofol sedation on neural correlates of speech perception and comprehension. In *British Journal of Anaesthesia* (Vol. 97, No. 3, pp. 438P-438P). Oxford University Press, Sept. 2006.
26. **Owen, A.M.**, Coleman MR and Pickard JD. Functional imaging in patients with altered consciousness. In: Latronico N, Rasulo FA, Candiani A (Ed), *Brescia Anaesthesia Intensive Care Neuroscience*, pp 41-48, Media Press, Italy, 2006.
27. **Owen, A.M.** Disorders of consciousness. In A. Kingstone and M. Miller. *The Year in Cognitive Neuroscience*. Proceedings of the New York Academy of Sciences. 225-238, 2008.
28. **Owen, A.M.** & Coleman M.R. Detecting awareness in the vegetative state. In D. Pfaff (Ed) *Molecular and Biophysical Mechanisms of Arousal, Alertness and Attention*. Annals of the New York Academy of Sciences, 130-140, 2008.
29. **Owen, A.M.** & Hampshire, A. The mid-ventrolateral frontal cortex and attentional control. F. Rösler, C. Ranganath, B. Röder, R. Kluwe (Eds) *Neuroimaging of Human Memory*. Oxford University Press, 195-212, 2009.
30. **Owen, A.M.**, Schiff, N. and Laureys, S. The assessment of conscious awareness in the vegetative state. In S. Laureys and G Tononi (Eds), *The Neurology of Consciousness*, 163-172, 2009.
31. Hampshire, A. & **Owen, A.M.** Clinical studies of attention and learning. In M. Pelley and C. Mitchell (Eds). *Attention and Associative Learning*. Oxford University Press, 14, 385 – 401, 2010.
32. Gruszka, A., Hampshire, A. and **Owen, A.M.** Learned irrelevance revisited: pathology-based individual differences, normal variation and neural correlates. In A. Gruszka, G. Matthews, B. Szymura (Eds) *Handbook of Individual Differences in Cognition*, Springer, 8, 127-144, 2010.
33. **Owen, A.M.** Functional magnetic resonance imaging, covert awareness, and brain injury. In J. Illes and B.J., Sahakian (Eds.) *Oxford Handbook of Neuroethics*. Oxford University Press. 14, 385 – 401, 2011.
34. **Owen, A.M.** When thoughts become actions: Imaging disorders of consciousness. In Dehaene (Ed.) *Characterizing Consciousness: From Cognition to the Clinic*, Springer, 99 – 108, 2011.
35. **Owen, A.M.** When thoughts become actions: Neuroimaging in non-responsive patients. In: S. Edwards, S. Richmond, G. Rees (Eds) *I Know What You Are Thinking: Brain Imaging and Mental Privacy*. Oxford University Press, 6, 73-87, 2012.
36. Guger, C., Noirhomme, Q., **Owen, A.M.**, et al. Brain-computer interfaces for assessment and communication in disorders of consciousness. In Ganesh R Naik (Ed) *Emerging Theory and Practice in Neuroprosthetics* IGIGLOBAL Press, 181-214, 2013.
37. **Owen, A.M.** Using functional magnetic resonance imaging and electroencephalography to detect consciousness after severe brain injury. In J. Grafman and A. Salazar (Eds) *Head Trauma. Handbook of Clinical Neurology*, 3rd Series, (18) 277 – 293, 2015.
38. **Owen, A.M.** & Naci, L. Decoding thoughts in disorders of consciousness. In M. Monti and W.G. Sannita (Ed.) *Brain Function and Responsiveness in Disorders of Consciousness*, Springer, (6) 67 – 80, 2016.

39. **Owen, A.M.** & Naci, L. Decoding thoughts in behaviourally non-responsive patients. In Sinnott-Armstrong (Ed.). *Finding Consciousness*. Oxford University Press, (7) 100-121, 2016.
40. **Owen, A.M.**, Schiff, N.D & Laureys, S. The assessment of conscious awareness in the vegetative state. *Neurology of Consciousness, Second Edition*, 155-166, 2016.
41. Gibson, R.M., **Owen, A.M.** & Cruse, D. Brain-computer interfaces for patients with disorders of consciousness. *Progress in Brain Research, Elsevier*, (228) 241-291, 2016.
42. González-Lara, L.E. and **Owen, A.M.** Identifying covert cognition in disorders of consciousness. In: Schnakers, C., Laureys, S. (Eds) *Coma and Disorders of Consciousness*, Springer, (5) 77-96, 2017.
43. Sternin, A., Burns, A., Owen, A.M. 35 Years of Computerized Cognitive Assessment of Aging – Where are we now? In A.J. Larner (Ed), *Diagnosis of Dementia and Cognitive Impairment*. MDPI, Basel, Switzerland. 85-97, 2019
44. Sergeeva, V., Viczko, J., **Owen, A.M.** & Fogel, S.M. Sleep oscillations and aging. In: Dang-Vu, T., Courtemanche, R. (Eds) *Neuronal Oscillations of Wakefulness and Sleep*. Springer, New York, NY, 223-247, 2020.

Books

1. Schneider, W. X., **Owen, A.M.** and Duncan, J. (Eds) *Executive Control and the Frontal Lobe: Current Issues*. Springer, 2000.
2. Harrison, J. E. and **Owen, A.M.** (Eds) *Cognitive Deficits in Neurological Disorders*: Dunitz, London, 2001.
3. Laureys, S., Schiff, N.D. and **Owen A.M.** (Eds) *Coma Science, Clinical and Ethical Implications*. Elsevier, 2009
4. **Owen, A.M.** *Into the Gray Zone: A Neuroscientist Explores the Border Between Life and Death*. Scribner, New York, 2017.