### Michael D. Rugg - Curriculum Vitae

Name: Michael Derek Rugg Orcid ID: 0000-0002-0397-5749

### **Academic Qualifications**

BSc (1st class Hons) Psychology, University of Leicester, 1976 PhD Psychology, University of Leicester, 1979

### **Employment History**

Oct 1978 - Sept 1979. Postdoctoral Research Fellow, Department of Psychology, University of York.

Oct 1979 - Sep 1988. University Lecturer, Department of Psychology, University of St Andrews.

Oct 1988 - Sep 1992. Reader in Psychology, Department of Psychology, University of St Andrews.

Oct 1992 - Sep 1994. Professor of Psychology and Head of School, School of Psychology, University of St Andrews.

Oct 1994 – Aug 1998. Professor of Psychology and Wellcome Trust Research Fellow, School of Psychology, University of St Andrews.

Sep 1998 – June 2003. Professor of Cognitive Neuroscience and Wellcome Principal Research Fellow, Institute of Cognitive Neuroscience and Department of Psychology, University College London.

Oct 2001 – Sep 2002. Acting Director, Institute of Cognitive Neuroscience, University College London.

July 2003 – Dec 2010. Professor, Department of Neurobiology and Behavior, and Fellow, Center for the Neurobiology of Learning and Memory, University of California, Irvine.

Sep 2004 – July 2010. Director, Center for the Neurobiology of Learning and Memory, University of California, Irvine.

Aug 2010 – July 2016. Volunteer Faculty, Department of Psychiatry, University of Texas Southwestern.

Jan 2011 – present. Distinguished Chair in Behavioral and Brain Sciences, University of Texas at Dallas.

Jan 2011 – June 2014. Co-Director, Center for Vital Longevity, University of Texas at Dallas.

June 2014 - present. Director, Center for Vital Longevity, University of Texas at Dallas.

July 2016 – present. Professor (fractional), Department of Psychiatry, University of Texas Southwestern Medical Center.

November 2018 – present. Professor (fractional), School of Psychology, University of East Anglia, United Kingdom.

### **Honors/Awards**

Henri Hecaen Award for Contributions to Neuropsychology (1989) Fellow of the Royal Society of Edinburgh (1996) Fellow of the American Association for the Advancement of Science (2009) Fellow of the Association for Psychological Science (2010)

#### Awarded Peer-Reviewed Research Grants (Principal Investigator only)

 Wellcome Trust. Interhemispheric transfer of visual information in normal subjects and cases of callosal pathology (with A. D. Milner). March 1983 - October 1984. £13,250.
 Medical Research Council. Title as (1) above (with A. D. Milner). March 1983 -September 1984. £2,750 (Equipment).

 Medical Research Council. Cognitive functioning in poor readers of normal and below average intelligence (with R. S. Johnston). September 1982 - August 1985. £21,500.
 Wellcome Trust. Research Leave Fellowship -Electrophysiological investigation of the neuropsychological basis of higher visual processing, particularly reading. October 1983 -September 1984. £9,300.

5. Medical Research Council. Establishment of MRC Cognitive Neuroscience Research Group (with R. Byrne, G. Cottrell, M. Jeeves, R. Johnston, R. Morris, A.D. Milner, D. Perrett). October 1983 - September 1988. £173,000.

6. Wellcome Trust. Electrophysiological investigation of language and related processes in normal subjects and cases of language impairment. August 1985 - July 1988. £29,000.

7. Mental Health Foundation. An electrophysiological and behavioural study of the functional consequences of callosal damage in closed head injury (with A. D. Milner). October 1985 - April 1988. £18,000.

8. Medical Research Council. An electrophysiological and behavioural study of the functional consequences of callosal damage in closed head injury (with A. D. Milner and D. N. Brooks). February 1985 - April 1988. £48,000.

9. Medical Research Council, Senior Research Leave Fellowship - Event-related potentials and the investigation of human memory. April 1986 - Dec 1988. £27,000.

10. European Science Foundation. Twinning grant with Universities of Padua (Psychology) and Verona (Human Physiology) - Electrophysiological and behavioural study of visual selective attention. Jan. 1987 - Dec. 1989. 10,700 French francs.

11. Wellcome Trust. A research programme for the electrophysiological, behavioural and neurological study of cognitive processing and its impairment (with R.C. Roberts). August 1988 - July 1993. £282,078.

12. Wellcome Trust. Wellcome Prize Studentship - The physiological measurement of face processing in man and monkey (with D.I Perrett). October 1988 - September 1991. £23,400..

13. Wellcome Trust. Investigation of the brain regions and cognitive processes necessary for the generation of the 'P300' brain potential (with R.C. Roberts). July 1990 - June 1993. £54,273..

14. Medical Research Council. EEG and cognitive event-related potentials from foramen ovale electrodes in patients with temporal lobe epilepsy (with R.C. Roberts). June 1991 - May 1992. £11,000.

15. Wellcome Trust. Wellcome Prize Studentship - Fractionation of human memory with event-related brain potentials. January 1993 - Dec 1995. £43,715.

16. Wellcome Trust. A research programme for the electrophysiological, behavioural and neurological study of cognitive processes underlying memory, and their impairment

in neurological populations (with R.C. Roberts). September 1993 - August 1998. £434,800. 17. Wellcome Trust. Research Leave Fellowship. 'The neuropsychology of normal human memory: parallel ERP and PET studies'. January 1994 - December 1997. £82,100.

18. Wellcome Trust. Wellcome Prize Studentship 'Investigation of human memory with event-related brain potentials'. July 1995-June 1998. £52,717.

19. Scottish Home and Health Department. 'Prognosis after head injury: the use of eventrelated potentials to predict outcome' (with S. Chaudry-Dijkerman, D. Gentleman, J. Gilchrist). May 1996-Dec 1999. £101,975.

20. Biotechnology and Biological Sciences Research Council. 'An electrophysiological study of interactions between memory representations and retrieval cues'. Oct 1996 - Jan 2000. £93,645.

21. Wellcome Trust. 'The functional and neural basis of human memory: electrophysiological and functional neuroimaging studies'. Sep 1998 - Aug 2003.  $\pounds$ 1,232,709.

22. Wellcome Trust. Wellcome Prize Studentship. 'The fractionation of human memory: ERP and fMRI studies'. Oct 1999 - Sep 2002. £57,178.

23. Wellcome Trust. 'The functional and neural basis of human memory: electrophysiological and functional neuroimaging studies'. Supplement. July 2000 - June 2003. £93,079.

24. Medical Research Council (with T. Shallice, U. Frith, J. Driver, J. O'Keefe, J. Atkinson, J. Blair and N. Burgess). Analysis of cognitive impairments and the imaging of cognition. Co-operative grant. Sep 2000-Aug 2005. £711,364.

25. Wellcome Trust (with T. Shallice, B. Butterworth, J. Driver, and P. Haggard). Funds for establishment of a TMS laboratory. Equipment grant. Jan 2001-Dec 2004. £38,795.

26. National Institute on Aging. Neural correlates of episodic memory in older adults. Apr 2005- Mar 2010. \$664,000 direct costs.

27. National Institute of Mental Health. Episodic memory encoding: fMRI investigations. Aug 2005-July 2009. \$558,000 direct costs.

28. National Institute of Mental Health. Retrieval processing in human memory: ERP and fMRI investigations. Oct 2005-May 2010. \$1,000,000 direct costs.

29. National Institute of Mental Health. Episodic memory encoding: fMRI investigations. Aug 2009-July 2015. \$1,250,000 direct costs.

30. National Institute of Mental Health. Retrieval processing in human memory: ERP and fMRI investigations. June 2010-May 2016. \$1,250,000 direct costs.

31. National Institute on Aging. Relationship between the neural correlates of episodic memory encoding, age, and memory performance. Aug 2011 – April 2017. \$1,250,000 direct costs.

32. National Science Foundation. Effects of age on specificity and control of recollected content. Aug 2016 – July 2019. \$355,266 direct costs.

33. National Institute on Aging. Effects of age and resource depletion on post-retrieval monitoring and individual differences in memory performance. Sep 2016 – Aug 2019. \$275,000 direct costs.

**34.** National Institute on Aging. Relationship between the neural correlates of episodic memory encoding, age, and memory performance. April 2017–March 2022. \$1,900,000 direct costs.

**35.** National Institute on Aging. Effects of age on the control of recollected content. March 2021 - February 2023. \$275,000 direct costs.

#### **Publications**

# **Edited Books**

1. Milner, A.D., and Rugg, M.D. (Eds). The Neuropsychology of Consciousness. Academic Press, 1991.

2. Rugg, M.D., and Coles, M.G.H. (Eds). Electrophysiology of Mind: Event-Related Brain Potentials and Cognition. Oxford University Press, 1995.

3. Rugg, M.D. (Ed.). Cognitive Neuroscience. Psychology Press (UK), MIT Press (USA), 1997.

## **Peer-Reviewed Publications**

1. Beaumont, J. G., Mayes, A. R. and Rugg, M. D. Asymmetry in EEG alpha coherence and power: effects of task and sex. Electroencephalography and clinical Neurophysiology, 1978, 45, 393-401.

2. Rugg, M. D. and Beaumont, J. G. Interhemispheric asymmetries in the visual evoked response: effects of stimulus lateralisation and task. Biological Psychology, 1978, 6, 283-92.

3. Rugg, M. D. and Beaumont, J. G. Visual evoked responses to visual-spatial and verbal stimuli: evidence of differences in cerebral processing. Physiological Psychology, 1978, 6, 501-04.

4. Beaumont, J. G. and Rugg, M. D. The specificity of intrahemispheric EEG alpha coherence asymmetry related to psychological task. Biological Psychology, 1979, 9, 237-48.

5. Rugg, M. D. and Beaumont, J. G. Late positive component correlates of verbal and visuospatial processing. Biological Psychology, 1979, 9, 1-11.

6. Rugg, M. D. and Venables, P. H. EEG correlates of the acquisition of high- and low-imagery words. Neuroscience Letters, 1980, 16, 67-70.

7. Beaumont, J. G., Thomson, M. and Rugg, M. D. An intrahemispheric integration deficit in dyslexia. Current Psychological Research, 1981, 1, 185-89.

8. Rugg, M.D. and Dickens, A.M.J. Dissociation of alpha and theta activity as a function of verbal and visuospatial tasks. Electroencephalography and clinical Neurophysiology, 1982, 53, 201-07.

9. Rugg, M. D. Further study of the electrophysiological correlates of lexical decision. Brain and Language, 1983, 19, 142-52.

10. Lines, C. R., Rugg, M. D. and Milner, A. D. The effect of stimulus intensity on visual evoked potential estimates of interhemispheric transmission time. Experimental Brain Research, 1984, 57, 89-98.

11. Rugg, M. D. Event-related potentials and the phonological matching of words and non-words. Neuropsychologia, 1984, 22, 435-43.

12. Rugg, M. D. Event-related potentials in phonological matching tasks. Brain and Language, 1984, 23, 225-40.

13. Rugg, M. D., Lines, C. R. and Milner, A. D. Visual evoked potentials to lateralized visual stimuli and the measurement of interhemispheric transmission time. Neuropsychologia, 1984, 22, 215-25.

14. Rugg, M. D. Commentary on Libet - Unconscious cerebral initiative and the role of conscious will in voluntary action. Behavioral and Brain Sciences, 1985, 8, 552.

15. Rugg, M. D. The effects of handedness on event-related potentials in a rhyme-matching task. Neuropsychologia, 1985, 23, 765-76.

16. Rugg, M. D. The effects of word repetition and semantic priming on event-related potentials. Psychophysiology, 1985, 22, 642-47.

17. Rugg, M. D., Lines, C. R. and Milner, A. D. Further investigation of visual evoked potentials elicited by lateralized stimuli: effects of stimulus eccentricity and reference site. Electroencephalography and clinical Neurophysiology, 1985, 62, 81-87.

18. Rugg, M. D., Milner, A. D. and Lines, C. R. Visual evoked potentials to lateralized stimuli in two cases of callosal agenesis. Journal of Neurology, Neurosurgery and Psychiatry, 1985, 48, 367-73.

19. Johnston, R. S., Rugg, M. D. and Scott, T. The influence of phonology on good and poor readers when reading for meaning. Journal of Memory and Language, 1987, 26, 57-68.

20. Johnston, R. S., Rugg, M. D. and Scott, T. Phonological similarity effects, memory span and developmental reading disorders: The nature of the relationship. British Journal of Psychology, 1987, 78, 205-11.

21. Rugg, M. D. Dissociation of semantic priming, word and non-word repetition by event-related potentials. Quarterly Journal of Experimental Psychology, 1987, 39A, 123-48.

22. Rugg, M. D. and Barrett, S. E. Event-related potentials and the interaction between orthographic and phonological information in a rhyme-judgement task. Brain and Language, 1987, 32, 336-61.

23. Rugg, M. D. and Nagy, M. E. Lexical contribution to non-word repetition effects: Evidence from event-related potentials. Memory and Cognition, 1987, 15, 473-81.

24. Rugg, M. D., Milner, A. D., Lines, C. R. and Phalp, R. Modulation of visual eventrelated potentials by spatial and non-spatial visual selective attention. Neuropsychologia, 1987, 25, 85-96.

25. Barrett, S. E., Rugg, M. D. and Perrett, D. I. Event-related potentials and the matching of familiar and unfamiliar faces. Neuropsychologia, 1988, 26, 105-18.

26. Johnston, R.S., Rugg, M.D. and Scott, T. Pseudohomophone effects in 8 and 11 year old good and poor readers. Journal of Research in Reading, 1988, 11, 110-32.

27. Robinson, D.L. and Rugg, M.D. Latencies of visually responsive neurons in various regions of the rhesus monkey brain and their relation to human visual responses. Biological Psychology, 1988, 26, 111-16.

28. Rugg, M.D., Furda, J. and Lorist, M. The effects of task on the modulation of event-related potentials by word repetition. Psychophysiology, 1988, 25, 55-63.

29. Rugg, M.D., Cowan, C.P., Nagy, M.E., Milner, A.D., Jacobson, I., and Brooks, D.N. Event-related potentials from closed head injury patients in an auditory 'oddball' task - evidence for a dysfunction in stimulus categorisation. Journal of Neurology, Neurosurgery and Psychiatry, 1988, 51, 691-98.

30. Rugg, M.D. Event-related potentials and psychological explanation. (Commentary on Verlager - Event-related potentials and memory: A critique of the context updating hypothesis and an alternative interpretation of P3.) Behavioral and Brain Sciences, 1988, 25, 55-63.

31. Barrett, S.E., and Rugg, M.D. Asymmetries in event-related potentials during rhymematching: Confirmation of the null effects of handedness. Neuropsychologia, 1989, 27, 539-48.

32. Barrett, S.E. and Rugg, M.D. Event-related potentials and the semantic matching of faces. Neuropsychologia, 1989, 27, 913-22.

33. Johnston, R.S., and Rugg, M.D. Rhyme judgement ability in good and poor readers. Language and Education, 1989, 3, 233-43.

34. Nagy, M.E., and Rugg, M.D. Modulation of event-related potentials by word repetition: the effects of inter-item lag. Psychophysiology, 1989, 26, 431-36.

35. Rugg, M.D., Cowan, C.P., Nagy, M.E., Milner, A.D., Jacobson, I., and Brooks, D.N. CNV abnormalities following closed head injury. Brain, 1989, 112, 489-06.

36. Rugg, M.D., and Nagy, M.E. Event-related potentials and recognition memory for words. Electroencephalography and Clinical Neurophysiology, 1989, 72, 395-06.

37. Barrett, S.E. and Rugg, M.D. Event-related potentials and the phonological matching of pictures. Brain and Language, 1990, 38, 424-37.

38. Barrett, S.E. and Rugg, M.D. Event-related potentials and the semantic matching of pictures. Brain and Cognition, 1990, 14, 201-12.

39. Rugg, M.D. ERPs and the fate of unattended stimuli (commentary on Naatanen - The role of attention in auditory information- processing as revealed by event-related potentials and other brain measures of cognitive function). Behavioral and Brain Sciences, 1990, 13, 251-52.

40. Rugg, M.D. Event-related potentials dissociate repetition effects of high and low frequency words. Memory and Cognition, 1990, 18, 367-79.

41. Rugg, M.D., Roberts, R.C., Potter, D.D., Nagy, M.E., and Pickles, C.D. Endogenous event-related potentials from sphenoidal electrodes. Electroencephalography and Clinical Neurophysiology, 1990, 76, 331-38.

42. Rugg, M.D., Pickles, C.D., Potter, D.D., and Roberts, R.C. Normal P300 in a case of extensive unilateral medial temporal lobe damage. Journal of Neurology, Neurosurgery, and Psychiatry, 1991, 54, 217-22.

43 Rugg, M.D., Roberts, R.C., Potter, D.D., Pickles, C.D., and Nagy, M.E. Event-related potentials related to recognition memory: effects of temporal lobectomy and unilateral temporal lobe epilepsy. Brain, 1991, 114, 2313-32.

44. Rugg, M.D., and Doyle, M.C. Event-related potentials and recognition memory for lowand high-frequency words. Journal of Cognitive Neuroscience, 1992, 4, 69-79.

45. Potter, D.D., Pickles, C.D., Roberts, R.C., and Rugg, M.D. The effects of scopolamine on event-related potentials in a continuous recognition memory task. Psychophysiology, 1992, 29, 29-38.

46. Young, M.P. and Rugg, M.D. Word frequency and multiple repetition as determinants of the modulation of ERPs in a semantic classification task. Psychophysiology, 1992, 29, 664-76.

47. Rugg, M.D., Brovedani, P., and Doyle, M.C. Modulation of event-related potentials by word repetition in a task with inconsistent mapping between repetition and response. Electroencephalography and clinical Neurophysiology, 1992, 84, 521-31.

48. Rugg, M.D., Pickles, C.D., Potter, D.D., Doyle, M.C., Pentland, B., and Roberts, R.C. Cognitive Brain Potentials in a Three-Stimulus Auditory 'Oddball' Task after Closed Head Injury. Neuropsychologia, 1993, 31, 373-93.

49. Otten, L.J., Rugg, M.D., and Doyle, M.C. Modulation of event-related potentials by word repetition: the role of selective attention. Psychophysiology, 1993, 30, 559-71.

50. Rugg, M.D., Doyle, M.C., and Melan, C. An event-related potential study of the effects of within- and across-modality word repetition. Language and Cognitive Processes, 1993, 8, 357-77.

51. Rugg, M.D., Pearl, S., Walker, P., Roberts, R.C., and Holdstock, J.S. Word repetition effects on event-related potentials in healthy young and old subjects, and in patients with Alzheimer-type dementia. Neuropsychologia, 1994, 32, 381-98

52. Rugg, M.D., Doyle, M.C., and Holdstock, J.S. Modulation of Event-Related Brain Potentials by Word Repetition: Effects of Local Context. Psychophysiology, 1994, 31, 447-59.

53. Ebmeir, K.P., Steele, J.D., MacKenzie, D.M., O'Caroll, R.E., Kydd, R.R., Glabus, M.F., Blackwood, D.H.R., Rugg, M.D., and Goodwin, G.M. Cognitive brain potentials and regional cerebral blood flow equivalents during two- and three-sound auditory oddball tasks. Electroencephalography and clinical Neurophysiology, 1995, 95, 434-43.

54. Holdstock, J.S., and Rugg, M.D. The effect of attention on the P300 deflection elicited by novel sounds. Journal of Psychophysiology, 1995, 9, 18-31.

55. Rugg, M.D., Cox, C.J.C., Doyle, M.C., and Wells, T. Event-related potentials and the recollection of low and high frequency words. Neuropsychologia, 1995, 33, 471-84.

56. Rugg, M.D., Doyle, M.C., and Wells, T. Word and non-word repetition within- and across-modality: An event-related potential study. Journal of Cognitive Neuroscience, 1995, 7, 209-27.

57. Rugg, M.D. Memory and consciousness: a selective review of issues and data. Neuropsychologia, 1995, 33, 1131-42.

58. Rugg, M.D., Soardi, M., and Doyle, M.C. Modulation of event-related potentials by the repetition of drawings of novel objects. Cognitive Brain Research, 1995, 3, 17-24.

59. Wilding, E.L., Doyle, M.C. and Rugg, M.D. Recognition memory with and without retrieval of context: an event-related potential study. Neuropsychologia, 1995, 33, 743-67.

60. Allan, K., Doyle, M.C., and Rugg, M.D. An event-related potential study of word-stem cued recall. Cognitive Brain Research, 1996, 4, 251-62.

61. Doyle, M.C., Rugg, M.D., and Wells, T. A comparison of the electrophysiological effects of formal and repetition priming. Psychophysiology, 1996, 33, 132-47.

62. Friston, K.J., Stephan, K.M., Heather, J.D., Frith, C.D., Ioannides, A.A., Liu, L.C., Rugg, M.D., Vieth, J., Keber, H., Hunter, K., and Frackowiak, R.S.J. A multivariate analysis of evoked responses in EEG and MEG data. Neuroimage, 1996, 3, 167-74.

63. Rugg, M.D., Schloerscheidt, A.M., Doyle, M.C., Cox, C.J.C., and Patching, G.R. Event-related potentials and the recollection of associative information. Cognitive Brain Research, 1996, 4, 297-304.

64. Rugg, M.D., Fletcher, P.C., Frith, C.D., Frackowiak, R.S.J., and Dolan, R.J. Differential activation of the prefrontal cortex in successful and unsuccessful memory retrieval. Brain,1996, 119, 2073-83.

65. Wilding, E.L. and Rugg, M.D. An event-related potential study of recognition memory with and without retrieval of source. Brain, 1996, 119, 889-906.

66. Allan, K., and Rugg, M.D. An event-related potential study of explicit memory on tests of cued recall and recognition. Neuropsychologia, 1997, 35, 387-97.

67. Fletcher, P.C., Frith, C.D., and Rugg, M.D. The functional neuroanatomy of episodic memory. Trends in Neurosciences, 1997, 20, 213-18.

68. Rugg, M.D., Fletcher, P.C., Frith, C.D., Frackowiak, R.S.J., and Dolan, R.J. Brain regions supporting intentional and incidental memory: a PET study. NeuroReport, 1997, 8, 1283-87.

69. Rugg, M.D., Mark, R.E., Gilchrist, J., and Roberts, R.C. ERP repetition effects in indirect and direct tasks: effects of age and inter-item lag. Psychophysiology, 1997, 34, 572-86.

70. Schloerscheidt, A.M. and Rugg, M.D. Recognition memory for words and pictures: an event-related potential study. NeuroReport, 1997, 8, 3281-85.

71. Tendolkar, I., Doyle, M.C., and Rugg, M.D. An event-related potential study of retroactive interference in memory. NeuroReport, 1997, 8, 501-06.

72. Wilding, E.L., and Rugg, M.D. Event-related potentials and the recognition memory exclusion task. Neuropsychologia, 1997, 35, 119-28.

73. Wilding, E.L., and Rugg, M.D. An event-related study of memory for spoken and heard information. Neuropsychologia, 1997, 35, 1185-95.

74. Allan, K., and Rugg, M.D. Neural correlates of cued recall with and without retrieval of source memory. NeuroReport, 1998, 9, 3463-66

75. Allan, K., Wilding, E.L., and Rugg, M.D. Electrophysiological evidence for dissociable processes contributing to recollection. Acta Psychologica, 1998, 98, 231-52.

76. Friston, K.J., Fletcher, P., Josephs, O., Holmes, A., Rugg, M.D., and Turner, R. Eventrelated fMRI: Characterizing differential responses. Neuroimage, 1998, 7, 30-40.

77. Mark, R.E. and Rugg, M.D. Age effects on brain activity associated with episodic memory retrieval: an electrophysiological study. Brain, 1998, 121, 861-73.

78. Donaldson, D.I. and Rugg, M.D. Recognition memory for new associations: Electrophysiological evidence for the role of recollection. Neuropsychologia, 1998, 36, 377-95.

79. Doyle, M.C., and Rugg, M.D. Word repetition within and across visual fields: an event-related potential study. Neuropsychologia, 1998, 36, 1403-15.

80. Rugg, M.D., Mark, R.E., Walla, P., Schloerscheidt, A.M., Birch, C.S., and Allan, K. Dissociation of the neural correlates of implicit and explicit memory. Nature, 1998, 392, 595-98.

81. Rugg, M.D., Schloerscheidt, A.M., and Mark, R.E. An electrophysiological study of two indices of recollection. Journal of Memory and Language, 1998, 39, 47-69.

82. Rugg, M.D. Convergent approaches to electrophysiological and haemodynamic investigations of memory. Human Brain Mapping, 1998, 6, 394-98.

83. Rugg, M.D., Fletcher, P.C., Allan, K., Frith, C.D., Frackowiak, R.S.J., and Dolan, R.J. Neural correlates of memory retrieval during recognition memory and cued recall. NeuroImage, 1998, 8, 262-73.

84. Rugg, M.D., Walla, P., Schloerscheidt, A.M., Fletcher P.C., Frith, C.D., and Dolan, R.J. Neural correlates of depth of processing effects on recollection: evidence from brain potentials and PET. Experimental Brain Research, 1998, 123, 18-23.

85. Tendolkar, I. and Rugg, M.D. Electrophysiological dissociation of recency and recognition memory. Neuropsychologia, 1998, 36, 477-90.

86. Donaldson, D.I., and Rugg M.D. An event-related potential study comparing associative recognition and associative recall. Cognitive Brain Research, 1999, 8, 1-16.

87. Henson, R.N.A., Rugg, M.D., Shallice, T., Josephs, O., and Dolan, R.J. Recollection and familiarity in recognition memory: an event-related fMRI study. Journal of Neuroscience, 1999, 19, 3962-72.

88. Rugg, M.D., and Nieto-Vegas, M. Modality-specific effects of immediate word repetition: electrophysiological evidence. NeuroReport, 1999, 10, 2661-64.

89. Rugg, M.D., Fletcher, P.C, Chua, P M-L, and Dolan, R.J. The role of the prefrontal cortex in recognition memory and memory for source: an fMRI study. Neuroimage, 1999, 10, 520-29.

90. Allan, K., Dolan, R.J., Fletcher, P.C., and Rugg, M.D. The role of the anterior right prefrontal cortex in episodic memory retrieval. Neuroimage, 2000, 11, 217-27.

91. Allan, K., Robb, W.G K., Rugg, M.D. Neural correlates of cued recall: Depth of processing and modality effects. Neuropsychologia, 2000, 38, 1188-05.

92. Henson, R.N.A., Rugg, M.D., Shallice, T., and Dolan, R.J. Confidence in recognition memory for words: dissociating right prefrontal roles in episodic retrieval. Journal of Cognitive Neuroscience, 2000, 12, 913-23.

93. Maratos, E.J., and Rugg, M.D. Recognition memory for emotionally negative and neutral words: An ERP study. Neuropsychologia, 2000, 38, 1452-65.

94. Picton, T.W, Bentin, S., Berg, P., Donchin, E., Hillyard, S.A., Johnson, R. Jr., Miller, G.A., Ritter, W., Ruchkin, D.S., Rugg, M.D., Taylor, M.J. Guidelines for using human event-related potentials to study cognition: recording standards and publication criteria. Psychophysiology. 2000, 37, 127-52.

95. Potter, D.D., Pickles, C.D., Roberts, R.C. and Rugg, M.D. Scopolamine impairs memory performance and reduces frontal but not parietal visual P3 amplitude. Biological Psychology, 2000, 52, 37-52.

96. Potter, D.D., Pickles, C.D., Roberts, R.C. and Rugg, M.D. The effect of cholinergic receptor blockade by scopolamine on memory performance and the auditory P3. Journal of Psychophysiology, 2000, 14, 11-23.

97. Rugg, M.D. and Wilding, E.L. Retrieval processing and episodic memory. Trends in Cognitive Sciences, 2000, 4, 108-15.

98. Rugg, M.D., Allan, K., and Birch, C.S. Electrophysiological evidence for the modulation of retrieval orientation by depth of study processing. Journal of Cognitive Neuroscience, 2000, 12, 664-78.

99. Tendolkar, I., Rugg, M.D, Fell, J., Vogt, H., Scholz, M., Hinrichs, H., and Heinze, H.J. A magnetoencephalographic study of brain activity related to recognition memory in healthy young human subjects. Neuroscience Letters, 2000, 280, 69-72.

100. Allan, K., Wolf, H.A., Rosenthal, C.R., and Rugg, M.D. The effect of retrieval cues on post-retrieval monitoring in episodic memory: An electrophysiological study. Cognitive Brain Research, 2001, 12, 289–99

101. Maratos, E.J., Dolan, R.J., Morris, J.S., Henson, R.N.A., and Rugg, M.D. Neural activity associated with episodic memory for emotional context. Neuropsychologia, 2001, 39, 910-20.

102. Maratos, E.J., and Rugg, M.D. Electrophysiological correlates of the retrieval of emotional and non-emotional context. Journal of Cognitive Neuroscience, 2001, 13, 877-91.

103. Otten, L.J., Henson, R.N.A., and Rugg, M.D. Depth of processing effects on neural correlates of memory encoding: relationship between findings from across- and within-task comparisons. Brain, 2001, 124, 399-12.

104. Otten, L.J., and Rugg, M.D. Electrophysiological correlates of memory encoding are task-dependent. Cognitive Brain Research, 2001, 12, 11-18.

105. Otten, L.J., and Rugg, M.D. When more means less: neural activity related to unsuccessful memory encoding. Current Biology, 2001, 11, 1528-30.

106. Otten, L.J., and Rugg, M.D. Task-dependency of the neural correlates of episodic encoding as measured by fMRI. Cerebral Cortex, 2001, 11, 1150–60.

107. Tsivilis, D., Otten, L.J., and Rugg, M.D. Context effects on the neural correlates of recognition memory: an electrophysiological study. Neuron, 2001, 31, 497-505.

108. Cansino, S., Maquet, P., Dolan, R.J., and Rugg, M.D. Brain activity underlying encoding and retrieval of source memory. Cerebral Cortex, 2002, 12, 1048-56.

109. Henson, R.N.A., Price, C.J., Rugg, M.D, Turner, R. and Friston, K.J. Detecting latency differences in event-related BOLD responses: application to words versus nonwords, and initial versus repeated face presentations. Neuroimage, 2002, 15, 83-97.

110. McAllister-Williams, R.H., and Rugg. M.D. Effects of chronic cortisol administration on brain potential correlates of episodic memory retrieval. Psychopharmacology, 2002, 160, 74-83.

111. McAllister-Williams, R.H., Massey, A.E. and Rugg. M.D. Effects of tryptophan depletion on brain potential correlates of episodic memory retrieval. Psychopharmacology, 2002, 160, 434-42.

112. Morcom, A.M., and Rugg, M.D. Getting ready to remember: the neural correlates of task set during recognition memory. NeuroReport, 2002, 13,149-52.

113. Otten, L.J., and Rugg, M.D. The birth of a memory. Trends in Neurosciences, 2002, 25, 279-81.

114. Otten, L.J., Henson, R.N.A., and Rugg, M.D. State- and item-related neural correlates of successful memory encoding. Nature Neuroscience, 2002, 5, 1339-44.

115. Penny, W.D., Kiebel, S.J., Kilner, J.M., and Rugg, M.D. Event-related brain dynamics. Trends in Neurosciences, 2002, 25, 387-89.

116. Phillips, C., Rugg, M.D. and Friston, K.J. Anatomically informed basis functions for EEG source localisation: Combining functional and anatomical constraints. Neuroimage, 2002, 16, 678-95.

117. Phillips, C., Rugg, M.D. and Friston, K.J. Systematic regularisation of linear inverse solutions of the EEG source localisation problem. Neuroimage, 2002,17, 287-01.

118. Robb, W.G.K., and Rugg, M.D. Electrophysiological dissociation of retrieval orientation and retrieval effort. Psychonomic Bulletin and Review, 2002, 9, 583-89.

119. Rugg, M.D., Otten, L.J., and Henson, R.N.A. The neural bases of episodic memory: evidence from functional neuroimaging. Philosophical Transactions of the Royal Society B (Biological Sciences), 2002, 357, 1097-110.

120. Strange, B.A., Otten, L.J., Josephs, O., Rugg, M.D., and Dolan, R.J. Dissociable human perirhinal, hippocampal and parahippocampal roles during verbal encoding. Journal of Neuroscience, 2002, 22, 523-28.

121. Goldmann, R.E., Sullivan, A.L., Droller, D.B.J., Rugg, M.D., Curran, T., Holcomb, P.J., Schacter, D.L., Daffner, K.R., and Budson, A.E. Late frontal brain potentials distinguish true and false recognition. Neuroreport , 2003,14, 1717-20.

122. Henson, R.N.A. and Rugg. M.D. Neural response suppression, haemodynamic repetition effects and behavioural priming. Neuropsychologia, 2003, 41, 263-70.

123. Henson, R.N.A., Cansino, S., Herron, J.E., Robb, W.G.K. and Rugg, M.D. A familiarity signal in human anterior medial temporal cortex? Hippocampus, 2003, 13, 259-62.

124. Henson, R.N., Goshen-Gottstein, Y., Ganel, T., Otten, L.J, Quayle, A. and Rugg, M.D. Electrophysiological and haemodynamic correlates of face perception, recognition and priming. Cerebral Cortex, 2003, 13, 793-805.

125. Herron, J.E., Quayle, A.H., and Rugg, M.D. Probability effects on event-related potential correlates of recognition memory. Cognitive Brain Research, 2003, 16, 66-73.

126. Herron, J.E. and Rugg, M.D. Retrieval orientation and the control of recollection. Journal of Cognitive Neuroscience, 2003 15, 843-54.

127. Herron, J.E. and Rugg, M.D. Strategic influences on recollection in the exclusion task: Electrophysiological evidence. Psychonomic Bulletin and Review, 2003, 10, 703-10.

128. Morcom, A.M., Good, C.D., Frackowiak, R.S.J., and Rugg, M.D. Age effects on the neural correlates of successful memory encoding. Brain, 2003, 126, 213-29.

129. Rugg, M.D., Henson, R.N.A., and Robb, W.G.K. Neural correlates of retrieval processing in the prefrontal cortex during recognition and exclusion tasks. Neuropsychologia, 2003, 41, 40-52.

130. Rugg, M.D. and Yonelinas, A.P. Human recognition memory: a cognitive neuroscience perspective. Trends in Cognitive Sciences, 2003, 7, 313-19.

131. Tsivilis, D., Otten, L.J., and Rugg, M.D. Repetition effects elicited by objects and their contexts: an fMRI study. Human Brain Mapping, 2003, 18, 145-54.

132. Cheng, S., and Rugg, M.D. An event-related potential (ERP) study of two kinds of source judgment errors. Cognitive Brain Research, 2004, 22, 113-27.

133. Gottfried, J.A., Smith, A.P.R., Rugg, M.D., and Dolan, R.J. Remembrance of odors past: human olfactory cortex in cross-modal recognition memory. Neuron, 2004, 42, 687-95.

134. Henson, R.N., Rylands, A., Ross, E., Vuilleumeir, P., and Rugg, M.D. The effect of repetition lag on electrophysiological and haemodynamic correlates of visual object priming. Neuroimage, 2004, 21, 1674-89.

135. Herron, J.E., Henson, R.N.A., and Rugg, M.D. Probability effects on the neural correlates of retrieval success: an fMRI study. Neuroimage, 2004, 21, 302-10.

136. Hornberger, M., Morcom, A.M., and Rugg, M.D. Neural correlates of retrieval orientation: Effects of study-test similarity. Journal of Cognitive Neuroscience, 2004, 16, 1196-210.

137. Li, J., Morcom, A.M., and Rugg, M.D. The effects of age on the neural correlates of successful episodic retrieval: an ERP study. Cognitive, Affective and Behavioral Neuroscience, 2004, 4, 279-293.

138. Morcom, A.M., and Rugg, M.D. Effects of age on retrieval cue processing as revealed by ERPs. Neuropsychologia, 2004, 42, 1525-42.

139. Schloerscheidt, A., and Rugg, M.D. The impact of change in stimulus format on the electrophysiological indices of recognition. Neuropsychologia, 2004, 42, 451-66.

140. Smith, A.P.R., Dolan, R.J., and Rugg, M.D. Event-related potential correlates of the retrieval of emotional and non-emotional context. Journal of Cognitive Neuroscience, 2004 16, 760-75.

141. Smith, A.P.R., Henson, R.N.A., Dolan, R.J., and Rugg, M.D. fMRI correlates of the retrieval of emotional contexts. Neuroimage, 2004, 22, 868-78.

142. Cheng, S., and Rugg, M.D. An event-related potential (ERP) study of two kinds of source judgment errors. Cognitive Brain Research, 2004, 22, 113-27.

143. Budson, A.E., Droller, D.B.J., Dodson, C.S., Schacter, D.L., Rugg, M.D., Holcomb, P.J., and Daffner, K.R. Electrophysiological dissociation of picture versus word encoding: The distinctiveness heuristic as a retrieval orientation. Journal of Cognitive Neuroscience, 2005, 17,1181-93

144. Henson, R.N.A., Hornberger, M., and Rugg, M.D. Further dissociating the processes involved in recognition memory: an fMRI study. Journal of Cognitive Neuroscience, 2005, 17, 1058-73.

145. Honey, G.D., Honey, R.A., Sharar, S.R., Turner, D.C., Pomarol-Clotet, E., Kumaran, D., Simons, J.S., Hu, X., Rugg, M.D., Bullmore, E.T., and Fletcher, P.C. Impairment of specific episodic memory processes by sub-psychotic doses of ketamine: the effects of levels of processing at encoding and of the subsequent retrieval task. Psychopharmacology, 2005, 20, 1-13.

146. Phillips, C., Mattout, J., Rugg, M.D., Maquet, P., and Friston, K.J. An empirical Bayesian solution to the source reconstruction problem in EEG. Neuroimage, 2005, 24, 997-1011.

147. Uncapher, M.R., and Rugg, M.D. Encoding and the durability of episodic memory: a functional magnetic resonance imaging study. Journal of Neuroscience, 2005, 25, 7260-67.

148. Uncapher, M.R., and Rugg, M.D. Effects of divided attention on fMRI correlates of memory encoding. Journal of Cognitive Neuroscience, 2005, 17, 1923-35.

149. Woodruff, C.C, Johnson, J.D., Uncapher, M.R. and Rugg, M.D. Content-specificity of the neural correlates of recollection. Neuropsychologia, 2005, 43, 1022-32.

150. Yonelinas, A.P., Otten, L.J., Shaw, K.N., and Rugg, M.D. Separating the brain regions involved in recollection and familiarity in recognition memory. Journal of Neuroscience, 2005, 25, 3002-08.

151. Hornberger, M., Rugg, M.D., and Henson, R.N.A. ERP correlates of retrieval orientation: direct versus indirect memory tasks. Brain Research, 2006, 1071, 124-36.

152. Hornberger, M., Rugg, M.D., and Henson, R.N.A. fMRI correlates of retrieval orientation. Neuropsychologia. 2006, 44, 1425-36.

153. Johnson, J.D., and Rugg, M.D. Modulation of the electrophysiological correlates of retrieval cue processing by the specificity of task demands. Brain Research, 2006, 1071, 153-64.

154. Johnson, J.D., and Rugg, M.D. Electrophysiological correlates of retrieval processing: Effects of consistent versus inconsistent retrieval demands. Journal of Cognitive Neuroscience, 2006, 18, 1531-44.

155. Mattout, J., Phillips, C., Penny, W.D., Rugg, M.D., and Friston, K.J. MEG source localization under multiple constraints: an extended Bayesian framework. Neuroimage, 2006, 30, 753-67.

156. Otten, L.J., Quayle, A.H., Akram, S., Ditewig, T.A., and Rugg, M.D. Brain activity before an event predicts later recollection. Nature Neuroscience, 2006, 9, 489-91.

157. Smith, A.P.R., Stephan, K.E., Rugg, M.D. and Dolan, R.J. Task and content modulate amygdala-hippocampal connectivity in emotional retrieval. Neuron, 2006, 49, 631–38.

158. Uncapher, M.R., Otten, L.J., and Rugg, M.D. Episodic encoding is more than the sum of its parts: an fMRI investigation of multifeatural contextual encoding. Neuron, 2006, 52, 547-56.

159. Woodruff, C.C., Hayama, H., and Rugg, M.D. Electrophysiological dissociation of the neural correlates of recollection and familiarity. Brain Research, 2006, 1100, 125-35.

160. Woodruff, C.C, Uncapher, M.R., and Rugg, M.D. Neural correlates of differential retrieval orientation: sustained and item-related components. Neuropsychologia, 2006, 44, 3000-10.

161. Vilberg, K., Moosavi, R., and Rugg, M.D. The relationship between electrophysiological correlates of recollection and amount of information retrieved. Brain Research, 2006, 1122, 161-70.

162. Johnson, J.D. and Rugg, M.D. Recollection and the reinstatement of encoding-related cortical activity. Cerebral Cortex, 2007, 17, 2507-15.

163. Morcom, A.M., Li, J., and Rugg, M.D. Age effects on the neural correlates of episodic retrieval: Increased cortical recruitment with matched performance. Cerebral Cortex, 2007, 17, 2491-506

164. Rugg, M.D. and Curran, T. Event-related potentials and recognition memory. Trends in Cognitive Sciences, 2007, 11, 251-57.

165. Vilberg, K., and Rugg, M.D. Dissociation of the neural correlates of recognition memory according to familiarity, recollection, and amount of recollected information. Neuropsychologia, 2007, 45, 2216-25.

166. Duverne, S., Habibi, A., and Rugg, M.D. Regional specificity of age effects on the neural correlates of episodic retrieval. Neurobiology of Aging, 2008, 29, 1902-16.

167. Hayama, H.R., Johnson. J.D. and Rugg, M.D. The relationship between the right frontal old/new ERP effect and post-retrieval monitoring: specific or non-specific? Neuropsychologia, 2008, 46, 1211-23.

168. Johnson, J.D., Mintun, B.R., and Rugg, M.D. Content-dependence of the electrophysiological correlates of recollection. Neuroimage, 2008, 39, 406-16.

169. Johnson, J.D., Muftuler, L.T., and Rugg, M.D. Multiple repetitions reveal functionally- and anatomically-distinct patterns of hippocampal activity during continuous recognition memory. Hippocampus, 2008,18, 975-80.

170. Park, H., and Rugg, M.D. The relationship between study processing and the effects of cue congruency at retrieval: fMRI support for Transfer Appropriate Processing. Cerebral Cortex, 2008, 18, 868-75

171. Park, H., and Rugg, M.D. Effects of study task on the neural correlates of source encoding. Learning and Memory, 2008, 15, 417-25.

172. Park, H., and Rugg, M.D. Neural correlates of successful encoding of semanticallyand phonologically-mediated inter-item associations. Neuroimage, 2008, 43, 165-72.

173. Rugg, M.D., Johnson, J.D., Park, H., and Uncapher, M.R. Encoding-retrieval overlap in human episodic memory: a functional neuroimaging perspective. Progress in Brain Research, 2008, 169, 339-52.

174. Uncapher, M.R., and Rugg, M.D. Fractionation of the component processes underlying successful episodic encoding: a combined fMRI and divided-attention study. Journal of Cognitive Neuroscience, 2008, 20, 240-54.

175. Vilberg, K.L., and Rugg, M.D. Memory retrieval and the parietal cortex: a review of evidence from a dual-process perspective. Neuropsychologia, 2008, 46, 1787-99.

176. Duverne, S., Motamedinia, S., and Rugg, M.D. Effects of age on the neural correlates of retrieval cue processing are modulated by task demands. Journal of Cognitive Neuroscience, 2009, 21, 1-17.

177. Duverne, S., Motamedinia, S., and Rugg, M.D. The relationship between aging, performance, and the neural correlates of successful memory encoding. Cerebral Cortex, 2009, 19, 733-44.

178. Jaeger, A., Johnson, J.D., Corona, M., and Rugg, M.D. ERP correlates of the incidental retrieval of emotional information: effects of study-test delay. Brain Research, 2009, 1269, 105-13.

179. Vilberg, K.L., and Rugg, M.D. An investigation of the effects of relative probability of old and new test items on the neural correlates of successful and unsuccessful source memory. Neuroimage, 2009, 45, 562-71.

180. Vilberg, K.L., and Rugg, M.D. Functional significance of retrieval-related activity in lateral parietal cortex: evidence from fMRI and ERPs. Human Brain Mapping, 2009, 30, 1490-501

181. Wang, T.H., Kruggel, F., and Rugg M.D. Effects of advanced aging on the neural correlates of successful recognition memory. Neuropsychologia, 2009, 47, 1352-61.

182. Whalley, M.G., Rugg, M.D., Smith, A.P.R, Dolan, R.J., and Brewin, C.R. Incidental retrieval of emotional contexts in posttraumatic stress disorder and depression: An fMRI study. Brain and Cognition, 2009, 69, 98-107.

183. Uncapher, M.R. and Rugg, M.D. Selecting for memory? The influence of selective attention on the mnemonic binding of contextual information. Journal of Neuroscience, 2009, 29, 8270–79.

184. Hayama, H., and Rugg, M.D. Right dorsolateral prefrontal cortex is engaged during post-retrieval processing of both episodic and semantic information. Neuropsychologia 2009, 47, 2409-16.

185. Johnson, J.D., McDuff, S.G.R., Rugg, M.D., and Norman, K.A. Recollection, familiarity, and cortical reinstatement: A multi-voxel pattern analysis. Neuron, 2009, 63, 697-708.

186. Trinkler, I, King, J.A., Doeller, C.F, Rugg, M.D., and Burgess, N. Neural bases of autobiographical support for episodic recollection of faces. Hippocampus, 2009, 19, 718-30.

187. Vilberg, K.L., and Rugg, M.D. Lateral parietal cortex is modulated by amount of recollected verbal information. Neuroreport, 2009, 20, 1295-1299.

188. Cheng, S.K. and Rugg, M.D. Event-related potential correlates of gist and verbatim encoding. International Journal of Psychophysiology, 2010, 77, 95-105.

189. Clare, L., Linden, D.E., Woods R.T., Whitaker, R., Evans, S.J., Parkinson, C.H., van Passchen, J., Nelis, S.M., Hoare, Z., Yuen, K.S., and Rugg, M.D. Goal-oriented cognitive rehabilitation for people with early-stage Alzheimer's Disease: a single blind randomized controlled trial of clinical efficacy. American Journal of Geriatric Psychiatry, 2010, 18, 928-39.

190. Gottlieb, L.J., Uncapher, M.R., and Rugg, M.D. Dissociation of the neural correlates of visual and auditory contextual encoding. Neuropsychologia, 2010, 48, 137-44.

191. Park, H., and Rugg, M.D. Pre-stimulus hippocampal activity predicts later recollection. Hippocampus, 2010, 20, 24-28

192. Yu, S.S., and Rugg, M.D. Dissociation of the electrophysiological correlates of familiarity strength and item repetition. Brain Research, 2010, 12;1320, 74-84.

193. de Chastelaine, M., Wang, T.H., Minton, B., Muftuler, L.T., and Rugg, M.D. The effects of age, memory performance and callosal integrity on the neural correlates of successful associative encoding. Cerebral Cortex, 2011, 21, 2166-76.

194. Gottlieb, L., and Rugg, M.D. Effects of modality on the neural correlates of encoding processes supporting recollection and familiarity. Learning & Memory, 2011, 18, 565-73.

195. Kroes, M.C.W, Rugg, M.D., Whalley M.G., and Brewin, C.R. Structural brain abnormalities common to posttraumatic stress disorder and depression. Journal of Psychiatry and Neuroscience, 2011, 36, 256-65.

196. Kroes, M.C.W., Whalley M.G., Rugg, M.D., and Brewin, C.R. Association of flashbacks and structural brain abnormalities in posttraumatic stress disorder. European Psychiatry, 2011, 26, 525-31.

197. Park H. and Rugg, MD. Neural correlates of encoding within- and across-domain inter-item associations. Journal of Cognitive Neuroscience, 2011, 9, 2533-43.

198. Suzuki, M., Johnson, J.D., and Rugg, M.D. Decrements in hippocampal activity with item repetition during continuous recognition: an fMRI study. Journal of Cognitive Neuroscience, 2011, 23, 1522-32.

199. Suzuki, M., Johnson, J.D., and Rugg, M.D. Recollection-related hippocampal activity during continuous recognition: a high-resolution fMRI study. Hippocampus, 2011, 21, 575-83.

200. Gottlieb, L., Wong, J., de Chastelaine, M. and Rugg, M.D. Neural correlates of the encoding of multi-modal contextual features. Learning and Memory, 2012, 19, 605-14.

201. Hayama, H.R., Vilberg, K.L., and Rugg, M.D. Overlap between the neural correlates of cued recall and source memory: Evidence for a generic recollection network? Journal of Cognitive Neuroscience, 2012, 24, 1127-37.

202. Jaeger, A., and Rugg, M.D. Implicit effects of emotional contexts: an ERP study. Cognitive, Affective and Behavioral Neuroscience, 2012, 12, 748-60.

203. Morcom, A.M., and Rugg, M.D. Retrieval orientation and the control of recollection: an fMRI study. Journal of Cognitive Neuroscience, 2012, 2372-84.

204. Okada, K., Vilberg, K.L., and Rugg, M.D. Comparison of the neural correlates of retrieval success in tests of cued recall and recognition memory. Human Brain Mapping, 2012, 33, 523-33.

205. Rugg, M.D., Vilberg, K.L., Mattson, J.T., Yu, S.S. Johnson, J.D., and Suzuki, M. Item memory, context memory and the hippocampus: fMRI evidence. Neuropsychologia, 2012, 50, 3070-79.

206. Vilberg, K.L., and Rugg, M.D. The neural correlates of recollection: transient versus sustained fMRI effects. Journal of Neuroscience, 2012, 32, 15679-87.

207. Wang, T.H., de Chastelaine, M., Minton, B., and Rugg, M.D. Effects of age on the neural correlates of familiarity as indexed by ERPs. Journal of Cognitive Neuroscience, 2012, 24, 1055-1068.

208. Whalley, M.G., Rugg, M.D., and Brewin, C.R. Autobiographical memory in depression: An fMRI study. Psychiatry Research, 2012, 20, 98-106.

209. Yu, S.S., Johnson, J.D., and Rugg, M.D. Hippocampal activity during recognition memory co-varies with the accuracy and confidence of source memory judgments. Hippocampus, 2012, 22, 1429-37.

210. Yu, S.S., Johnson, J.D., and Rugg, M.D. Dissociation of recollection-related neural activity in ventral lateral parietal cortex. Cognitive Neuroscience, 2012, 3, 142-49.

211. Johnson, J.D., Suzuki, M., and Rugg, M.D. Recollection, familiarity, and contentsensitivity in lateral parietal cortex: A high-resolution fMRI study. Frontiers in Human Neuroscience, 2013, 7, 219.

212. Rugg, M.D., and Thompson-Schill, S.L. Moving forward with fMRI data. Perspectives on Psychologial Science, 2013, 8, 84-87

213. Rugg, M.D., and Vilberg, K.L. Brain networks underlying episodic memory retrieval. Current Opinion in Neurobiology, 2013, 23, 255-260.

214. Whalley, M., Kroes, M., Huntley, Z., Rugg, M.D., Davis, S., and Brewin, C.R. An fMRI Investigation of Posttraumatic Flashbacks. Brain and Cognition, 2013, 8, 151-9.

215. van Paasschen, J., Clare, L., Yuen, K., Woods, R.T, Evans, S.J., Parkinson, C.H., Rugg, M.D., and Linden, D.E.J. Cognitive rehabilitation changes memory-related brain activity in people with Alzheimer's disease. Neurorehabilitation and Neural Repair, 2013, 75, 448-59.

216. Wong, J.X., de Chastelaine, M., and Rugg, M.D. Comparison of the neural correlates of encoding item-item and item-context associations. Frontiers in Human Neuroscience, 2013, 7, 436.

217. de Chastelaine, M., and Rugg, M.D. The relationship between task-related and subsequent memory effects. Human Brain Mapping, 2014, 35, 3687-700.

218. Mattson, J.T., Wang, T.H., de Chastelaine, M., and Rugg, M.D. Effects of age on negative subsequent memory effects associated with the encoding of item and item-context information. Cerebral Cortex, 2014, 24, 3322-33.

219. Vilberg, K.L., and Rugg, M.D. Temporal dissociations within the core recollection network. Cognitive Neuroscience, 2014, 5, 77-84.

220. Addante, R.J., de Chastelaine, M., and Rugg, M.D. Pre-stimulus neural activity predicts successful encoding of inter-item associations. Neuroimage, 2015, 105, 21-31.

221. de Chastelaine, M., Mattson, J.T., Wang, T.H., Donley, B.E. and Rugg, M.D. Sensitivity of negative subsequent memory and task-negative effects to age and associative memory performance. Brain Research, 2015, 1612, 16-29.

222. de Chastelaine, M., and Rugg, M.D. The effects of study task on pre-stimulus subsequent memory effects in the hippocampus. Hippocampus, 2015, 25, 1217-23.

223. Elward, R.L., Vilberg, K.L., and. Rugg, M.D. Motivated memories: Effects of reward and recollection in the core recollection network and beyond. Cerebral Cortex, 2015, 25, 3159-66.

224. Elward, R.L. and Rugg, M.D. Retrieval goal modulates memory for context. Journal of Cognitive Neuroscience, 2015, 27, 2529-40.

225. King, D.R., de Chastelaine, M., Elward, R.L., Wang, T.H., and Rugg, M.D. Recollection-related increases in functional connectivity predict individual differences in memory accuracy. Journal of Neuroscience, 2015, 28, 35, 1763-72.

226. Sweeney-Reed, C.M., Zaehle, T., Voges, J., Schmitt, F.C., Buentjen, L., Kopitzki, K., Hinrichs, H., Heinze, H-J., Rugg, M.D., Knight R.T., Richardson-Klavehn, A. Thalamic theta phase alignment predicts human memory formation and anterior thalamic cross-

frequency coupling. eLife, 2015, 4, e07578.

227. Thakral, P.P., Wang, T.H., and Rugg, M.D. Cortical reinstatement and the confidence and accuracy of source memory. Neuroimage, 2015, 109, 118-29.

228. Thakral, P.P., Yu, S.S., and Rugg, M.D. The hippocampus is sensitive to the mismatch in novelty between items and their contexts. Brain Research, 2015, 1602, 144-52.

229 de Chastelaine, M., Mattson, J.T., Wang, T.H., Donley, B.E. and Rugg, M.D. The relationships between age, associative memory performance and the neural correlates of successful associative memory encoding. Neurobiology of Aging, 2016, 42, 163–76.

230. de Chastelaine, M., Mattson, J.T., Wang, T.H., Donley, B.E. and Rugg, M.D. The neural correlates of recollection and retrieval monitoring: relationships with age and recollection performance. Neuroimage, 2016, 138, 164-175.

231. Koen, J.D., and Rugg, M.D. Memory reactivation predicts resistance to retroactive interference: Evidence from multivariate classification and pattern similarity analyses. Journal of Neuroscience, 2016, 36, 4389-99.

232. Sweeney-Reed, CM., Zaehle, Z.T, Voges, J., Schmitt, F.C., Buentjen, L., Kopitzki, K., Richardson-Klavehn, A., Hinrichs, H., Heinze, H.J., Knight, R.T., and Rugg, M.D. Prestimulus thalamic theta power predicts human memory formation. Neuroimage, 2016, 138, 100-108.

233. Sweeney-Reed, CM., Zaehle, Z.T, Voges, J., Schmitt, F.C., Buentjen, L., Kopitzki, K., Richardson-Klavehn, A., Hinrichs, H., Heinze, H.J., Knight, R.T., and Rugg, M.D. Clinical, neuropsychological, and pre-stimulus dorsomedial thalamic nucleus electrophysiological data in deep brain stimulation patients. Data in Brief, 2016, 8, 557-561.

234. Wang, T.H., Johnson, J.D., de Chastelaine, M., Donley, B.E., and Rugg, M.D. The effects of age on the neural correlates of recollection success, recollection-related cortical reinstatement and post-retrieval monitoring. Cerebral Cortex, 2016, 26, 1698-1714.

235. de Chastelaine, M., Mattson J.T., Wang T.H., Donley B.E., and Rugg, M.D. Independent contributions of fMRI familiarity and novelty effects to recognition memory and their stability across the adult lifespan. Neuroimage, 2017, 156, 340-351

236. Lega B., Germi J., Rugg M.D. Modulation of oscillatory power and connectivity in the human posterior cingulate cortex supports the encoding and retrieval of episodic memories. Journal of Cognitive Neuroscience, 2017, 29, 1415-1432.

237. Thakral, P.P., Wang, T.H., and Rugg, M.D. Decoding the content of recollection within the core recollection network and beyond. Cortex, 2017, 91 101-113.

238. Sweeney-Reed, C.M., Zaehle, Y., Voges, J., Schmitt, F.C., Buentjen, L., Borchardt, V., Walter, M., Hinrichs, H., Heinze, H.J, Rugg, M.D and Knight, R.T. Anterior thalamic high frequency band activity is coupled with theta oscillations at rest. Frontiers in Neuroscience, 2017, 11, 358.

239. Lin, J.J., Rugg, M.D., Das, S., Stein, J., Rizzuto, D., Kahana, M., and Lega, B.Theta band power increases predict successful item encoding in the posterior but not anterior human hippocampus. Hippocampus, 2017, 27, 1040-1053.

240. Cabeza, R., Albert, M., Belleville, S., Craik, F.I.M., Duarte, A., Grady, C.L., Lindenberger, U., Nyberg, L., Park, D.C., Reuter-Lorenz, P.A., Rugg, M.D., Steffener, J., and Rajah, M.N. Maintenance, reserve, and compensation: the cognitive neuroscience of healthy ageing. Nature Reviews Neuroscience, 2018, 19, 701-710.

241. King, D.R., de Chastelaine, M., and Rugg, M.D. Recollection-related increases in functional connectivity across the healthy adult lifespan. Neurobiology of Aging, 2018, 62, 1-19.

242. King, D.R., de Chastelaine, M., Elward, R.L., Wang, T.H., and Rugg, M.D. Dissociation between the neural correlates of recollection and familiarity in the striatum and hippocampus: across-study convergence. Behavioral Brain Research, 2018, 354, 1-7.

243. Koen, J.D., Horne, E.D., Hauck, N., and Rugg, M.D. Age-related differences in prestimulus subsequent memory effects assessed with event-related potentials. Journal of Cognitive Neuroscience, 2018, 30, 829-850.

244. Koen, J.D., Thakral, P.P., and Rugg, M.D. Transcranial magnetic stimulation of the left angular gyrus during encoding does not impair associative memory performance. Cognitive Neuroscience, 2018, 9, 127-138.

245. Rugg, M.D., and King, D.R. Ventral lateral parietal cortex and episodic memory retrieval. Cortex, 2018, 107, 238-250.

246. Cabeza, R., Albert, M., Belleville, S., Craik, F.I.M., Duarte, A., Grady, C.L., Lindenberger, U., Nyberg, L., Park, D.C., Reuter-Lorenz, P.A., Rugg, M.D., Steffener, J., and Rajah, M.N. Reply to 'Mechanisms underlying resilience in ageing'. Nature Reviews Neuroscience, 2019, 20, 247.

247. Koen, J.D., Hauck, N., and Rugg, M.D. The relationship between age, neural differentiation, and memory performance. Journal of Neuroscience, 2019, 39, 149-162.

248. de Chastelaine, M., Donley B.E., Kennedy, K.M., and Rugg, M.D. Age moderates the relationship between cortical thickness and cognitive performance. Neuropsychologia, 2019, 132, 107136.

249. Koen, J.D., and Rugg, M.D. Neural Dedifferentiation in the Aging Brain. Trends in Cognitive Sciences, 2019, 23, 547-559.

250. Lin, J.J., Umbach, G, Rugg, M.D., and Lega, B. Gamma oscillations during episodic memory processing provide evidence for functional specialization in the longitudinal axis of the human hippocampus. Hippocampus, 2019, 29, 68-72.

251. Natu, V.S., Lin, J., Burks, A., Arora, A., Rugg, M.D., and Lega, B. Stimulation of the posterior cingulate cortex impairs episodic memory encoding. Journal of Neuroscience, 2019, 39, 7173-7182.

252. Renoult, L., Irish, M., Moscovitch, M., Rugg, M.D. From knowing to remembering: the semantic-episodic distinction. Trends in Cognitive Sciences, 2019, 23, 983-1088.

253. Thakral, P.P., Wang, T.H., and Rugg, M.D. Effects of age on across-participant variability of cortical reinstatement effects. Neuroimage, 2019, 191,162-175.

254. Hill, P.F., King, D.R., Lega, B.C., and Rugg M.D. Comparison of fMRI correlates of successful episodic memory encoding in temporal lobe epilepsy patients and healthy controls. Neuroimage, 2020, 207, 116397.

255. Koen, J.D., Srokova, S., and Rugg, M.D. Age-related neural dedifferentiation and cognition. Current Opinion in Behavioral Sciences, 2020, 32, 7-14.

256. Renoult, L., and Rugg, M.D. An historical perspective on Endel Tulving's episodic-semantic distinction. Neuropsychologia, 2020, 139, 107366.

257. Horne, E.D., Koen, J.D., Hauck, N., and Rugg, M.D. Age differences in the neural correlates of the specificity of recollection: an event-related potential study. Neuropsychologia, 2020, 140, 107394.

258. Choi, K., Bagen, L., Robinson, L., Umbach, G., Rugg, M.D., and Lega, B. Longitudinal differences in human hippocampal connectivity during episodic memory processing. Cerebral Cortex Communications, 2020, 1, tgaa010.

259. Reifegerste, J., Veríssimo, J., Rugg, M.D., Pullman, M.Y., Babcock, L., Glei, D.A., Weinstein, M., Goldman, N., and Ullman, M.T. Early-life education may help bolster declarative memory in old age, especially for women. Aging, Neuropsychology and Cognition, 2020, 5, 1-35.

260. Srokova, S., Hill, P.F., Koen, J.D., King, D.R., and Rugg, M.D. Neural differentiation is moderated by age in scene- but not face-selective cortical regions. eNeuro, 2020, 7(3).

261. Alghamdi, S.A. and Rugg, M.D. The effect of age on recollection is not moderated by differential estimation methods. Memory, 2020, 28, 1067-1077.

262. Hou, M., de Chastelaine, M., Jayakumar, M., Donley, B. E., and Rugg, M.D. Recollection-related hippocampal fMRI effects predict longitudinal memory change in healthy older adults. Neuropsychologia, 2020, 146, 107537.

263. Hou, M., de Chastelaine, M., Donley, B. E., and Rugg, M.D. Specific and general relationships between cortical thickness and cognition in older adults: a longitudinal study. Neurobiology of Aging, 2020, 102, 89-101.

264. Tan, R.J., Rugg, M.D., and Lega, B.C. Direct brain recordings identify hippocampal and cortical networks that distinguish successful versus failed episodic memory retrieval. Neuropsychologia, 2020, 147, 107595.

265. Wang, W., Li, B., Hou, M., and Rugg, M.D. Electrophysiological correlates of the perceptual fluency effect on recognition memory in different fluency contexts. Neuropsychologia, 2020, 148, 107639.

266. Kota, S., Rugg, M.D., and Lega, B.C. Hippocampal theta oscillations support successful associative memory formation. Journal of Neuroscience, 2020, 40, 9507-9518.

267. Hill, P.F., King, D.R., and Rugg, M.D. Age differences in retrieval-related reinstatement reflect age-related dedifferentiation at encoding. Cerebral Cortex, 2021, 31, 106-122.

268. Horne, E.D., de Chastelaine, M., and Rugg M.D. Neural correlates of post-retrieval monitoring in older adults are preserved under divided attention, but are decoupled from memory performance. Neurobiology of Aging, 2021, 97, 106-119.

269. Liu, E.S., Koen, J.D., and Rugg, M.D. Effects of age on pre-stimulus neural activity predictive of successful memory encoding: an fMRI study. Cerebral Cortex, 2021, 31, 917-932.

270. Elward, R.L., Rugg, M.D., and Vargha-Khadem, F. When the brain, but not the person, remembers: Cortical reinstatement is modulated by retrieval goal in developmental amnesia. Neuropsychologia, 2021, 154, 107788.

271. Srokova, S., Hill, P.F., Elward, R.L., and Rugg, M.D. Effects of age on goal-dependent modulation of episodic memory retrieval. Neurobiology of Aging, 2021, 102, 73-88.

272. Sweeney-Reed, C.M., Buentjen, L., Voges, J., Schmitt, W.C., Zaehle, T., Kam, J.W.Y., Kaufmann, J., Heinze, H-J., Hinrichs, H., Knight, R.T., and Rugg, M.D. The role of the anterior nuclei of the thalamus in human memory processing. Neuroscience and Biobehavioral Reviews, 2021, 126, 146-158.

273. Hill, P.F., Seger, S.E., Yoo, H.B., King, D.R., Wang, D.X., Lega, B.C. and Rugg, M.D. Distinct neurophysiological correlates of the fMRI BOLD signal in the hippocampus and neocortex. Journal of Neuroscience, 2021, 41, 6343-6352.

274. Hill, P.F., Horne, E.D., Koen, J.D. and Rugg, M.D. Transcranial magnetic stimulation of right dorsolateral prefrontal cortex does not affect associative retrieval in healthy young or older adults. Neuroimage: Reports, 2021, 1, 100027.

275. Hou, M., Wang, T.H., and Rugg, M.D. The effects of age on neural correlates of recognition memory: an fMRI study. Brain and Cognition, 2021, 153, 105785.

## **Book Chapters**

1. Rugg, M.D., Fletcher, R.P. and Lykken, D.T. Computers in psychophysiological research. In I. Martin and P.H. Venables (eds.), Techniques in Psychophysiology. John Wiley, 1980.

2. Rugg, M. D. Electrophysiological studies. In J.G. Beaumont (ed.), Divided Visual Field Studies of Cerebral Organisation. Academic Press, 1982.

3. Rugg, M. D. The relationship between evoked potentials and lateral asymmetries of processing. In A. W. K. Gaillard and W. Ritter (eds.), Tutorials in ERP Research: Endogenous Components. Elsevier, 1983.

4. Rugg, M. D. Constraints on cognitive performance: some problems with and alternatives to resource theory. In R. Hockey, A. W. K. Gaillard and M. Coles (eds.), Energetics and Human Information Processing. Nijhoff, 1986.

5. Rugg, M. D., Kok, A., Barrett, G. and Fischler, I. ERPs associated with language and hemisphere specialisation. In W. C. McCallum, R. Zappoli and F. Denoth (eds.), Cognitive Psychophysiology: Studies in ERPs. Elsevier, 1986.

6. Milner, A.D. and Rugg, M.D. Interhemispheric transmission times. In J. Crawford and D. Parker (Eds.) Developments in Clinical and Experimental Neuropsychology. Plenum Press, 1989.

7. Rugg, M.D. Event-related potentials and selective attention: commentary. In C.H.M. Brunia, G. Mulder, and M.N. Verbaten (Eds.), Event-Related Brain Research, Elsevier, 1991.

8. Rugg, M.D. Conscious and unconscious processes in language and memory: commentary. In A.D. Milner, and M.D. Rugg (Eds), The Neuropsychology of Consciousness. Academic Press, 1991.

9. Rugg, M.D. Event-related potentials in Clinical Neuropsychology. In J.R. Crawford, W.A. McKinlay, and D.M. Parker. (Eds.) The Handbook of Neuropsychological Assessment. L. Erlbaum, 1992.

10. Rugg, M.D., and Doyle, M.C. Event-related potentials and stimulus repetition in indirect and direct tests of memory. In H. Heinze, T. Munte, and G.R. Mangun (Eds), Cognitive Electrophysiology. Birkhauser Boston, 1994.

11. Rugg, M.D. Event-related potential studies of human memory. In M.S. Gazzaniga (Ed.), The Cognitive Neurosciences. MIT Press, 1995.

12. Rugg, M.D. Cognitive event-related potentials: Intracerebral and lesion studies. In F. Boller and J. Grafman (Eds.), Handbook of Neuropsychology, Volume 10. Elsevier, 1995.

13. Coles, M.G.H., and Rugg, M.D. Event-related brain potentials: An introduction. In M.D. Rugg, and M.G.H. Coles,(Eds.), Electrophysiology of Mind: Event-Related Brain Potentials and Cognition. Oxford University Press, 1995.

14. Rugg, M.D., and Coles, M.G.H. The ERP and cognitive psychology: Conceptual issues. In M.D. Rugg, and M.G.H. Coles (Eds.), Electrophysiology of Mind: Event-Related Brain Potentials and Cognition. Oxford University Press, 1995.

15. Rugg, M.D. ERP studies of memory. In M.D. Rugg, and M.G.H. Coles (Eds.), Electrophysiology of Mind: Event-Related Brain Potentials and Cognition. Oxford University Press, 1995.

16. Rugg, M.D. Functional neuroimaging in cognitive neuroscience. In P. Hagoort and C. Brown (Eds.) Neurocognition of Language. Oxford: Oxford University Press, 1999.

17. Rugg, M.D., and Allan, K. Memory retrieval: an electrophysiological perspective. In M.S. Gazzaniga (Ed.) The Cognitive Neurosciences 2nd Ed., MIT press, 1999.

18. Rugg, M.D., and Allan, K. Event-related potential studies of long-term memory. In E. Tulving and F.I.M. Craik (Eds), The Oxford Handbook of Memory. Oxford University Press, 2000.

19. Rugg, M.D., Herron, J.E., and Morcom, A.M. Electrophysiological studies of retrieval processing. In L.R. Squire and D.L. Schacter (eds.), Neuropsychology of Memory, 3rd Edition. Guilford Press, 2002.

20. Rugg, M.D. Functional neuroimaging of memory. In A. Baddeley, B. Wilson, and M. Kopelman (Eds.), Handbook of Memory Disorders, 2nd Edition. Wiley, 2002.

21. Rugg, M.D., and Henson, R.N.A. Episodic memory retrieval: an (event-related) functional neuroimaging perspective. In A.E. Parker, E.L.Wilding, T. Bussey, (eds.) The cognitive neuroscience of memory encoding and retrieval. Psychology Press, 2002.

22. Otten, L. J., and Rugg, M. D. Interpreting event-related brain potentials. In T. C. Handy (Ed.), Event-related potentials: A methods handbook. Cambridge, MA: MIT Press, 2004.

23. Rugg, M.D., and Morcom, A.M. The relationship between brain activity, cognitive performance and aging: The case of memory. In Cabeza, R., Nyberg, L., and Park, D. (Eds.) Cognitive Neuroscience of Aging: Linking Cognitive and Cerebral Aging. Oxford University Press, 2004.

24. Rugg, M.D. Retrieval processing in human memory: Electrophysiological and fMRI evidence. In M.S. Gazzaniga (Ed.) The Cognitive Neurosciences 3rd Ed., MIT press, 2004.

25. Rugg, M.D. Functional neuroimaging and cognitive theory. In Rosler, F., Ranganath, C., Roder, B., and Kluwe, R.H. (Eds.), Functional neuroimaging and psychological theories of brain function, Oxford University Press, 2009.

26. Rugg, M.D., Johnson, J.D., and Uncapher, M.R. Encoding and retrieval in episodic memory: Insights from fMRI. In Duarte, A., Barense, M., & Addis, D.R. (Eds.), Handbook on the Cognitive Neuroscience of Memory. Wiley-Blackwell, 2015.

27. Rugg, M.D. Interpreting age-related differences in memory-related neural activity. In Cabeza, R., Nyberg, L., and Park, D.C. (Eds.), Cognitive Neuroscience of Aging: Linking Cognitive and Cerebral Aging – 2nd Edition. Oxford University Press, 2016.

28. Rugg, M.D. Frontoparietal contributions to retrieval. In Kahana, M.J., and Wagner, A.D. (Eds.), Handbook on Human Memory, Oxford University Press, in press.

### **Consultancy work for Grant Awarding Bodies**

Ad Hoc consultant for:

Australian Research Council Austrian Research Foundation Biotechnology and Biological Sciences Research Council (UK) **British Council** European Community Human Capital Programme Danish Council for Independent Research Dutch Medical Research Organisation (NWO) Economic and Social Research Council (UK) Foundation for Polish Science Human Frontiers Programme March of Dimes Birth Defects Association Medical Research Council (UK) Medical Research Council (Australia) Medical Research Council of Canada Mental Health Foundation (UK) National Institutes of Health National Science Foundation Natural Sciences and Engineering Research Council of Canada NATO Scientific Affairs Division Research into Ageing (UK) SANE (schizophrenia: a national emergency) (UK) Science Foundation Ireland Swiss National Science Foundation United States-Israel Binational Science Foundation. Wellcome Trust World Health Organisation

#### **Editing/Reviewing**

Editor-in-Chief *Neuropsychologia* (2009-2017). Action Editor *Neuropsychologia* (2003-2006) Board of Editors *Neuropsychologia* (2001-2003) Associate Editor *Neuropsychologia* (1989-2001) Assistant Editor *Human Brain Mapping* (2000-2003). Associate Editor *Neuroscience* (2000-2003). Board of Editors *Biological Psychology* (1989-1992). Consulting Editor *Neuropsychology* (1996-2001). Member of Editorial Board *NeuroImage* (1995-2005). Member of Editorial Board *Neurobiology of Learning and Memory* (2005-). Member of Editorial Board *PLOS Biology* (2005-2009). Member of Editorial Board *Journal of Cognitive Neuroscience* (2005-).

Ad Hoc reviewer for approximately 30 other journals.

# Invited Presentations at Conferences, Symposia and Workshops since 2012

Second Annual Neuroscience, Behavior and Health Forum, University of Vermont. Plenary speaker. 'The cognitive neutoscience of human memory: a perspective from fMRI'. Burlington, February, 2012.

10th Tsukuba International Conference on Memory. Invited speaker. 'Cortical networks underlying the encoding and retrieval of episodic memories'. Gakushuin University, Tokyo, Japan, March, 2012.

First International Conference on the Functional Architecture of Memory. Invited speaker. 'Recollection, familiarity and the hippocampus: fMRI evidence'. Bochum, Germany, April, 2012.

Memory Disorders Research Society. 'Temporal dissociation of the neural correlates of recollection'. Davis, September, 2012.

Second INAPIC Fall Workshop. 'Relating measures of brain function to behavioral performance in studies of cognitive aging: methodological and inferential issues'. University of Zurich, Switzerland, September, 2012.

Wu Ta-You science Camp, Wu Ta-You Foundation. Plenary lecturer. 'The cognitive neuroscience of episodic memory: a perspective from fMRI.' Ci-Tou, Taiwan, August, 2013.

Third INAPIC Fall Workshop. 'Brain networks underlying successful recollection: does anything differ with age?'. University of Zurich, Switzerland, September, 2013.

Memory Disorders Research Society. Invited symposium contributor. 'What is the role of the angular gyrus in episodic memory? 'Toronto, October, 2013.

DZNE Opening symposium. Invited speaker. 'Functional interactions within the brain's recollection network and their relationship with memory performance and age'. Magdeburg, Germany, February, 2014.

Second International Conference on the Functional Architecture of Memory. Invited speaker. 'Brain networks supporting successful recollection'. Bochum, Germany, May 2014.

12th International Conference on Cognitive Neuroscience. Invited symposium contributor. 'The effects of age on episodic memory - what stays up and what goes down?'. Brisbane, Australia, July 2014. Kumamoto Aging Brain Symposium. Invited contributor. 'Understanding individual differences in episodic memory across the adult lifespan: evidence from functional neuroimaging'. Kumamoto, Japan, October 2014.

Cognitive Neuroscience Society. Invited symposium contributor. 'Dissociating the effects of age and performance on functional brain activity: an individual differences approach'. San Francisco, April 2015.

Memory Disorders Research Society. Invited symposium contributor. 'Insights into episodic encoding and retrieval from the analysis of whole-brain event-related connectivity'. Cambridge, UK, September 2015.

Third International Conference on the Functional Architecture of Memory. Invited speaker. 'Hippocampal-cortical interactions supporting episodic retrieval'. Magdeburg, Germany, May 2016.

International workshop - From knowing to re-experiencing: the cognitive neuroscience of declarative memory. Plenary speaker. 'Remembering, knowing and the distinction between episodic and semantic memory: what do we know 30 years on?'. University of East Anglia, UK, June 2016.

International Conference on Memory, Invited symposium contributor and discussant. 'Recollection and the ventral parietal cortex: a representational account', and 'Neural networks and interactions underlying episodic memory: evidence from functional connectivity'. Budapest, Hungary, August 2016.

Barabara Dicker Oration. Swinburne University. 'Memory and Dementia'. Melbourne, Australia, September 2016.

Jeeves Lecture, St Andrews University. 'Memory and aging: what we know and what we need to know'. St Andrews, UK, November 2016.

International workshop – 'Stop me if you've heard this one before: novelty, repetition and the brain. Plenary speaker. 'Relationships between hippocampal and perirhinal novelty effects, age, and memory performance'. University of East Anglia, Norwich, UK, May 2017.

International workshop – 'Towards consensus definitions on key terms in the cognitive neuroscience of aging and dementia'. Invited speaker. 'Compensation: avoiding circularity and a preliminary classification scheme'. McGill University, Montreal, Canada, June 2017.

Cognitive Neuroscience Society. Chair and contributor to symposium: Neural Dedifferentiation and Age-Related Cognitive Decline. 'Age-Related Neural Dedifferentiation – Some Points for Discussion'. Boston, April 2018.

Cognitive Aging Conference. Symposiom contributor. 'Age-Related differences in the neural correlates of cognitive processing: from description to interpretation'. Atlanta, May 2018.

2nd Cambridge Representational Similarity Analysis and Advanced Computational Methods Workshop. 'MVPA: the Good, the Bad and the Ugly'. Cambridge, UK, May 2018.

Memory Disorders Research Society. Symposium organizer and contributor. 'The striatum and memory retrieval from a dual-process perspective'. Toronto, Canada, October 2018.

Cognitive Neuroscience Society. Invited symposium contributor. 'The role of semantic memory in memory for unique events'. San Francisco, March 2019.

McGill University: conference on Life Trajectories and Interventions that Support Successful Neurocognitive Aging. Invited contributor. 'Challenges in using functional neuroimaging to predict individual trajectories of age-related cognitive decline'. Montreal, Canada, September 2019.

Memory Disorders Research Society. Symposium contributor. 'Dedifferentiation as a moderator of age-related differences in specificity of retrieval-related reinstatement'. New York, October, 2019.

# Past and Current Membership of External Committees

1) Local Secretary and national committee member of Brain Research Association (1981-84)

2) Evoked Potentials Review Subcommittee of the Neurosciences Board of the Medical Research Council (1986)

3) Committee member Psychophysiology Society (1987-88)

4) Committee member European Brain and Behaviour Society (1990-95)

5) Advisory Council of the International Association for the Study of Attention and Performance (1992-2000)

6) Committee member Experimental Psychology Society (1996-1998)

7) Nominations committee, Society for Psychophysiological Research (1996-1997)

8) Social and psychological studies sectional committee, Royal Society of Edinburgh (1997-1999)

9) Scientific advisory board, Max-Planck Institute for Cognitive Neuroscience, Leipzig (1997-2002)

10) Medical Research Council Advisory Board (1997-2003)

11) Department of Health working party on chronic health effects of low-level exposure to organophosphates (1998-1999). Report: 'Organophosphates'. Department of Health, HM Government, 1999

12) Program Committee, Cognitive Neuroscience Society (1999-2003); Chair of committee (2002-2003)

13) HM Government Independent Expert Group on Mobile Phones (1999-2000). Report: 'Mobile Phones and Health'. Independent Expert Group on Mobile Phones, 2000

14) Scientific Advisory Committee, Donders Institute for Functional Imaging, Nijmegen, Holland (2000-2005)

15) Programme Management Committee of the UK Mobile Telecommunications Health Research Programme (2000-2003; 2005-2008).

16) National Radiological Protection Board: Advisory Group on Non-Ionizing Radiation (2001-2002)

17) National Science Foundation. Human Social and Dynamics Panel (2004).

18) National Institutes of Health. Cognition and Perception Study Section, *ad hoc* member (2006).

19) National Institute of Mental Health. Conte Centers for Neuroscience Research Study Section (Chair) (2006-2007).

20). National Institutes of Health. Interdisciplinary Behavioral Science Centers for Mental Health Study Section (Chair). (2006).

21). National Institute of Mental Health. Special Emphasis Panel: Building Translational Research in Integrative Behavioral Science. (Chair). (2007).

22). National Institute of Mental Heath. Basic Centers Working Group (co-Chair) (2007).

23). National Institutes of Health. Cognition and Perception Study Panel, chartered member (2007-2009), Chair (2009-2011).

24) National Institute of Mental Health. Interdisciplinary Developmental Science Centers Study Section (Chair). (2007-2008).

25) National Institute of Mental Health. Conte Basic Neuroscience Centers Study Section (Chair). (2009, 2011).

26) National Institute of Mental Health. Conte Basic Neuroscience Centers Study Section (member). (2012).

27) National Steering Committee, Wayne State University Institute of Gerontology (member). (**2012 -** )

28) National Science Foundation. Member, Pre-Proposal Review Panel for Modulation II, Neural Systems. (2013).

29) Advisory Committee, Conte Center on the Neurobiology of Social Decision-Making, Caltech. (2013-)

30) National Institutes of Health. Neurobiology of Learning and Memory Study Section, chartered member, (2014-2017), Chair (2017-2019)

31) University of Texas System Advisory Board for Neuroscience and Neurotechnology Research Institute. (**2014-**).

32) National Institute of Mental Health. BRAIN initiative: Planning for next generation human brain imaging (Chair). (2015).

33) National Institute of Mental Health. BRAIN initiative: Foundations of non-invasive functional human brain imaging and recording - bridging scales and modalities. (Chair). (2016, 2018)

34) National Institute of Mental Health. *Ad hoc* review member of the NIMH Board of Scientific Counselors. (2016).

35) National Institutes of Health. Center for Scientific Review. Special Emphasis Panel.
'Novel Approaches to Diagnosing Alzheimer's Disease & Predicting Progression'. (2018).
36) National Institute on Aging. Special Emphasis Panel. 'Transition to Aging Research Award for Predoctoral Students'. (2020).

37). National Institutes of Health. Center for Scientific Review. Molecular, Cellular, and Behavior Neuroscience Fellowship Study Section. (Chair). (2020).

# **Membership of Professional Societies**

American Association for the Advancement of Science (Fellow) Association for Psychological Science (Fellow) Cognitive Neuroscience Society Experimental Psychology Society Memory Disorders Research Society Royal Society of Edinburgh (Fellow) Society for Neuroscience