

## R G M Morris - CV

Surname: **MORRIS**

Forenames: **Richard Graham Michael**



**1. Current Position:** Professor of Neuroscience, The University of Edinburgh.

### **2. Current Grants:**

- 2007-12 Medical Research Council (£2.56 million). Hippocampal, Subcortical and Cortical Interactions in Memory. With Dr Bruno Frenguelli (U. Warwick).
- 2007-14 E.U. Framework 7. MEMOLOAD (£364,000). Joint grant in an international team led by Prof. Heikki Tanila (Univ. Kuopio, Finland).
- 2011-16 European Research Council (Euro 3.10 million). The neurobiology of schemas: knowledge acquisition and consolidation. Joint Grant with Prof. Dr. Guillen Fernandez (Nijmegen, The Netherlands).

### **3. Key Publications:**

- RGM Morris**, P Garrud, JNP Rawlins and J O'Keefe (1982) Place navigation impaired in rats with hippocampal lesions. *Nature*, 297: 681-683 (2966 citations).
  - RGM Morris**, E Anderson, M Baudry and GS Lynch (1986) Selective impairment of learning and blockade of long-term potentiation in vivo by AP5, an NMDA antagonist. *Nature*, 319: 774-776 (2131 citations).
  - U Frey and **RGM Morris** (1997) Synaptic tagging: synapse specificity during protein synthesis dependent long-term potentiation. *Nature*, 385: 533-536 (577 citations)
  - G Chen, KS Chen, J Knox, J Inglis, A Bernard, SJ Martin, A Justice, L McConlogue, D Games, SB Freedman and **RGM Morris** (2000) A learning deficit related to age and  $\beta$ -amyloid plaques in a mouse model of Alzheimer's Disease. *Nature*, 408: 975-979. (328 citations).
  - P Andersen, **Morris RGM**, TVP Bliss, J O'Keefe and D Amaral (2007) The Hippocampus Book, Oxford University Press, Oxford and New York. Pp 863.
  - D Tse, RF. Langston, M Kakeyama, I Bethus, PA Spooner, ER Wood, MP Witter and **RGM Morris** (2007) Schemas and memory consolidation. *Science*, 316: 76-82. (99 citations).
  - S-H Wang, RL Redondo and **RGM Morris** (2010) Relevance of synaptic tagging and capture to the persistence of long-term potentiation and everyday spatial memory. *Proc. Natl. Acad. Sci.*, 107: 19537-19542.
  - RL Redondo and **RGM Morris** (2011) Making memories last: the synaptic tagging and capture hypothesis. *Nature Rev. Neurosci.*, 12: 17-30 (6 citations)
  - D Tse, T Takeuchi, M Kakeyama, Y Kajii, H Okuno, C Tohyama, H Bito and **RGM Morris** (2011) Schema-Dependent gene activation and Memory Encoding in Neocortex. *Science*, 333, 891-895.
- Papers=171; Citations=19,565; Citations/paper=114.5; h-index=53; ISI Highly Cited.*

### **4. Key Achievements incl. awards:**

Morris's primary research interests are the neurobiology of learning and memory, and the application of concepts and techniques from this work to develop new therapeutics for Alzheimer's Disease. His key scientific achievements in research include the development of the watermaze (now used worldwide); the discovery of the role of the NMDA receptor in learning and memory; the development of the synaptic tagging and capture hypothesis; discoveries about the neurobiology of prior knowledge (schemas). Other achievements include active involvement in public engagement including a period of employment in BBC Science and Features (TV). Numerous Plenary and Named Lectures including Stanford (USA), Gdansk (Poland), Stockholm (Sweden), Peking (China), Amsterdam (Netherlands), Feldberg (Germany), SfN Chicago (USA).

1993 Fellow of the Royal Society of Edinburgh; 1997 Fellow of the Royal Society; 1998 Founding Fellow of AMS; 1999 Zotterman Medal of the Swedish Physiological Society; 2000 Forum Fellow at World Economic Forum, Davos; 2005 Foreign Fellow, American Association for the Advancement of Science; 2006-8 President, Federation of European Neuroscience Societies; 2007 Commander of the British Empire.