

# Three years of Neurohistory, 1: 2004-2007

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This annotated bibliography covers the periodical literature in the history of neuroscience (broadly conceived) from 1 January 2004 to 1 January 2007. The listings are derived by combining the six biennial bibliographies published in the *Journal of the History of the Neurosciences* during that three year period. Those bibliographies, for obvious reasons, did not include papers published in the Journal itself. These have now been added.

The periodical literature in the neurosciences is huge. Braun, Gläzel and Schubert (2001) estimate that from 20 000 to 30 000 papers are published in neuroscience journals each year. The *Journal of the History of the Neurosciences*, moreover, uses a very wide definition of Neuroscience. It includes neuroanatomy, neurochemistry, neurolinguistics, neurophysiology, neuropsychiatry, neurology, and neurosurgery. In addition the history of the sensory and behavioural sciences and neurophilosophy are also covered. In constructing this bibliography it has thus been necessary to scan a very wide spectrum of journals. I am aware that these have been mostly English-language journals and for this reason relevant contributions in other languages may have been missed. In addition to those dealing with the history of science and neuroscience *sensu stricto*, papers falling within the ambit of neurohistory are sometimes published in the history journals, for instance, *Victorian Studies*, *Renaissance Studies* and at the other end of the spectrum in science journals such as *Nature* and *Science*. The mainstream journals in neurophysiology, physiology, neurology and neurosurgery also, though in most cases infrequently, publish papers of neurohistorical interest. In constructing these bibliographies I have made use of libraries in London (the British Library, the Wellcome Library, the Library of the Royal Society of Medicine) and in the English Midlands (especially the libraries of the Universities of Aston and Birmingham). The internet has, of course, also been an invaluable resource, especially the lists provided by *PubMed*. However, I am only too well aware that I may have overlooked significant publications and for this I can only apologise.

In concluding I have to thank fellow editors at the *Journal of the History of the Neurosciences*, especially Professor Sam Greenblatt, Dr Peter Koehler and Professor Ted Sourkes, for their help and encouragement. I hope that the 350 or so papers listed in this bibliography will go some way to showing that neurohistory is a vibrant and growing speciality and at the same time provide a basis for its further development.

## Reference

Braun T, Gläzel W, Schubert A (2001): Publication and cooperation patterns of the authors of neuroscience journals. *Scientometrics* 51: 499-510

Key: # of particular interest; \* of outstanding interest

### **Antiquity ( -500CE)**

Acar F, Naderi S, Guvencer M, et al (2005): Herophilus of Chalcedon: A Pioneer in Neuroscience. *Neurosurgery* 56: 861-867. A nice summary of the available literature on this important but opaque figure in the history of anatomy

Carod-Artal FJ and Vazquez-Cabrera CB (2006): Myelomeningocele in a Peruvian mummy from the Moche period. *Neurology* 66: 1775. A short illustrated account of a 1700 year old mummy of a child with a myelomeningocele from the Moche period (100-700 AD) of Peruvian antiquity

Dan B (2005): Titus' Tinnitus. *J.Hist.Neurosci.* 14: 210-13. A brief account of ancient ideas about and treatment of tinnitus, paying particular attention to the account in the Babylonian Talmud

Debru A (2006): The power of the torpedo fish as a pathological model for the understanding of nervous transmission in antiquity. *C.R.Biol.* 329: 298-302. A discussion of the work of the Hippocratic writers, Plato, Aristotle, the Alexandrians and Galen on *Torpedo*

Dimopoulos VG, Machinis TG, Fountas KN, Robinson, JS (2005): Head injury management algorithm as described in Hippocrates' 'peri ton en cephalic traumaton'. *Neurosurg.* 57: 1303-5. A systematisation of Hippocrates' methodology for treating head injury in the form of a modern-era algorithm

Ioannis G, Panourias MD, Panayiotis K, Skiadas MD, Damianos E., Sakas MD, Spyros G, Panourias IG, Marketos, SG (2005): Hippocrates: a pioneer in the treatment of head injuries. *Neurosurg.* 57: 181-9. Hippocrates' treatise 'On the Wounds in the Head' is the first written work dealing exclusively with cranial trauma and shows that he pioneered the treatment of head injuries

Lindekleiv H (2005): Neurosurgery in Antique Medicine. *Tidsskr Nor Laegeforen* 125: 3494-6. A review of neurosurgery in ancient medicine with emphasis on Hippocrates and Celsus' *De Medicina*, both discussed in the light of surgical instruments excavated at Pompeii (in Norwegian)

#Ture H, Ture U, Gogus FY et al. (2005): The Art of Alleviating Pain in Greek Mythology. *Neurosurgery* 56: 178-86. A summary of concepts of pain and its treatment in Greek mythology

Weinberg A (2006): A Case of Cranial Surgery in the Talmud. *J.Hist.Neurosci.* 15: 102-110. Invasive surgery for a painful skin ailment known as ra'aton provides a rare account of invasive cranial surgery dating back nearly 2000 years and this paper reviews the procedures and background

## Medieval (500-1450 CE)

\* Aciduman A, Belen D, Simsek S (2006): Management of Spinal Disorders and Trauma in Avicenna's *Canon of Medicine*. *Neurosurgery* 59: 397-403. The Canon was published in the 11<sup>th</sup> century and provided detailed accounts of spinal disorders and strategies for their management. It was used extensively in both the Islamic and Christian worlds from the 11<sup>th</sup> to the 17<sup>th</sup> century and this paper provides a well-illustrated review, commentary and comparison with the related Hippocratic text.

Baloyannis SJ (2006): Neurology in the hospitals of Constantinople during the Byzantine era. *European J.Neurol.* 13, Suppl. 2: 309-10 (Abstract only)

#DiMaio S, Discepola F, Del Maestro RF (2006): Il Fascicolo di Medicina of 1493: Medical culture through the eyes of the artist. *Neurosurgery* 58:187-196. The Latin edition of 1491 is considered to be "the first illustrated medical book and this article outlines the scientific and social environment into which the Latin edition was introduced and the transition which occurred with the publication of the 1493 Italian edition.

Economou NT, Lascaratos J (2005): The Byzantine Physicians on Epilepsy. *J.Hist.Neuosci.* 14: 346-52. A discussion of the understanding and treatment of epilepsy throughout the Byzantine era (4<sup>th</sup> to 16<sup>th</sup> centuries) with emphasis on the earlier period. It is shown that it was regarded as an organic disease and explained by Hippocratic humoral theory.

Holmøy T (2006): A Norse contribution to the History of Neurological Disease. *European Neurology* 56: 57-8. The saga of Bishop Thorlak describes a woman who suffered from what may have been multiple sclerosis in 11<sup>th</sup> century Iceland and (it is suggested) this lends weight to the 'Viking gene' hypothesis for the origin and dissemination of the disease

#Knoeff, R (2004): The Reins of the Soul: The Centrality of the Intercostal Nerves to the Neurology of Thomas Willis and to Samuel Parker's Theology. *J.Hist. Med. & Allied Sci.* 59: 413-440. Willis believed that the intercostal nerves provided the means by which the brain controlled the passions and instincts of the 'lower body'. This theory was used by the 17th century theologian, Samuel Parker, to reconcile the new neurology with Anglicanism

Landt blom A-M (2004): Did St Brigitta suffer from Epilepsy? *Seizure* 13: 161-7. The Swedish St Brigitta of Vadstena (1302-1373 CE) was subject to intense religious enthusiasms and this article discusses, with reference to her putative skull, whether these might have been due to partial epileptic fits

Lascaratos JG, Panourias IG, Sakas DE (2004): Hydrocephalus according to Byzantine writers. *Neurosurgery* 55:214-221. This is authoritative. The senior author (deceased) was a physician/historian.

\*Martin-Araguz A, Bustamante-Martinez C. (2004): The Examination of Men's Wits by Juan Huarte de San Juan, and the Dawn of the Neurobiology of Intelligence in the Spanish Renaissance. *Rev. Neurol.* 38: 1176-85. Juan Huarte de San Juan (1529-1588) published *The Examination of Men's Wits* in 1575. It is argued that in its naturalistic approach this highly influential publication marks the beginning of physiological psychology

#Souayah N and Greenstein JI (2005): Insights into neurologic localisation by Rhazes, a medieval Islamic physician. *Neurology* 65: 125-8. Rhazes was born near Teheran in 864 AD,

wrote over 200 medical and scientific works, and pioneered applied neuroanatomy combining a knowledge of cranial and spinal nerve anatomy with an insightful use of clinical information to localise lesions in the nervous system (further information at [www.neurol.org](http://www.neurol.org) 12 July)

## **Renaissance (1450-1700 CE)**

#Knoeff, R (2004): The Reins of the Soul: The Centrality of the Intercostal Nerves to the Neurology of Thomas Willis and to Samuel Parker's Theology. *J.Hist. Med. & Allied Sci.* 59: 413-440 Willis believed that the intercostal nerves provided the means by which the brain controlled the passions and instincts of the 'lower body'. This theory was used by the 17th century theologian, Samuel Parker, to reconcile the new neurology with Anglicanism

Kruger L (2004): An Early Illustrated Comparative Anatomy of the Brain: Samuel Collins' A Systeme of Anatomy (1685) and the Emergence of Comparative Neurology in 17<sup>th</sup> Century England. *J.Hist.Neurosci.* 13: 195-217. A well illustrated account of Collins (1618-1710) pioneering two-volume work on comparative anatomy in which the comparative anatomy of the brain receives extensive treatment.

Langley EF (2006): Anatomising the early-modern eye: a literary case study. *Renaissance Studies* 20: 340-55. A survey of the eye in English literature of the sixteenth and seventeenth centuries showing how early anatomists influenced the literary imagination

Larner AJ (2006): A Possible Account of Synaesthesia Dating from the Seventeenth Century. *J.Hist.Neurosci.* 15: 245-49. Seventeenth century accounts of a blind man able to detect colours by touch is discussed

Lega BC (2006): An Essay Concerning Human Understanding: How the Cerebri Anatomie of Thomas Willis Influenced John Locke. *Neurosurgery* 58: 567-576. This essay explores how some of Willis's anatomic discoveries might have influenced the ideas Locke expressed in his *Essay Concerning Human Understanding*

\*Martin-Araguz A, Bustamante-Martinez C. (2004): The Examination of Men's Wits by Juan Huarte de San Juan, and the Dawn of the Neurobiology of Intelligence in the Spanish Renaissance. *Rev. Neurol.* 38: 1176-85. Juan Huarte de San Juan (1529-1588) published *The Examination of Men's Wits* in 1575. It is argued that in its naturalistic approach this highly influential publication marks the beginning of physiological psychology

#Molnar Z (2004): Thomas Willis (1621-75), the founder of clinical neuroscience. *Nat.Rev.Neurosci.* 5: 329-35 A well-referenced and well-illustrated account of Willis' life, thought and legacy

Pearce JMS (2004): Migraine treated by Shakespeare's son-in-law, Dr John Hall. *J Neurol. Neurosurg. Psychiatry* 75: 987. A very short case-history of a migraine treated by Shakespeare's son-in-law, Dr John Hall (c.1575-1635) an eminent Stratford physician and herbalist

Salcman M (2006): *The Cure of Folly or The Operation for the Stone* by Hieronymus Bosch (c.1450-1516). *Neurosurgery* 59: 935-7. An assessment of the meaning of Bosch's

famous painting, *The Cure of Folly*, showing the removal of the 'stone' of madness. It is concluded that the painting may have some basis in reality.

Salzman M (2006): *The Creation of Adam* by Michelangelo Buonarroti (1457-1564). *Neurosurgery* 59: N11-N12. An analysis of the famous fresco and an assessment of Meshberger's conjecture that the draperies of God and His attendants outline an early depiction of the human brain

Schäfer D (2005): No Old Man Ever Forgot Where He Buried His Treasure: Concepts of Cognitive Impairment in Old Age Circa 1700. *J.Am.Ger.Soc.*, 53: 2023-2027.. A discussion of the history of cognitive impairment in old age showing how it began to receive a physical interpretation during the 17<sup>th</sup> century

Schutta HS, Howe HM (2006): Seventeenth Century Concepts of "Apoplexy" as Reflected in Bonet's "Sepulchretum". *J.Hist.Neurosci.* 15: 250-268. Theophile Bonet's (1679) *Sepulchretum* contains over 70 case reports of patients who died of 'apoplexy' (stroke) and this paper reviews these reports and examines the nosology and treatments available at the time

Tubbs RS, Salter EG (2006): Vidius Vidius (Guido Guidi): 1509-1596. *Neurosurgery* 59: 201-3. An account of what is known of this somewhat obscure figure after whom the Vidian nerve, artery and canal are named and whose anatomic treatise *Vidi Vidi: Florentini de anatome corporis humani libri VII* was published posthumously in 1626

Ulucam E, Mesut R, Gokce N (2005): Neuroanatomy in Tesrih-i Ebdan: a study on a book which is written in Ottoman era. *Neuroanatomy* 4: 31-4. A review of the neuroanatomical topics in the first book of Turkish anatomy handwritten and illustrated between the years 1623 and 1632

Uston C (2005): NEUROwords: Dr Thomas Willis' Famous Eponym: The Circle of Willis. *J.Hist.Neurosci.* 14: 16-21. A brief well-illustrated account of the first complete description and illustration of Willis' famous circle

Van Gijn J (2005): René Descartes (1596-1650). *J.Neurol.*, 252: 241-2. A very brief account of Descartes' life and physiological ideas

Viale GL (2005): Gunshot wounds to the head in the 16<sup>th</sup> century. *Neurosurg.* 57: 1306-1315. The development of firearms in the sixteenth century led to a multitude of head injuries which taxed the skill of physician-surgeons and led to new types of surgical practice

\* Zanchin G, De Caro R (2006): the nervous system in colours: the tabulae pictae of G.F.d'Acquapendente (c.1533-1619). *J. Headache Pain* 7: 360-6. The third volume of Acquapendente's anatomical paintings contains his only known pictures of neuroanatomy and a thorough study of these 21 plates is pivotal to an understanding of his contribution to neuroscience

## **Eighteenth century**

Bazner H., Hennerici M (2004): Georg Friedrich Handel's strokes. *Cerebrovasc Dis* 17: 326-31. It is argued that far from being due to cataract, Handel's visual impairment was due to cerebrovascular disease. A differential diagnosis is offered.

Bertucci P (2006): Revealing sparks: John Wesley and the religious utility of electrical healing. *Brit.J.Hist.Sci.* 393: 341-62. An analysis of Wesley's role in the medical application of electricity and an assessment of its use in his philanthropic endeavours to help the sick and the poor and to promote the spread of Methodism

Breitenfeld T, Solter VV, Breitenfeld I, Zavoreo I, Kes VB, Supanc V, Jergovic K, Demarin V (2006): Mozart's neurological disorders – A study on the 250<sup>th</sup> anniversary of his death. *Europ.J.Neurol.* 13: Suppl.2: 309. (Abstract only)

#Cherici C (2006): Vincenzo Malacarne (1744-1816): a researcher in neurophysiology between anatomophysiology and electrical physiology of the human brain. *C.R.Biol.* 329: 319-329. Malacarne is considered to have been the first to accurately describe the anatomy of the cerebellum. He also attempted to develop an anatomopsychic parallelism based on the number of lamellae in the cerebellum and endeavoured to use Galvani's recent discoveries to make sense of brain activity.

Doherty MJ (2005): Captain Cook on Poison Fish. *Neurology* 65: 1788-91. A nicely illustrated account of the effects of ingesting the flesh of two species of poison fish (probably *Sparus pagrus* and *Tetraodon sp.*) by members of the crew during Cook's second voyage (1772-5) to the Pacific

Finger S (2006): Benjamin Franklin, electricity and the palsies. On the 300<sup>th</sup> anniversary of his birth. *Neurology* 66: 1559-63. A nicely illustrated account of Franklin's attempts to cure movement disorders by the application of electricity

Frixione E (2006): Albrecht von Haller (1708-1777). *J.Neurol* 253: 265-6. A concise account of Haller's many-sided life and work stressing his work on 'irritability' and its consequences

Gardner-Thorpe C & Pearn J (2006): Erasmus Darwin (1731-1802): Neurologist. *Neurology* 66: 1913-6. Erasmus Darwin wrote about the evolutionary development of the nervous system and about neuroembryology and psychiatric illness, conducted experiments in electrotherapy and neuro-ophthalmology and discussed colour vision, after-images, the blind spot and visual memory

Hildebrand R (2005): Soemmering's work on the nervous system: a view on brain structure and function from the late eighteenth century. *Acta embryol. (Berl)* 210: 338-42. Samuel Thomas Soemmerring (1755-1830) was an encyclopaedist anatomist and neuroanatomist who in his treatise *Über das Organ der Seele* (1796) stirred great controversy with an attempt to localise the functions of the soul in the CS fluid

Ishizuka H (2006): The elasticity of the animal fibre: Movement and life in Enlightenment medicine. *Hist. Sci.* 44: 435-68. A re-assessment of the importance of the idea of the elasticity of animal fibres as a mediator between mechanism and vitalism and thus of the shift from a mechanistic to a vitalistic neurophysiology during the 18<sup>th</sup> century

Pearce JMS.(2004): Cotugno and cerebrospinal fluid. *J Neurol Neurosurg Psychiatry* 75: 1299A precis of the life and work of Domenico Felice AntonioContugno (1736-1822) who provided the first reliable account of ventricular and sub-arachnoid fluid and also gave one of the first accounts of the anatomy and physiology of the inner ear

\*Piccolino M (2006): Luigi Galvani's path to animal electricity. *C.R.Biol.* 329: 303-318. Through a study of Galvani's work, using published and unpublished material, and by situating his work in

the context of the Enlightenment, Piccolino traces the complex and elusive path to his momentous discoveries

Reynolds EH (2005): Vis attractive and vis nervosa. *J.Neurol. Neurosurg. Psychiatry* 76: 1711-12. A brief account of how the concept of *vis nervosa* was developed by Juri Prochaska (1749-1820) from Isaac Newton's gravitational '*vis attractiva*' and its subsequent employment by Haller, Laycock and Bentley Todd

Saad M (2006): La mélancholie entre le cerveau et les circonstances: Cabanis et la nouvelle science de l'homme. *Gesnerus* 63: 113-120. A discussion of Cabanis' (1757-1808) *Rapports du physique et du moral de l'homme* in which he relates eighteenth century 'melancholy' to the anatomy of the brain and other organs (in French)

Storey GO (2006): John Wesley (1708-91). *J.Med.Biogr.* 14: 218-22. A biography of the founder of Methodism, physician, philanthropist and pioneer electrotherapist

Wade NJ (2005): Medical Societies and Insanity in Late-Eighteenth-Century London: The fight Between Andrew Marshall and John Hunter. *J.Hist.Neurosci.* 14: 11-15. An account of the heated debate between Marshall (1742-1813) and John Hunter (1728-1793) on the association between mania and brain structure

Wade NJ (2005): Vision and the dimensions of Nerve Fibers. *J.Hist.Neurosci.* 14: 281-94. It is shown that the diameters of nerve fibres were not discovered by microscopical investigation but by experiments on the limits of visual discrimination during the seventeenth and particularly the eighteenth centuries

## **Nineteenth century**

Barbara JG (2006): Louis Antoine Ranvier (1835-1922). *J.Neurol.* 253: 399-400. A brief account of the life and work of the discoverer of the eponymous nodes in myelinated fibres

Baumann C (2005): Henry Head in Ewald Hering's Laboratory in Prague 1884-1886: An Early Study on the Nervous Control of Breathing. *J.Hist.Neurosci.* 14: 322-33. Head spent two years in Hering's Prague laboratory (1884-86) where he worked on the nervous control of respiration, discovered his 'paradoxical reflex' and was ever after grateful to Hering for imparting 'the psychological attitude... (essential) in interpreting his observations'

Binder DK (2004): A history of Todd and his paralysis. *Neurosurgery* 54:480-487. A discussion of Robert Bentley Todd (1809-60) and some of his contributions to medicine, especially to epileptic hemiplegia, afterwards known as 'Todd's paralysis': good coverage of mostly old ground.

Binder DK, Clusman H, Schaller C (2006): Friedrich-Christian Rosenthal: surgeon and anatomist. *Neurosurgery* 59: 1328-33. A well-illustrated account of the life and achievements of Rosenthal (1780-1829) who described the basilar (cerebral) vein and spiral canal of the cochlea to both of which his name is nowadays sometimes attached

Cole CD, Lin JK, Apfelbaum, R (2005): Historical perspectives on the diagnosis and treatment of trigeminal neuralgia. *Neursurg. Focus* 18(5): E4. An account of the initial

descriptions of tic douloureux, Forthergill's disease and trigeminal neuralgia along with various therapies and their refinements

Compston A (2005): From the Archives (Schäfer (1888): Experiments on special sense localisations in the cortex cerebri of the monkey; Jackson (1878): 'On affections of speech from disease of the brain'; Critchley (1938): 'Aphasia'). *Brain* 128: 957-9; 1233-4.. Reviews of the context and consequences of three significant papers published in *Brain* in the later nineteenth and early twentieth centuries

Compston A (2005): Jean-Martin Charcot on 'sclérose en plaques' (Multiple Sclerosis). *Adv.Clin.Neurosci.& Rehab.* 5(4): 28-29 . A brief assessment of Charcot's analysis of the pathology and clinical features of MS

De Jong BM (2005): Localisation of Brain Function, 125 years after the thesis of Aletta Jacobs, the first Dutch female physician. *Ned. Tijdsch Geneeskd* 149: 482-6. In 1879 the first Dutch female physician, Aletta Jacobs, defended a thesis on brain localisation. This article discusses this work and compares it with modern ideas, especially those relating to localisation in the visual areas of the brain

Dierig S (2006): Science and craftsmanship: The art of experiment and instrument making, *C.R.Biol.* 329: 348-53. Taking du Bois Reymond's monograph, *Untersuchungen über thierische Electricität*, as an example this paper argues that experimentation is not only an epistemic but also an aesthetic enterprise

Eadie MJ (2005): Victor Horsley's contribution to Jacksonian epileptology. *Epilepsia* 46: 1836-48. An account of Horsley's major contribution to John Hughlings Jackson's understanding of the mechanisms involved in the generalisation of convulsive epileptic seizures

Finger S, Koehler PJ, Jagella C. (2004): The Monakow concept of diaschisis: origins and perspectives. *Arch.Neurol.* 61: 283-. The origins of the concept of diaschisis and the goals of von Monakow in attempting to account for remote lesion effects and recovery of function in terms of the newly formulated 'neuron doctrine' are discussed.

Finkelstein G (2006): Emil du Bois Reymond vs Ludimar Hermann. *C.R.Biol.* 329: 340-47. A reassessment of the contest between du Bois Reymond and his student Ludimar Hermann on the nature and cause of injury currents in nerve and muscle

#Gage N, Hickok G (2005): Multiregional cell assemblies, temporal binding and the representation of conceptual knowledge in cortex: a modern theory by a 'classical' neurologist, Carl Wernicke. *Cortex* 41: 823-32. It is argued that Carl Wernicke (1848-1904) proposed a theory of how concepts are acquired and represented in the cortex that is strikingly similar to modern views. His ideas are set out by way of quotes from his earlier work and by translation of relevant sections of his *Grundriss der Psychiatrie* (1900).

Goetz CG (2006): Charcot in Contemporary Literature. *J.Hist.Neurosci* 15: 22-30. A discussion of three late twentieth century literary works (two French novels and one American play) which take Jean-Martin Charcot (1825-93) as their central figure

Gijn J. van ( 2004): Hermann Oppenheim (1858-1919). *J Neurol* 251: 1028-9. One of a series of short accounts of the pioneers of neurology being published in this Journal

Goetz CG (2005): Jean Martin Charcot (1825-93). *J.Neurol.*, 252: 374-5. A short essay on the life and work of one of the greatest figures in neurology

Grzybowski A (2005): The history of neuro-ophthalmology in Edinburgh. *Klin Oczna 107 (1-3)*: part 1, 167-9; part 2, 170-2.. Reviews the work of Sir Charles Bell (1774-1842), Argyll Robertson (1837-1909) and Harry Moss Traquair (1875-1954) in the development of neuro-ophthalmology (Polish)

#Hakosalo H (2006): The Brain under the knife: serial sectioning and the development of late 19<sup>th</sup> century neuroanatomy. *Stud.Hist.Phil.Biol.& Med.Sci.* 37: 172-202. This paper argues that the introduction of the microtome in the late 19<sup>th</sup> century revolutionised brain anatomy and re-orientated theory away from the localisationist toward the holistic. The argument is exemplified by a comparison of German neuroanatomy in 1860/70 (Theodor Meynert) and at the turn of the century (von Monakow)

Jacyna, S (2004): Bastian's four centres *Cortex* 40: 7-8. An account of Henry Charlton Bastian (1837-1914) and his 'four language centre' diagram of the cerebral bases of language to aid understanding the disruptions observed in the aphasias

Jacyna, S (2004): Lichtheim's House. *Cortex*, 40: 413-4. The origin of the well-known figure, named Lichtheim's House, conceived by Ludwig Lichtheim (1845-1928), one of the founders of the *Deutsche Zeitschrift für Nevenheilkunde*, to describe the cerebral bases of language and the disruptions which may occur in the aphasias

Jellinek EH (2004): Charlton Bastian (1837-1915). *J Neurol.* 251: 1542-3. Short account of one of neurology's pioneers

Jellinek EH (2005): Sir James Crichton-Browne (1840-1938): pioneer neurologist and scientific drop-out. *J.Roy.Soc.Med.* 98: 428-30. Sir James Crichton-Browne has been the subject of a full biography by Neve and Turner (*Med.Hist.*, 39: 399-432) but this paper focuses on the ten years (1866-1876) he spent as Director of *The West Riding Lunatic Asylum* when he was not only responsible for its re-organisation and updating but also published six annual volumes of *Medical Reports* and, in 1878, co-founded the journal *Brain*

Kumbier E and Haack K (2005): The case of Cassian H in 1893 and his importance to the history of the extrapyramidal movement disorders. *J.Neurol. Neursurg. Psychiatry* 76:1564. A short account of Gabriel Anton's contribution to our understanding of basal ganglia disorders

Lagerkvist B (2006): La Salpêtrière – the cradle of modern neurology. *Lakartidningen* 103: 863-6. Article in Swedish, no abstract available

Langerkrantz H (2006): Nobel Prizes in pediatrics: Santiago Ramon y Cajal (1852-1934) and the founding of neuroembryology. *Acta Paediatr* 95: 130-1. A short but nicely illustrated essay on Cajal's contribution to neuroembryology to mark the centenary of the 1906 Nobel Prize in Physiology or Medicine

Laporte Y (2006): Charles-Eduard Brown-Séquard. An eventful life and a significant contribution to the study of the nervous system. *C.R.Biol.* 329: 363-68. An account of the eventful and peripatetic life of Brown-Séquard (1817-1894) who eventually (in 1879) succeeded Claude Bernard at the Collège de France together with an assessment of his contributions to neurophysiology

Larner A (2004): Neurological contributions of Caleb Hillier Parry. *Adv Clin Neurosci & Rehab* 4 : 38-9. A brief account of the neurological work of Jenner's life-long friend, Caleb Hillier Parry (1755-1822)

Louis ED and York GK (2006): Weir Mitchell's observations on sensory localisation and their influence on Jacksonian neurology. *Neurology* 66: 1241-4. Weir Mitchell's observations on sensory location were frequently cited by Jackson in articles on cortical localisation and their correspondence provides an example of Anglo-American co-operation when neurology first emerged as a distinct clinical discipline

Macmillan M (2004): "I could see, and yet, mon, I could na' see": William Macewen, the agnosias and brain surgery. *Brain and Cognition* 56: 63-76. Two cases in which Macewen used symptoms of visual agnosia to plan surgery on the angular gyrus are reviewed and the positive results achieved analysed in the historical context of the dispute over its rôle as the visual centre

Maehle A-H (2004): 'Receptive Substances': John Newport Langley (1825-1925) and his path to a Receptor theory of Drug Action. *Medical History* 48: 153-74. A detailed review of the origin of the 'drug receptor theory' by Langley working in Michael Foster's Cambridge physiology laboratory on autonomic nervous system and smooth muscle

Moog FP, Karenberg A (2004): Samuel Thomas Soemmering (1755-1830). *J. Neurol.* 251: 1420-1. Another of the series of short biographies of neurological pioneers

Morus IR (2006): Bodily Disciplines and Disciplined Bodies: Instruments, Skills and Victorian Electrotherapeutics. *Soc.Hist.Med.* 19: 241-259. A review of the practice of electrotherapy in England during the late Victorian period arguing that controversies over how to treat the body through electricity were also controversies about what the body was

Muller U, Fletcher PC, Steinberg H (2006): The origin of pharmacopsychology: Emil Kraepelin's experiments in Leipzig, Dorpat and Heidelberg (1882-1892). *Psychopharmacology (Berl.)* 184: 131-8. This paper reviews Kraepelin's psychopharmacological research, his methodological innovations and provides English translations of some of his papers and monographic publications.

Noakes R (2004): The "Bridge Which is Between Physical and Psychical Research: William Fletcher Barrett, Sensitive Flames, and Spiritualism. *History of Science*, 42: 419-64. William Fletcher Barrett started as a lab assistant to the arch-materialist, John Tyndall, but thirty years later, as Professor of Physics in Dublin, was a pioneering figure in the Society for Psychical Research. This paper reviews Barrett's career, foregrounding the investigation of 'sensitive flames' and discussing the interdisciplinary politics of physics, neurophysiology and psychology in late Victorian Britain

Okun MS, Koehler, PJ (2004): Babinski's clinical differentiation of organic paralysis from hysterical paralysis: effect on US neurology. *Arch.Neurol.* 61: 778-83. Primary and secondary sources were studied to elucidate the discoveries of Joseph Babinski and to determine his influence on US neurology, especially via two US neurologists, Chaddock and Hoover

Pearce JMS (2004): Postive and negative cerebral symptoms: the roles of Russell Reynolds and Hughlings Jackson. *J Neurol Neurosurg Psychiatry* 75: 1148. A short discussion of the views of Reynolds' and Jackson's views on positive and negative neurological symptoms and a resumé of Reynolds' distinguished medical career

Pearce JMS (2005): A note on scrivener's palsy. *J.Neurol.Neurosurg.Psychiatry* 76: 513. The first epidemics of 'writer's cramp' were reported in the 1830s amongst clerks in the British Civil Service and this note briefly reviews the subsequent investigations of Charles Bell (1833), Duchenne (1883), Julius Althaus (1870) and, in particular, Samuel Solly (1864)

Pearce JMS (2005): Marshall Hall and Romberg's sign. *J.Neurol. Neurosurg. Psychiatry* 76: 1241. Shows that Marshall Hall anticipated Romberg's 1846 description of a sign indicating loss of proprioceptive control in his 1836 *Lectures on the Nervous System and its Diseases*

Pearce JMS (2005): Parinaud's syndrome. *J.Neurol.Neurosurg.Psychiatry* 76: 99. A brief account of Parinaud's life and work with a review of his eponymous syndrome, a supranuclear paralysis of vertical gaze

Pearce JMS (2005): The Law of Specific Nerve Energies and Sensory Spots. *Eur.Neur.* 54: 115-7. A review of the discovery of sensory spots in the skin in the 1880s by Magnus Bkix and Alfred Goldscheider, their investigation by Max von Frey in the 1890s, and the modern understanding

Pearce JMS (2006): Meralgia paraesthetica (Bernhardt-Roth syndrome). *J.Neurol.Neurosurg.Psychiatry* 77: 84. A brief account of the discovery and description by Martin Bernhardt (1840-1915) and Vladimir Karlovich Roth (1848-1916) of the condition characterised by paraesthesia often accompanied by a burning pain over the anterolateral aspect of the thigh

Pearce JMS (2006): Myxodaema and Sir William Withey Gull (1816-1890). *J.Neurol.Neurosurg.Psychiatry* 77: 639. Short account of the work of Gull - one of the first to recognise that myxoedema was due to atrophy of the thyroid

Pearce JMS (2006): Nicholas Saucerotte: Acromegaly before Pierre Marie. *J.Hist.Neurosci.* 15: 169-75. A short review of cases of acromegaly, especially that described by Saucerotte in 1801, before Pierre Marie published his seminal clinico-pathological studies in 1889

Pearce JMS (2006): Sturge-Weber syndrome (encephalotrigeminal or leptomeningeal angiomas). *J.Neurophysiol.Neurosurg. Psychiatry* 77: 1291-2. An account of the description by Sturge (1850-1919) and Weber of their eponymous syndrome and a short biography of William Allen Sturge

Pokorny J, Trojan S (2005): Purkinje's concept of a neuron. *Cas Lek.Cesk.* 144: 659-61.. A brief account of Purkinje's work in neurohistology (in Czech; English abstract)

Ratin P, Taks IF, Haker S, Lieberman D, Everett, P (2004): The tale of Phineas Gage, digitally remastered. *J.Neurotrauma* 21: 637-43. A 3-D reconstruction using computer-aided techniques suggests a new biomechanical model of Gage's injury

#Reynolds H. (2004): Todd, Faraday and the electrical basis of brain activity. *Lancet-Neurology*, 3: 557-63. Robert Bentley Todd (1809-60), anatomist, physiologist, and clinician was the first to confirm electrical activity in the brain. He was influenced by Faraday, Daniell and Wheatstone and, working at Kings College London, did much to establish the electrical activity of the brain

\*Reynolds EH (2005): Robert Bentley Todd (1809-60). *J.Neurol.*, 252: 500-1. A brief biography of the eminent physician who did so much to establish the electrical basis of brain activity and a look at his application of this understanding to the study of epilepsy

Satran R (2005): Chekov and Rossolimo: careers in medicine and neurology in Russia 100 years ago. *Neurology* 64: 121-7. A survey of the lives, education and correspondence of Anton Chekov (1860-1904) and G.I.Rossolimo (1860-1928) which provides insight into 19<sup>th</sup> Century Russian medicine, neurology and the neurosciences during a turbulent era of major national, political and social change

#Schmidt D, Lothar S (2005): First research on the development of amblyopia due to early deprivation – Hans Berger’s experiments in 1900. *Perception*, 34: 765-767. A short account of Berger’s experiments on the development of amblyopia using puppies and kittens which he interpreted as showing that the normal development of visual cells depended on appropriate stimulation early in life

Schickore J (2006): Misperception, illusion and epistemological optimism: vision studies in early nineteenth-century Britain and Germany. *Brit.J.Hist.Sci.* 39: 383-405. A comparison of the investigation of vision in Britain and Germany in the early 19<sup>th</sup> century which shows that whilst German investigators were mostly from a medical background those in Britain were mostly physicists interested in optics. In both cases a major motivation was provided by epistemological concerns about the reliability of sensory knowledge.

Schoffer KL, O’Sullivan JD (2006): Charles Dickens: the man, medicine, and movement disorders. *J Clin Neurosci* 13: 898-901. The novelist Charles Dickens provided several detailed accounts of movement disorders which still provide insightful and entertaining perspectives.

Sourkes TL (2006): On the Energy Cost of Mental Effort. *J.Hist.Neurosci.* 15: 31-47. The ‘conservation of energy’ was one of the great discoveries of the nineteenth century. But was ‘psychophysical’ energy also conserved. This paper examines the response to this question in several nineteenth and early twentieth century investigators

Steinberg H (2005) Paul Julius Möbius (1853-1907). *J.Neurol.* 252: 624-5. A short account of the life and work of the neurologist after whom Möbius syndrome (paralysis of the muscles innervated by the abducens and facial nerves) and Möbius’s disease (an ophthalmoplegic migraine) are named

Stiles Anne (2006): Cerebral Automatism, the Brain, and the Soul in Bram Stoker’s *Dracula*. *J.Hist.Neurosci.* 15: 131-152. It is shown how Stoker used his knowledge of late nineteenth century knowledge in the creation of *Dracula* and it is suggested that the story dramatises late-nineteenth century fears that humans were no more than soul-less machines

Swash M (2005): John Hughlings Jackson (1835-1911). *J.Neurol.* 252: 745-6. A brief review of the life and career one of Neurology’s greatest figures

Swash M, Evans J (2006): Hughlings Jackson’s clinical research: evidence from contemporary documents. *Neurology* 67: 666-72. The discovery of several pages of Jackson’s notes has illuminated the clinical and academic background to his neurological practice in late nineteenth-century London.

#Talley CL (2005): The Emergence of Multiple Sclerosis, 1870-1950. *Perspectives in Biology and Medicine*, 48: 383-95. Charcot identified MS in 1868 as a distinct nosological entity but cases in the next fifty years were rarely recognised; after 1950, however, the frequency of diagnosis increased dramatically and it is now recognised as one of the most common neurological diseases. This paper discusses the history and reviews the reasons for the change in perspective

Tubbs RS, Loukas M, Salter EG, Oakes WJ (2006): Wilhelm Erb and Erb's point. *Clin Anat* on line at DOI 10.1002/ca.20385. A brief history of Erb's adult life and a review of his original description of his supraclavicular point.

Wade NJ, Ono H, Mapp AP (2006): The lost direction of binocular vision: the neglected signs posted by Wells, Towne and LeConte. *J.Hist.Behav.Sci. XLII*: 61-86. An examination of experiments on the direction of binocular vision before and after Wheatstone (1802-1875) invented the stereoscope (1838) arguing that the popularity of this instrument for the study of visual 'depth' directed research away from the study of visual 'direction'.

Van Whyhe J (2004): Was Phrenology a Reform Science? Towards a New Generalisation for Phrenology. *History of Science 42*: 313-331 . Phrenology is conventionally associated with social reform and social mobility but this paper argues that this characterisation is too glib and that phrenology was, on the contrary, about authority, 'irresistable authority'

Zago S, Randazzo C (2006): Antonion Berti and the early history of aphasia in Italy. *Neurol.Sci 27*: 449-52. In 1865 Antonio Berti published interesting observations on the association of aphasia with the frontal lobe and this paper reviews this forgotten episode in Italian neuropsychology.

## **Twentieth century**

Allen GE (2004): A pact with the embryo: Viktor Hamburger, Holistic and Mechanistic Philosophy in the Development of Neuroembryology, 1927-1955. *J Hist Biol 37*: 421-75. A review of Hamburger's work, in collaboration with Rita Levi-Montalcini and Stanley Cohen, on the embryogenesis of neurons in limb buds and the discovery of nerve growth factor, with special reference to the theoretical background

Angeliki DE (2005): The physiology of the vestibular nervous system: the birth of a field. *J.Neurophysiol. 93*: 3032-33 An account of three papers by César Fernández and Jay M Goldberg published in *J.Neurophysiol* in 1976 which established the electrophysiology of the mammalian peripheral otolith system

Apuzzo MLJ (2005): A fantastic voyage: A personal perspective on involvement in the development of modern stereotactic and functional neurosurgery (1974-2004). *Neurosurgery 56*: 1115-1132.. The author is the founding editor of this important journal and thus helped to shape neurosurgery over the past quarter century.

Bachelard H (2004): A Brief History of the British Neuroscience Association, 1967-1993. *BNA Bulletin 48*: 10-11 The origin and growth of the British Neuroscience Association (BNA), formerly the Brain Research Association (BRA), from its inception in London's Black Lion Pub until 1993

Backlund E-O (2004): Reflections: A historical vignette. *Neurosurgery 54*:734-741. Autobiographical - part of the series on history of stereotaxis.

Barboi AC (2005): Gheorghe Marinescu (1863-1938). *J.Neurol., 252*: 114-5. The 34-year-old Marinescu was appointed to the chair of neurology in Bucharest in 1897 and his subsequent career illustrates the formation of neurology in Europe in the first part of the 20<sup>th</sup> century

Batuev AS, Sokolova LV (2004): From physiological theory to psychological facts (celebrating the 100<sup>th</sup> anniversary of I.P.Pavlov's Madrid speech). *Neurosc .Behav Physiol* 34: 711-20. It is argued that Pavlov's theory of conditioned reflexes and Ukhomsky's theory of dominance are the most important concepts of the 20<sup>th</sup> century behavioural science and as such determine the crucial problems of neurophysiological research

Baumeister AA (2006): Serendipity and the Cerebral Localisation of Pleasure. *J.Hist.Neurosci* 15: 92-8. Robert Heath had recognised the existence of cerebral pleasure centres (in schizophrenics) a few years before Olds and Milner found them in rats. This paper argues that incorrect 'mental preparedness' (Heath's view that what he observed was 'arousal') can be an obstacle to progress

Beake T, Luzzati C, Vallar G (2004): Hermann Zingerle's 'Impaired perception of the own body due to organic brain disorders'. 1913. An introductory comment and an abridged translation. *Cortex*, 40: 265-74. An abridgement of Zingerle's overlooked paper and a discussion of his conclusions in the light of modern understanding of spatial neglect

Bentivoglio M, Vercelli A, Filogamo G (2006): Giuseppe Levi: Mentor of Three Nobel Laureates. *J.Hist.Neurosci*. 15: 358-68. Giuseppe Levi (1872-1965) mentored three students who later became Nobel laureates – Salvador Luria, Renato Dulbecco, Rita Levi-Montalcini – and this paper reviews his work and the influence he had on his students

Berbel P, Gonzalez-Torga A, Gonzalez M (2005): The work and life of Cajal through his medals and plaques. [http://www.ibro.info/Pub\\_Main\\_Display\\_Print.asp?Main\\_ID+405](http://www.ibro.info/Pub_Main_Display_Print.asp?Main_ID+405)

Berlucchi G (2006): Revisiting the 1981 Nobel Prize to Roger Sperry, David Hubel, and Torsten Wiesel on the Occasion of the Centennial of the Prize to Golgi and Cajal. *J.Hist.Neurosci*. 15: 369-75. A discussion of the work of the three 1981 Nobellists which brings out some important links between the work of Sperry and that of Hueln and Wiesel

Bertrand G (2004): Stereotactic surgery at McGill: The early years. *Neurosurgery* 54:1244-1252. One of the series of stereotactic vignettes published in this journal

Biderman A, Herman J. (2004): Silas Weir Mitchell (1829-1914): the rewards of versatility and its price. *J.Med.Biogr.*, 12: 66-70. An assessment of the influential and unorthodox US neurologist who was also the author of several best-selling novels

Bladin PF (2004): John William Springthorpe, 1855-1933, early Australian epileptologist and keeper the flame for neurosciences. *J.Clin.Neurosci.*, 11: 8-15. A detailed assessment of the physician who played a seminal role in establishing clinical neuroscience, especially epileptology, in colonial Victoria

Bladin PF (2004): Murray Alexander Falconer and the Guys-Maudsley Hospital seizure program. *J Clin Neurosci* 11: 577-83. Falconer's appointment as Director of Neurosurgery at Guys' Hospital, London, led to the creation of an outstanding seizure-surgery program. Falconer retired in 1975 and died in 1977

#Bladin PF (2006): W. Grey Walter, pioneer in the electroencephalogram, robotics, cybernetics, artificial intelligence. *J.Clin.Neurosci* 13: 170-7. An assessment of Grey Walter's pioneering work in the 1930s in clinical electrophysiology especially in the areas of epileptology and tumour detection

Bladin PF, Eadie MJ, Wehner V (2004): Leonard Bell Cox (1894-1976) – pioneer of Australian clinical neurology. *J Clin Neurosci. 11*: 819-24. A biography of the neurologist who pioneered the discipline of clinical neurology in Australia

Boller F (2006): Modern neuropsychology in France: Théophile Alajouanine (1890-1980). *Cortex 42*: 3-4. This editorial describes the life and work of the man who contributed to several aspects of aphasia and is known to neurologists because of the condition known as Foix or Alajouanine's syndrome

Borck C (2006): Between local cultures and national styles: units of analysis in the history of electroencephalography. *C.R.Biol. 329*: 450-9. A comparative analysis of the evolution of EEG showing that not only national cultures but also local research traditions have to be taken into account

Braukmann S (2005): The virtue of being too early: Paul A. Weiss and 'axonal transport'. *Hist.Philos. Life Sci. 26*: 333-53. This paper discusses how the work of Paul Weiss (1898-1989) on axonal transport was presented to his colleagues in 1948 and why those colleagues did not at first accept it.

Bromley E (2006): Stimulating a normal adjustment: misbehaviour, amphetamines, and the electroencephalogram at the Bradley Home for Children. *J.Hist.Behav.Sci. 42*: 379-98. A description of the psychopharmacological and neuroanatomical research conducted in the 1920s at the Bradley Home for Children with behaviour disorders in Providence, RI. Childrens' diverse behaviours came to be described in neuroanatomical terms and social categorisations fell away.

Brown RE (2006): The Life and work of Donald Olding Hebb. *Acta Neurol.Taiwan 15*: 127-42. A review of Hebb's life and work and the impact of his ideas on psychology and neuroscience

Buchfelder M (2005): From trephination to tailored resection: Neurosurgery in Germany before World War II. *Neurosurgery 56*: 605-613.. A summary of the work of the major German pioneers, Wagner, von Bergmann, Krause, Foerster, and Tönnis

Burke RE (2006): John Eccles' pioneering role in understanding central synaptic transmission. *Prog. Neurobiol. 78*: 173-88. An account of the central role which Eccles played in elucidating the mechanisms of central synaptic transmission during the three decades stretching from the late 1930s to 1966

Buser P (2006): Slowly forgetting the Pavlovian adventure? *C.R.Biol. 329*: 398-405. A careful reassessment of Pavlov's (1849-1936) career and of the subtleties of his work which tend to be obscured by the generalised reflexology which became Soviet orthodoxy

Chu N-S (2006): Contribution of a Snake Venom toxin to Myasthenia Gravis: The Discovery of  $\alpha$ -bungarotoxin in Taiwan. *J.Hist.Neurosci. 14*: 138-48. An account of the discovery in 1963, dissemination and use of  $\alpha$ -bungarotoxin in Myasthenia gravis research

Chu NS (2006): Centennial of the Nobel Prize for Golgi and Cajal – founding of modern neuroscience and the irony of discovery. *Acta Neurol Taiwan 15*: 217-22. Article in Chinese

Cohen-Gadol AA, Nahed BV, Voorhees JR, Maher CO, Spencer DD (2005): Cushing's experience with the surgical treatment of spinal dysraphism. *J. Neurosurg (Pediatrics)*, 102: 441-4. A discussion of the evolution of Cushing's technique in the treatment of myelomeningoceles through two illustrative patient records

#Cohen-Gadol AA, Homan JM, Laws ER, et al (2005): The Mayo brothers and Harvey Cushing: a review of their 39-year friendship through their personal letters. *J. Neurosurg*.102:391-396.. This was a very important relationship in the development of neurosurgery, especially as a recognized specialty.

Cohen-Gadol AA, Laws ER, Spencer DD, DeSalles AA (2005): The evolution of Harvey Cushing's surgical approach to pituitary tumors from transsphenoidal to transfrontal. *J.Neurosurg* 103: 372-7. A review of Cushing's early patient records leading to an account of the later development of transsphenoidal surgery by Norma Dott, Gerard Guiot and others

Cohen-Gadol AA, Liu, Laws ER Jr (2005): Cushing's first case of transsphenoidal surgery: the launch of the pituitary surgery era. *J.Neurosurg*. 103: 570-4. A review of the clinical details of Cushing's first case of transsphenoidal pituitary surgery in 1909

Cohen-Gadol AA, Spencer DD (2004): Harvey W. Cushing and cerebrovascular surgery. Part I, aneurysms. Part II, vascular malformations. *J. Neurosurg*. 101:547-559. Cushing encountered these lesions and dealt with them in the course of his practice, but he retired before the widespread use of cerebral angiography, which was first used in a human by Moniz in 1927

Cohen-Gadol AA, Spencer DD, Krauss WE (2005): The development of techniques for resection of spinal cord tumors by Harvey W Cushing. *J.Neurosurg Spine* 2: 92-7. A review of selected operative notes and sketches to demonstrate Cushing's technique in the excision of spinal cord tumors

Colrain IM (2005): The K-complex: a 7-decade history. *Sleep*, 28: 255-73. The K-complex was first described by Loomis in 1938 and this paper reviews the subsequent EEG literature and what is understood of the underlying neurophysiology

Compston A (2006): From the Archives. *Brain* 129: 1078-80. A well illustrated review of O'Connell's paper 'Some observations of the cerebral veins': *Brain* 57: 484-503 (1934)

Compston A (2006): From the Archives. *Brain* 129: 3-5. An assessment of the significance of Gordon Holmes' study of familial degeneration of the cerebellum (*Brain* 30: 466-89 (1907)) and Ferguson and Critchley's similar study (*Brain* 52: 203-225 (1929)) both of which form background to our contemporary genetic analyses of this condition

Compston, A (2005): From the Archives (L'Hermitte (1983): 'Utilisation behaviour'; Kugelberg (1952): 'Facial reflexes'; Penfield and Perot (1963): 'The brain's record of auditory and visual experience'; Sunderland (1945): 'The intraneural topography of the radial, median and ulnar nerves'). *Brain* 128: 3-4; 235-6; 449-50; 695-6. Reviews of four significant papers published in *Brain* and of their context and consequences

#Cooper SJ (2005): Donald O Hebb's synapse and learning rule: a history and commentary. *Neuroscience Biobehav. Rev.* 28: 851-74. Donald Hebb's life and the scientific

milieu in psychology and neurophysiology which preceded and informed his work are reviewed and the impact of his work on later theories of learning, memory and synaptic plasticity assessed

#Couldwell WT, Feindel W, Rovit RL (2004): William Osler at McGill University: the Baby Professor and his early contributions to neurosurgery. *J. Neurosurg.* 101:705-713. A well done paper that contains early case reports and cogent commentary. Osler's later friendship with the young Harvey Cushing at Johns Hopkins was important for modern neurosurgery's successful development.

Debru C (2004): Michel Jouvet: the enigma of scientific creativity. *Arch Ital Biol* 14: 353-7. Not seen

Demetriades AK (2004): Victor Horsley's contribution to the Foster Kennedy Syndrome. *British J. Neurosurgery* 18:371-374.. Horsley knew about the Syndrome and its importance before Foster Kennedy, but he exhibited his customary and unusual altruism in encouraging Kennedy's publication.

Dewsbury DA (2006): The Lashley Award. *J.Hist.Neurosci.* 15: 111-28. The Karl Spencer Lashley Award has been won by some 50 leading neuroscientists and this paper reviews the inauguration of the award in 1953, how it has evolved over the subsequent years, and the work and characteristics of its recipients

Doglietto F, Prevedello DM, Jane JA, Han J, Laws ER Jr (2005); Brief history of endoscopic transsphenoidal surgery – from Philipp Bozzini to the First World Congress of Endoscopic Skull Base surgery. *Neurosurg. Focus*, 19: E3. A review of the history of the endoscope, especially its application to endonasal surgery, from its first description by Bozzini to the First World Congress of Endoscopic Skull Base surgery in 2005

Dolphin AC (2006): A short history of voltage-gated channels. *Brit.J.Pharmacol.* 147: 556-62. A review of the evolution of our understanding of Ca<sup>2+</sup>-channels from their initial identification by Fatt and Katz in 1953 to our present recognition of their intricate molecular biology

Duff D, Evans J (2004): Remembering Jessie Ferne (1910-2004). *Axone* 26, 16-7. A biography and record of the times and achievements of the founder of the Canadian Association of Neuroscience Nurses

Dupont JC (2006): Some historical difficulties of the cholinergic transmission. *C.R.Biol.* 329: 426-36. An analysis of the controversy between the exponents of chemical transmission and electrical transmission at the synapse from the early 20<sup>th</sup> century to the final conversion of Eccles in the 1950s

Eadie MJ (2006): The epileptology of William Aldren Turner. *J.Clin Neurosci* 13: 9-13. Physician at the National and Kings College Hospitals and a major figure in epileptology during the interregnum between Hughlings Jackson and 1930s EEG.

Fairén A (2005): Pioneering a golden age of cerebral microcircuits: The births of the combined Golgi-electronmicroscope methods. *Neuroscience* 136: 607-614. A commemoration of the 1960s work of Theodor W. Blackstad in devising methods for combining Golgi staining and electronmicroscopy in the investigation of cerebral microcircuitry

Farina B, Cecarelli M, DiGiannantonio M (2004): Henri Ey's neojacksonism and the psychopathology of disintegrated mind. *Psychopatholog* 38: 285-90. The French psychiatrist Henri Ey developed an organo-dynamic theory of mind in the 1950s synthesising ideas from Hughlings Jackson, Janet and Bergson and his work anticipates some current theories of consciousness

# Fodstad H, Kelly PJ, Buchfelder M (2006): History of the Cushing reflex. *Neurosurgery* 59: 1132-7. The reflex takes its name from the work of Harvey Cushing in 1901 and 1902 but this well-illustrated account shows that similar work had been carried out decades earlier by a number of other investigators.

Gijn J van (2006): From the Archives. *Brain* 129: 557-560. An assessment of the work of Lawrence and Kuypers in analysing the motor system of Primates, especially their subcortical systems, reported in *Brain* 91: 1-14 (1968) and *Brain* 91: 15-36 (1968)

Gijn J. van (2004): Hermann Oppenheim (1858-1919). *J Neurol* 251: 1028-9. One of a series of short accounts of the pioneers of neurology being published in this Journal

Gildenberg PL (2004): The birth of stereotactic surgery: a personal retrospective. *Neurosurgery* 54:198-208. Gildenberg learned from some of the original masters, and he became one himself.

Glickstein M (2006): Golgi and Cajal: The neuron doctrine and the 100<sup>th</sup> anniversary of the 1906 Nobel Prize. *Curr Biol* 16: R147-51. A well-illustrated account of the origin and aftermath of the work for which the 1906 Prize for Physiology or Medicine was awarded

Grafstein B (2006): Roger Sperry: pioneer of neuronal specificity. *J.Neurophysiol.* 96: 2827-9

A review of two classic papers ('Optic nerve regeneration with return of vision in anurans', *J.Neurophysiol.* 7: 57-69 (1944) and 'Restoration of vision after crossing of optic nerves and after collateral transplantation of eye', *J.Neurophysiol.*, 8: 15-28 (1945)) and an account of their historical significance

# Grant G (2006): The 1932 and 1944 Noble Prizes in Physiology or Medicine: Rewards for Ground-Breaking Studies in Neurophysiology. *J.Hist.Neurosci.* 15: 341-57. An account of the work for which Sherrington and Adrian were awarded the 1932 Nobel Prize and for which Erlanger and Gasser were awarded the prize in 1944: together the four Laureates paved the way to modern neurophysiology.

Greenberg SA (2004): Henry Head (1861-1940). *J Neurol* 251: 1158-9. Another of the series on pioneering neurologists

#Greenspan RJ, Baars BJ (2005): Consciousness eclipsed: Jacques Loeb, Ivan Pavlov, and the rise of reductionist biology after 1900. *Consciousness and Cognition*, 14, 219-30. Jacques Loeb (1859-1920) and Ivan Pavlov (1849-1936) figured largely in the origin of the reductionist program in biology and psychology at the beginning of the 20<sup>th</sup> century and this paper reviews their influence on J.B.Watson, B.F.Skinner, Karl Lashley and many others whose work proved such an impediment to the study of consciousness until the end of that century

Griffiths, PE (2004): Instinct in the '50s: the British reception of Konrad Lorenz's theory of instinctive behavior. *Biology and Philosophy*, 36: 609-31. In the mid-1950s both Haldane and Lehrman subjected the central concepts of Lorenz's pre-war ethology to radical criticism and this paper shows how ethology in the anglophone world consequently departed from its founders concepts

Groeben C, Sio F de (2006): Nobel Laureates at the Stazione Zoologica Anton Dohrn: Phenomenology and Paths to Discovery in Neuroscience. *J.Hist.Neurosci.* 15: 376-95. The 'Naples experience' has been cited by many eminent scientists as a key moment in their scientific lives and this paper tests this belief against the experience of three Noble Laureates: T.H.Morgan, Otto Warburg and J.D.Watson.

Gross CG (2005): Processing the facial image: a brief history. *Am.Psychol.* 60: 755-63. The origins of contemporary understanding of the neural basis of face perception from its roots in monkey neuropsychology and neurophysiology to single neuron recordings in the inferior temporal cortex

Grüsser O-J, Kapp, H, Grüsser-Cornehls U (2005): Microelectrode Investigations of the Visual Sytem at the Department of Clinical Neurophysiology, Freiburg I.Br.: A Historical Account of the first 10 Years, 1951-1960. *J.Hist.Neurosci.* 14: 257-80. The history of the first ten years in Freiburg is described by some of the participants with special attention payed to the role of Richard Jung and J.F.Tönnies

\*Guillery RW (2005): Observations of synaptic structures: origins of the neuron doctrine and its current status. *Phil.Trans.Roy.Soc.B* 360: 1281-1307. A magisterial and well illustrated account of the 'neuron doctrine' from its origins in the 1890s to the present day

Hardy J (2004): Historical background of stereotactic surgery: Reflections on stereotactic surgery and the introduction of microelectrode recording in Montreal. *Neurosurgery* 54:1508-1511. One of the series of stereotactic vignettes published in this journal

Harris-Warrick R (2005): Synaptic chemistry in single neurons: GABA is identified as an inhibitory transmitter. *J.Neurophysiol.* 93: 3029-303. A review of two papers in the *J.Neurophysiol.* (Krawitz, Kuffler, Potter (1963); Otsaka, Krawitz, Potter (1967)) which identified the first inhibitory transmitters in the central nervous system

Hawkins SA (2006): The history of neurology in Belfast: the first hundred years. *Ulster Med. J* 75: 11-22. The first hundred years stretched from 1888 to the late 1980s and the history consists of people and places: the people were most importantly John McGee McCormac, Sydney Allison, Harold Millar and Louis Hurwitz, and the places were the hospitals where they worked and how they developed.

Hayward R. (2004): Demonology, Neurology and Medicine in Edwardian Britain. *Bull.Hist.Med.:* 78, 37-58. An exploration of the points of contact between the medical and demonological communities in Edwardian Britain in order to demonstrate the contested nature of biomedical innovation

Holdorf B (2004): Founding Years of Clinical Neurology in Berlin until 1933. *J.Hist.Neurosci* 13: 223-238. A detailed account of the origins of clinical neurology in Berlin from the late nineteenth century until the dispersal of Jewish physicians in the early 1930s

Hobson JA (2004): Michel Jovet: a personal tribute. *Arch Ital Biol* 142: 347-52. Not seen

#Horton, JC, Adams, DL (2005): The cortical column: a structure without a function. *Phil.Trans.Roy.Soc.B* 360: 837-62. A comprehensive and detailed review of fifty years of research following Mountcastle's 1955 discovery of cortical columns, coming to the 'disappointing' conclusion that they may have no function

#Hughes, JT (2004): Hugh Cairns (1896-1952) and the mobile surgical units of world war II. *J.Med.Biogr.* 12: 18-24. Cairns designed the mobile units which treated British head injuries during the campaigns of world war II and it is argued that the excellent outcomes contributed largely to the upsurge of neurosurgery during and after that war

Jane JA, Sherman JH, Boulos PT, Luce C, Dumont AS (2004): Lumbar stenosis: a personal record. *J. Neurosurg (Spine 1)* 1:31-38.. Dr. Jane has a half-century's experience with this common problem, and the authors review a little of its brief history before 1956.

Johnston JD (2005): The Contributions of Dr Mary Walker towards Myasthenia Gravis and Periodic Paralysis Whilst working in Poor Law Hospitals in London. *J.Hist.Neurosci.* 14: 121-37. Dr Mary Walker discovered that Physostigmine and Prostigmine temporarily restored muscle function in patients with Myasthenia gravis in 1934 and this paper reviews her life and scientific achievements

#Jones EG (2006): The Impossible Interview with the Man of the Neuron Doctrine. *J.Hist.Neurosci.* 15: 326-40. An imaginary interview with Santiago Ramón y Cajal on the occasion of his receiving the Nobel Prize in 1906. Cajal's responses taken from his own writings

Karenberg A (2006): Neurosciences and the Third Reich: Introduction. *J.Hist.Neurosci.* 15: 168-172. An introduction to three papers on the role of the neurosciences in the Hitler's Germany

Kelly PJ (2004): Stereotactic navigation, Jean Talairach, and I. *Neurosurgery* 54:454-64. Talairach was a central figure in mid-twentieth century stereotaxis, and Kelly is one of his most important disciples

Keong NCH, Gleave JRW, Hutchinson PJ (2006): Neurosurgical history: comparing the management of penetrating head injury in 1969 with 2005. *Brit,J.Neurosurg.* 20: 227-32.. Two cases, one from each year, are compared in this example of 'recent history'.

Kerber C (2006): History of endovascular neurosurgery: a personal view. *Neurosurgery* 59 (5 Suppl 3): S22-9. Endovascular therapy has continuously evolved since it was first described in 1904 and this paper describes the development of the technique into the 21<sup>st</sup> century.

Koehler PJ (2006): The significance of Bernard Brouwer's contribution to Dutch neurology and neurosurgery. On the 125<sup>th</sup> anniversary of the year of his birth. *Ned.Tijdschr.Geneeskd.* 150: 2819-24. (In Dutch)

Kosmachevskaia EA, Gromova LI (2006): Ivan Petrovich Pavlov and Harvery Williams Cushing. *Ross Fiziol Zh Im I M Sechenova* 92: 1265-9. (In Russian)

Kim DG, Park C-K, Paek SH (2006): Bo Sung Sim (1924-2001): a pioneer of neurosurgery in Korea. *J.Neurosurg.* 105: 494-497. The life and work of the pioneer Korean neurosurgeon who established the Department of Neurosurgery at the Seoul National University Hospital and the Korean Neurosurgical Society

Koehler PJ (2004): Bernard Brouwer (1881-1949). *J.Neurol.*, 251: 901-2. Another in the series of short accounts of pioneering neurologists

Koehler PJ (2006): “The Orang Lives Almost Next Door” The Correspondence Between John Fulton (New Haven) and Willem Verhaart (Java). *J.Hist.Neurosci.* 15: 5-16.

Between 1937 and 1959 Fulton and Verhaart corresponded on neuroanatomical topics and this paper, after a brief biography of the two scientists, reviews their joint research and Verhaart’s war time experiences and subsequent return to the Netherlands

Koehler PJ, Lanska DJ (2004): Mitchell’s Influence on European Studies of Peripheral Nerve Injuries during World War 1. *J.Hist.Neurosci.* 13: 297-35. The influence of Weir Mitchell (1829-1914), especially his ideas on causalgia, on European physicians who treated peripheral nerve injuries sustained in World War 1 is analysed.

#Kretzer RM, Crosby, RW, Rini DA, Tamargo RJ (2004): Dorcas Hager Padgett: neuroembryologist and neurosurgical illustrator trained at Johns Hopkins. *J. Neurosurg.* 100:719-730. A major paper about an interesting woman.

Kroker, K (2004) Endemic encephalitis and American neurology 1919-1940. *Bull. Hist.Med.* 78: 108-147. What was encephalitis lethargica? This paper reviews its short-lived history

Kumbier E, Haack K, Herpertz S (2005): Considerations on the work of the neuropsychiatrist Gabriel Anton (1858-1933). *Nervenarzt.* 76: 1132-6; 1138-40. An account of the work of Gabriel Anton (1858-1933) best known for his eponymous syndrome but who also did important work on basal ganglia disorders and preliminary studies on child and adolescent psychiatry (in German; English abstract)

Kumbier E, Hak K (2004): Alfred Hauptmann (1881-1948). *J Neurol* 251: 1288-9. Brief account of a pioneering neurologist

Laitinen LV (2004): Personal memories of the history of stereotactic neurosurgery. *Neurosurgery* 55:1420-1429. Laitinen is a pioneer of Finnish neurosurgery and important in the development of stereotactic neurosurgery.

Larner A (2004): Neurological contributions of Caleb Hillier Parry. *Adv Clin Neurosci & Rehab* 4 : 38-9. A brief account of the neurological work of Jenner’s life-long friend, Caleb Hillier Parry (1755-1822)

Leel-Ossy L (2005): Correspondence of Santiago Ramon y Cajal and Dezso Miskolczy between 1925 and 1936. *Orv. Hetil* 146: 665-8. Hungarian: no abstract available

#Leff A (2004): A historical review of the representation of the visual field in the primary visual cortex with special reference to the neural mechanisms underlying macular sparing. *Brain and Language* 88: 268-278. A review of the last 130 years of research into the mapping of the visual field concluding that central vision is not bilaterally represented in the primary visual cortex

Lerner V, Margolin J, Witztum E (2005): Vladimir Bekhterev: his life, his work and the mystery of his death. *Hist.Psychiatry* 62 (2): 217-27. Bekhterev (1857-1927) made significant contributions to the study of brain development, neurophysiology and neuropathology and this article is designed to rectify the historical injustice which consigned his work to oblivion

Liu JK, Cohen-Gadol AA, Laws ER Jr, Cole CD, Kan P, Couldwell WT (2005): Historical vignette: Harvey Cushing and Oskar Hirsch: early forefathers of modern transsphenoidal surgery. *J.Neurosurg.* 103:1096-1104. A comparative analysis of the operative techniques of Cushing and Hirsch and a review of the contributions they made to modern transsphenoidal surgery

Lopez-Munoz F, Boya J, Alamo C (2006): Neuron Theory, the corner stone of neuroscience on the centenary of the Nobel Prize award to Santiago Ramon y Cajal. *Brain Res.Bull.* 70: 391-405. An historical analysis of the circumstances in which Cajal formulated his theory, paying attention to the authors and works which influenced his postulate and the difficulties he encountered in getting it accepted

Lovelace RE (2006): A tribute to Jack Petajan's inspiration: from goat to goat. *J.Neurol.Sci.* 242: 43-6. An account of the development of clinical neurophysiology, with special reference to neuromuscular diseases and the career of Dr Jack Petajan (1930-2005) and other inspiring teachers, over the last fifty years

Lublin F (2005): History of modern multiple sclerosis therapy. *J.Neurol.* 252, S3: 3-9. It was not until the latter years of the 20<sup>th</sup> century that treatments for MS were found and this paper reviews this very recent history

Lucignani G, Bastianello S (2006): Neuroimaging: a story of physicians and basic scientists. *Funct. Neurol.* 21(3): 133-6. The authors trace the evolution of brain-imaging techniques in the second part of the twentieth century.

Macmillan M (2004): "I could see, and yet, mon, I could na' see": William Macewen, the agnosias and brain surgery. *Brain and Cognition* 56: 63-76. Two cases in which Macewen used symptoms of visual agnosia to plan surgery on the angular gyrus are reviewed and the positive results achieved analysed in the historical context of the dispute over its rôle as the visual centre

Macmillan M (2004): Localisation and William Macewen's Early Brain Surgery Part 1: the Controversy. *J.Hist.Neurosci* 13: 297-325. An assessment of the claim by Macewen that he had operated to remove brain tumours based on localising signs before 1884 the date usually accepted as marking the origin of this procedure

Macmillan M (2005): Localisation and William Macewen's Early Brain Surgery Part II: The Cases. *J.Hist.Neurosci.* 14: 24-56. A continuation of the previous paper, describing the cases which confirm Macewen's priority in this area of brain surgery

#Malis LI (2006): Electrosurgery and bipolar technology. *Neurosurgery* 58 (*Operative Neurosurgery Supplement 1*):1-11. Malis is a major contributor to surgical haemostasis. This paper gives Malis' explanation of the physics behind his highly successful bipolar coagulating forceps, as well as some discussion of other techniques for haemostasis in neurosurgery.

#Manni, E, Petrosini, L (2004): 'A century of cerebellar somatotopy: A debated representation. *Nat.Rev.Neurosci.* 5: 241-9. A very well illustrated account of how models of cerebellar localisation have evolved over the last century

Marcum JA (2006): 'Soup' vs 'Sparks': Alexander Forbes and the Synaptic Transmission Controversy. *Ann. Sci.* 63: 139- 156. Alexander Forbes (1882-1965) was prominent in the early

twentieth century controversy over the chemical or electrical nature of synaptic transmission and this paper reviews his contribution and assesses its implication for scientific controversies in general.

Marler P (2005): Ethology and the roots of behavioural endocrinology. *Hormones and Behaviour* 47: 493-502. An account of the origins of behavioural endocrinology from its roots in the early 20<sup>th</sup> century work of Lorenz, Tinbergen, Uexküll, Loeb, Spencer, Jennings and Charles Otis Whitman to the present.

Matthews G (2005): Making the retina approachable. *J.Neurophysiol.* 93: 3034-5. A review of three classic papers (Kuffler (1953); Dowling and Werblin (1969); Werblin and Dowling (1969) in the *J.Neurophysiol.*) which laid the foundation of our present understanding of retinal physiology

Mazzarello P (2006): The Impossible Interview with the Man of the Hidden Biological Structures. *J.Hist.Neurosci.* 15: 318-325. A reconstruction of Golgi's life and major scientific discoveries on the basis of his own writings.

McClelland S, Harris KS (2006): Clarence Sumner Greene, Sr: the first African-American Neurosurgeon. *Neurosurgery* 59: 1325-27. Trained at the Montreal Neurological Institute under Wilder Penfield, Greene (1901-57) overcame enormous odds to become the first African-American neurosurgeon, thus opening the door for fellow African-Americans to follow in his footsteps

McCrone T (2004): Freud's Neurology. *Lancet Neurology* 3: 320. A very brief critical assessment of Freud's early interest in brain science and neurology

McDonald I (2006): Short memoir of Dr MacDonald Critchley. *Cortex* 42: 782-3. A short review of Critchley's life and contribution to neuroscience

Meagher RJ, Bucheit WA, Narayan RK (2004): The history of neurosurgery at Temple University. *Neurosurgery* 55:688-97. . Several second generation pioneers trained and worked at Temple, including Temple Fay, Ernest Spiegel and Henry Wycis. The latter two were genuine pioneers of stereotaxic surgery in humans.

Mecacci L (2005): Luria: a unitary view of human brain and mind. *Cortex* 41: 816-22. An account of the work of Aleksandr Luria (1902-1977) in neuropsychology.

Miller D (2006): Macdonald Critchley (1900-97). *J.Med Biogr* 14: 149. A brief 'thumbnail' sketch

Montes-Santiago J (2006): the meeting of Einstein with Cajal (Madrid, 1923): a lost tide of fortune. *Rev. Neurol.* 43:113-7. An account of the meeting of Einstein and Cajal in Madrid in 1923 which left a profound impression on Einstein (in Spanish)

Moog FP, Karenberg A (2004): Samuel Thomas Soemmering (1755-1830). *J. Neurol.* 251: 1420-1. Another of the series of short biographies of neurological pioneers

Morange M (2006): What history tells us, VI. The transfer of behaviours by macromolecules. *J. Biosci* 31: 323-7. A useful review and critique of a well-known and at the time (1960s) exciting episode in the history of neuroscience when a molecular basis of memory seemed in reach

Mukhida K, Shilpakar SK, Sharma MR, Bagam, M (2005): Neurosurgery at Tribhuvan University Teaching Hospital, Nepal. *Neurosurg.* 57: 172-80. A review of the origins of neurosurgery in Nepal, its development at Tribhuvan during the last decade, and a discussion of the challenges facing neurosurgical care in Nepal and other developing countries

Müller T (2004): Die Neurologische Abteilung des Krankenhauses Lankwitz. *Sudhoffs Archiv* 88: 54-76 (German with English abstract). An account of neurology at the Lankwitz hospital (near Berlin) until 1933 when many Jewish physicians were forced to leave. It is shown that, far from being 'marginalised', psychoanalysis was closely integrated with neurology and psychiatry before the National Socialist ascendancy

Nathoo N, Lautzenheiser FK, Barnett GH (2005): George W. Crile, Ohio's first neurosurgeon, and his relationship with Harvey Cushing. *J.Neurosurg.* 103: 378-86. George Crile was distinguished in many fields but is best remembered for his work in the pathophysiology of pain. This paper focuses on his relationship with Harvey Cushing

Nyhan WL (2005): Lesch-Nyan Disease. *J.Hist.Neurosci.* 14: 1-10. An account of the forty year history of the disease from its first description in 1964 until the present by one of its co-descriptors

Ogren K, Sandland M (2005): Psychosurgery in Sweden 1944-1964. *J.Hist.Neurosci.* 14: 353-67. This is the first study of the more than 700 psychosurgical operations carried out in northern Sweden during the years 1944-64. Statistical analysis, qualitative content analysis and discourse analysis are presented.

Ohye C, Fodstad H (2004): Forty years with Professor Narabayashi. *Neurosurgery* 55:222-227 Another Stereotactic Vignette. Narabayashi was a leader in establishing neurosurgery in Japan after world War II.

Omerod W (2006): Richard Caton (1842-1926): pioneer electrophysiologist and cardiologist. *J.Med.Biogr* 14: 30-35. A useful biography of the man who discovered the intrinsic electrical activity of the brain, afterwards called the EEG

Patzwald GA, Wildt SC (2004): The use of convent archival records in medical research: the School Sisters of Notre Dame archives and the nun study. *American Archivist* 67: 89-106. A discussion of the archives program which allows a longitudinal study of Alzheimer's disease and ageing in 678 SSND allowing the correlation of late-life cognitive and physical functions and post-mortem neuropathology with early life factors

Pearce JM (2006): Sir Francis Walshe, MD FRS (1885-1973). *J.Med.Biogr.* 14: 93-5. A brief biography of Francis Walshe, Physician at the National and University College Hospitals, editor of *Brain*, and author of many papers on the cerebral cortex and neurophysiology

Pearce JMS (2004): A note on Pierre Marie (1853-1940). *J Neurol Neurosurg Psychiatry* 75: 1583. A brief account of the co-founder of *Revue Neurologique*, a brilliant clinician and teacher, a student of the aphasias where he differed from Broca, and of several other neurological conditions

Pearce JMS (2004): Canavan's disease. *J Neurol Neurosurg Psychiatry* 75: 1410. A brief biography of Myrtle May Canavan (1879-1953), an American neuropathologist who anticipated van Bogaert and Bertrand in describing a progressive spongy degeneration of the white matter which consequently became known as 'Canavan's Disease' or 'Bogaert and Bertrand's disease'

- Pearce JMS (2004): From orthostatic hypotension to Shy-Drager syndrome. *J Neurol Neurosurg Psychiatry*, 75, 1666. Brief accounts of Gilbert Milton Shy (1919-67) and Glen Albert Drager (1917-67) who in 1960 gave the first comprehensive clinicopathological descriptions of multiple system atrophy (MSA)
- Pearce JMS (2004): William John Adie (1886-1935). *J Neurol Neurosurg Psychiatry* 75: 1111, A biographical note of one of the founders of the Association of British Neurologists, best-known for his account of the tonic pupil
- Pearce JMS (2006): Queckenstedt's manoeuvre. *J.Neurol.Neurosurg.Psychiatry* 77: 728. A brief description of the work of Hans Queckenstedt (1876-1918) which culminated in his eponymous clinical test for spinal obstruction together with a brief biography
- Pearce JMS.(2004): Sir Gordon Holmes (1876-1965). *J Neuro .Neurosurg Psychiatry* 75: 1502-3 . A mini-biography of one of the giants of twentieth century neurology
- Pearce JMS (2006): James Collier (1870-1935) and uncal herniation. *J. Neurol.Neurosurg.Psychiatry* 77: 883-4. Collier was an inspiring teacher at Queen Square and one of the first to recognise uncal herniation
- Pearce JM (2006): Walter Edward Dandy (1886-1946). *J.Med Biogr* 14: 127-8. An outline of Dandy's principal neurosurgical achievements and of his sometimes turbulent friendship with Walter Cushing
- #Peiffer J (2006): Phases in the Postwar German Reception of the "Euthanasia Program" (1939-1945) Involving the Killing of the Mentally disabled and its Exploitation by Neuroscientists. *J.Hist.Neurosci.* 15: 210-44. Five phases are distinguished in the post-war response to the killing of mentally disabled patients during the Nazi period
- Petrik V, Apok V, Britton JA, et al. (2006): Godfrey Hounsfield and the dawn of computed technology. *Neurosurgery* 58:780-787. Based on interviews of people who worked with Hounsfield and James Ambrose at Atkinson Morley's Hospital in the 1970s.
- Powell M (2006): Sir Victor Horsley – an inspiration. *BMJ* 333(7582): 1317-9. At the age of 29 Horsley (1857-1916) was an FRS and he became the first surgeon in the world to be appointed to a hospital post as a brain surgeon. This brief article, marking the 150<sup>th</sup> anniversary of his life, reviews his life and character, his science, surgery and his work as a medical reformer.
- Rand RW (2004): Stereotaxy: Recollections of Robert W. Rand, M.D., Ph.D. *Neurosurgery* 54: 992-98. Neurosurgical vignette
- Rashotte ME, Smith JC (2005): Psychobiology and Neuroscience at the Florida State University: A history. *Psychol. And Behav.* 86: 261-4. The major developments during the 50 year history of FSU's psychobiology research and teaching
- Richling B (2006): History of endovascular surgery: personal accounts of the evolution. *Neurosurgery* 59(5 Suppl 3): S30-8. A history, by one of its practioners, of endovascular surgery for brain aneurisms, from its inception in 1904 until the present day

Rose F Clifford (2006): The History of the Migraine Trust. *J.Headache Pain* 7: 109-115. A history of the Trust established in 1964 to initiate and fund research into migraine, one of the commonest causes of headache

Sammet K (2006): Wilhelminian Myelinated Fibers – Theodor Kaes, Myeloarchitectonics and the Asylum Hamburg-Frierichsberg 1890-1910. *J.Hist.Neurosci* 15: 56-72. An assessment of the life and work of Theodor Kaes (1852-1913) in the context of turn-of-the-century German neuroscience

Sansone JM, Gatzke AM, Aslinia F, Rolak LA, Yale SH (2006): Jules Tinel (1879-1952) and Paul Hoffman (1884-1962). *Clin.Med.Res.* 4: 85-89. Tinel and Hoffman served on opposite sides during the 1914-18 war and both described the sign which bears their names; this paper provides brief biographies and an account of the discovery of the sign.

Schmaltz F (2006): Neurosciences and Research in Chemical Weapons of Mass Destruction in Nazi Germany. *J.Hist.Neurosci.* 15: 186-209. The military-industrial complex in wartime Germany orientated neuropharmacologic research to the discovery of new chemical nerve agents (Tabun, Sarin, Soman) which, although never used, were superior to those available to the Allies

#Schurr, PH (2005): The evolution of field neurosurgery in the British Army. *J.Roy.Soc.Med.* 98: 423-427. An account of how Hugh Cairns established mobile neurosurgical units (MNSUs) for the British Army at the outset of World War 2 and of their success in Europe, North Africa and Asia in treating over 20 000 patients

Segal R, Shoshan Y, Israel Z, et al (2005): Neurosurgery at the Hadassah-Hebrew University Medical Center in Jerusalem. *Neurosurgery* 56: 1135-1148. This Department of Neurosurgery was founded in 1941, much earlier than other departments in much of the rest of the world.

Segev I (2006): What do dendrites and their synapses tell the neuron? *J.Neurophysiol.* 95: 1295-7. An assessment of the historical significance of four classic neurophysiological papers: Rall W (1967): Distinguishing theoretical synaptic potentials computed for different soma-dendritic distributions of synaptic input; Rall, W., Burke RE et al. (1967): Dendritic location of synapses and possible mechanisms for the monosynaptic EPSP in motoneurons; Rall W and Shepherd GM (1968): Theoretical reconstruction of field potentials in the olfactory bulb; and Segev I and Rall W (1988): Computational study of an excitable dendritic spine. All published in *J.Neurophysiol.*

#Shahlaie, K, Watson JC, Benson, DR (2004): The Intriguing Encounters of Pavlov and Cushing. *J.Neurosurg.* 100: 568-71. Correspondence between Cushing and Pavlov at the beginning of the twentieth century

Sheehan JP, Sheehan, JM, Ellegala DB, Furneaux C (2005): Pioneers in the Development of Neurological Surgery in Auckland, New Zealand: Robertson, Wrightson and Mackensie. *Neurosurgery* 57: 364-7. Historical records were examined and interviews conducted to determine the factors that shaped the development of neurosurgery in New Zealand

Sherman IJ, Kretzer RM, Tamargo RJ (2006): Personal recollections of Walter E Dandy and his brain team. *Neurosurgery* 105: 487-93. A description of Dandy's neurosurgical residency program (1918-1946) at Johns Hopkins and personal recollections of training under Walter Dandy (1886-1946)

#Simpson D (2005): Phrenology and the Neurosciences: Contributions of F.J.Gall and J.G.Spurzheim. *ANZ J Surg.* 75: 475-82. A well-illustrated account of the work of Gall and Spurzheim in establishing the pseudoscience of phrenology

Smith CUM (2005): Origins of Molecular Neurobiology: the Role of the Physicists. *J.Hist.Neurosci.* 14: 214-29. An account of how the great quantum physicists of the beginning of the twentieth century influenced the origin and growth of molecular neurobiology

Snyder S (2005): Historical Perspective: Neuroscience at Johns Hopkins. *Neuron* 48: 201-211. Although neuroscience has had a long history at John Hopkins, stretching back to Harvey Cushing's appointment as head of Neurosurgery in 1906, a Department of Neuroscience was only established in 1980 and in this paper Solomon Snyder, its founding director, describes its very distinguished history during the ensuing 25 years

Spierings, EL (2004): The aura-headache connection in migraine: a historical analysis. *Arch.Neurol.* 61: 794-9. A historical analysis of insights into the pathogenetic mechanisms of aura and headache and their interconnection

Squire LR (2006): Lost forever or temporarily misplaced? The long debate about the nature of memory impairment. *Learn Mem* 13: 522-9. A reappraisal of four areas of behavioural study in the 1970s and 80s that led to the dominant view of memory impairment as a deficit in information storage

Steger F (2006): Neuropathological Research at the "Deutsche Forschungsanstalt fuer Psychiatrie" (German Institute for Psychiatric Research) in Munich (Kaiser-Wilhelm-Institute). Scientific Utilisation of Children's Organs from the "Kinderfachabteilungen" (Children's Special Departments) at Bavarian State Hospitals. *J.Hist.Neurosci.* 15: 173-85. It is argued that histological material from child 'euthanasia' programs contributed to neuropathological research and that publications from this research continued after 1945.

Stein M. (2004): The establishment of the department of psychiatry in the Mount Sinai Hospital: A conflict between neurology and psychiatry. *J Hist Behav Sci* 40: 285-309. Reviews the impact of the conflict between neurology and psychiatry (including the controversial role of psychoanalysis) in the establishment of an independent Department of Psychiatry at Mount Sinai, Hospital (New York) in the first half of the twentieth century

#Stone JL, Vilensky J, McCauley TS (2005): Neurosurgery 100 years ago: the Queen Square letters of Foster Kennedy. *Neurosurgery* 57: 797-808. The prominent New York City neurologist Foster Kennedy (1884-1952) trained at Queen Square from 1906 to 1910 and a little known group of his personal letters is reviewed in the light of their historic and neurosurgical context. In addition to the neurosurgeons Horsley and Sargent, Kennedy's letters describe his interactions with Bastian, Ferrier, Gowers, Head, Jackson, Wilson and others

#Stuart DG & Pierce PA (2006): The academic lineage of Sir John Carew Eccles (1903-1997). *Progr.in Neurobiol.* 78: 136-55. Sir John Eccles: who trained him, whom he trained, with whom he collaborated and the subsequent immense impact he, his trainees and collaborators had on neuroscience and philosophy of mind. Several useful Tables showing the academic lineages

Tan T-C (2004): Father of neurosurgery in Hong Kong. *Neurosurgery* 54:984-991.. A brief biography of Hsiang-Lai Wen (b.1923).

Tansey EM (2006): Henry Dale and the discovery of acetylcholine. *C.R.Biol.* 329: 419-25. This paper uses much unpublished material in an examination of Dale's work, from his discovery of naturally occurring Ach in 1913 through to work on its neurophysiological roles

Teive HAG, Kowacs PA, Maranhão Filho, P, Piovesan EJ, Weneck LC (2005): Leão's cortical spreading depression: From experimental 'artefact' to physiological principle. *Neurology* 65: 1455-59. An account of the serendipitous discovery in 1943 by the Brazilian neurophysiologist, Aristides Leão, of the spreading depression now known to underly migraine aura

Terry RD (2006): My own experience of early research on Alzheimer's disease. *J.Alzheimer's Dis.* 9(3 Suppl): 117-9. Review of research by the neuropathology group at the Einstein College of Medicine and then at University of California, San Diego, from 1959 to present

Tomasello F, Germano A (2006): Francesco Durante: the history of intracranial meningiomas and beyond. *Neurosurgery* 59: 389-96; discussion 389-96. Durante (1844-1934) was Chair of Clinical Surgery at Rome for 45 years from 1885. He was the first in the history of neurosurgery to remove a cranial base meningioma in addition to many other innovations and is commemorated by the Francesco Durante award bestowed on world-renowned surgeons.

#Triarhou LC & delCerro M (2006) An early work (1910-1913) in Biological Psychology by pioneer psychiatrist, criminologist and philosopher Jose Ingenieros MD (1877-1925) of Buenos Aires. *Biol.Psychol* 72: 1-14. An overview of Ingenieros' life and work with and English translation of Wilhelm Ostwald's introduction to his major work: *Principios de Psicología Biologica*

Triarhou LC, Del Cerro M (2006): Semicentennial tribute to the ingenious neurobiologist Christfried Jakob (1866-1956). 2. Publications from the second Argentina period, 1913-1949. *Eur Neurol.* 56: 189-98. Jakob is regarded as the father of Argentinian neurology, neurobiology and forensic histopathology and this account discusses the final phase of his career.

Triarhou LC (2005): Georg N Koskinas (1885-1975) and his scientific contributions to the normal and pathological anatomy of the human brain. *Brain Res. Bull.* 68: 121-139. This is the first account of the life and work of Koskinas, best-known for his joint authorship with Constantin von Economo of *Cytoarchitektonik der Hirnrinde des erwachsenen Menschen* but who also published on neuropathology and neuropsychiatry

#Triarhou LC (2006): The percipient observations of Constantin von Economo on encephalitis lethargica and sleep disruption and their lasting impact on contemporary sleep research. *Brain Res Bull* 69: 244-58. This article completes the review of von Economo's work (139 scientific publications) with an in-depth account of his research into sleep control and, especially, encephalitis lethargica.

#Triarhou LC (2006): The signalling contributions of Constantin von Economo to basic, clinical and evolutionary neuroscience. *Brain Res Bull* 69: 223-43. This and its companion article (see below) review the entire spectrum of von Economo's contributions (1899-1932) to all aspects of neuroscience

Tschabitscher M, Warnke JP, Laws ER Jr (2006): Dr Benno Schlesinger: neuroanatomist and neurosurgeon from Vienna, 1900-1983. *Neurosurgery* 59: 697-701. Schlesinger made lasting contributions to the surgical anatomy of the brain's venous system, developed an intimate friendship

with Harvey Cushing, and wrote many research papers on neuroanatomy. His life reflects Europe's tragedy in the first half of the 20<sup>th</sup> century.

Tsuji S (2006): René Couteaux (1909-1999) and the morphological identification of synapses. *Biol Cell* 98: 503-9. An account of Couteaux's work on the histology of the neuromuscular junction where he was the first to stain the postsynaptic membrane and to localise acetylcholinesterase activity.

Tudor, M., Tudor, L., Tudor KI (2005): Hans Berger (1873-1941) – the history of electroencephalography. *Acta Med.Croatia* 59: 307-13. An account of the historical context of Berger's discovery of EEG in the 1920s and of his personal odyssey. (in Croatian: English abstract)

#Vilensky JA, Gilman S, Sinish PR (2004): Denny-Brown, Boston City Hospital, and the History of American Neurology. *Perspectives in Biology and Medicine* 47: 505-518. An account of the Neurological Unit at Boston City Hospital and of the influence of Derek Denny-Brown's tenure as director (1939-67) on the development of neurology in the USA

#Vilensky JA, Sinish PR, Stone JL, Gilman S (2005): The Publications of Sir Victor Horsley: a listing and an assessment. *Neurosurgery* 57: 581-4. A complete list of Horsley's writings on neurological and many other topics (list available on the Journal's website)

#Voorhees JR, Cohen-Gadol AA, Laws ER, Spencer DD (2005): Battling blood loss in neurosurgery: Harvey Cushing's embrace of electrosurgery. *J. Neurosurg.*102:745-752.. A very important chapter in neurosurgery, often told, and told here with original insights from Cushing's papers.

Wagner FC Jr (2004): The Brain Research Laboratory at the Cleveland Metropolitan General Hospital and Case Western Reserve University. *J. Neurosurg* 101:881-887. This is the laboratory of Robert White, where the "isolated brain preparation" was created - a primate brain kept alive outside of the original owner's body.

Walsh K, Megyesi J, Hammond R (2005): Human central nervous system tissue culture: a historical review and examination of recent advances. *Neurobiology of Disease* 18: 2-18. A review of the development of CNS tissue culture from Harrison's initial work in 1907 until the present. Includes a useful 'time-line' figure

Walshe JM (2006): History of Wilson's Disease: 1912 to 2000. *Movement Disorders* 21: 142-7. A concise history of research into the causes of the disorder first identified by Kinneir Wilson in 1912 (although it may have been noted as far back as Morgagni in the 18<sup>th</sup> century) up to modern molecular biological understandings

Walsh V, Cowey A (2006): Fifty years of the parietal cortex: What could we tell Critchley today? *Cortex* 42: 663-5. An editorial to an issue of *Cortex* commemorating the publication of Critchley's 1953 *The Parietal Lobes* illustrating what has changed and what has not in the ensuing fifty years

#Wiesenndanger M (2006): Constantin von Monakow (1853-1930): A pioneer in interdisciplinary brain research. *C.R.Biol.* 329: 407-418. A biography of the Director of Brain Anatomy Institute in Zurich and a pioneer in the early history of interdisciplinary brain sciences

Xia-Jing W (2005): Discovering spatial working memory fields in the prefrontal cortex. *J.Neurophysiol.* 93: 3027-28. A concise history of prefrontal neurophysiology beginning with W.S.Hunter in 1913 and ending with a detailed assessment of Funahashi, Bruch and Goldman-Rakic's 1989 paper in *J.Neurophysiol.*

Young JZ, Keynes R (2005): The Functioning of the Giant Nerve Fibres of the Squid. 1938 – JZ and the discovery of the squid giant nerve fibres. *J.Exp.Biol.* 208 (pt 2): 179-80. A brief account of the recognition of squid giant axons by one of those involved

Zielinski K (2006): Jerzy Konorski on brain associations. *Acta Neurobiol.Exp (Wars)* 66: 75-84; discussion 85-90, 95-7. A biography of Konorski (1903-73) whose work on conditioned reflexes, summarised in his book *Integrative Activity of the Brain* (1967), made him one of the seminal figures of twentieth century neuroscience

Zimprich F, Ronen GM, Stögmann W, Baumgartner C, Stögmann E, Rett B, Pappas C, Leppert M, Singh N, Anderson VE (2006): Andreas R Rett and benign familial neonatal convulsions revisited. *Neurology* 67: 864-6. A brief biography of Rett (1924-1997) who, although better known for the discovery of his eponymous syndrome, was also the first to describe a family with benign familial neonatal convulsions (BFNC), a condition which his own family appears to have suffered

## **Thematic**

#Barbara J-G (2006): The physiological construction of the neurone concept (1891-52). *C.R.Biol.* 329: 437-49. An analysis of the historical pathways from which the modern concept of the neuron emerged, stressing the essential rôles played by underlying disciplinary interactions and national traditions

\*Barbara J-G, Debru C, Buser P (2006): Aspects de l'histoire des neurosciences/Facets of the history of the neurosciences. *C.R.Biol.* 329: 297-464. A thematic issue of *C.R.Biol.* marking the recognition in France of a new academic discipline: the History of the Neurosciences. See also separate entries. (In English)

Baumeister AA, Hawkins MF (2004): The Serotonin Hypothesis of Schizophrenia: A Historical Case Study on the Heuristic Value of Theory in Clinical Neuroscience. *J.Hist.Neurosci.* 13: 277-291. The serotonin hypothesis of schizophrenia is now believed to be false but although false it had the heuristic value of stimulating much further research. This paper uses the serotonin hypothesis as a case study to show how a flawed theory is better than no theory at all.

Baumeister AA, Hawkins MF (2005): Continuity and discontinuity in the Historical Development of Modern Psychopharmacology. *J.Hist.Neurosci.* 14: 199-209. It is argued that far from there being a shift in the middle of the twentieth century from a psychoanalytic paradigm to a psychopharmacologic paradigm there was instead a smooth progression from one schematic to the other

Beaulieu A (2004): From brainbank to database: the informational turn in the study of the brain. *Stud. Hist. Phil. Biol. & Biomed. Sci.* 35: 367-90 A discussion of what is involved in the move from scarce, wet, biological brains to plentiful, digital, virtual ones and its consequences for collections, institutions, research practices and political control

Charac F (2005): The History of Reflexes, Part 1: From Descartes to Pavlov. <[http://www.ibro.info/Pub\\_Main\\_Display.asp?Main\\_ID=421](http://www.ibro.info/Pub_Main_Display.asp?Main_ID=421)> (9 pages; 5316 words). A well illustrated internet account of the development of the reflex concept from the times of René Descartes in the early seventeenth century to those of Ivan Pavlov in the early twentieth century

#Charac F (2005): The History of Reflexes, Part 2: From Sherrington to 2004. <[http://www.ibro.info/Pub\\_Main\\_Display.asp?Main\\_ID=439](http://www.ibro.info/Pub_Main_Display.asp?Main_ID=439)> (11 pages; 6382 words). Beginning with Cajal and Sherrington and proceeding through the work of Liddell, Lloyd, Adrian, Eccles, Lundsberg, Matthews and others this well-illustrated internet account brings the history of reflexes up to contemporary times

\*Dagleish T (2004): The Emotional Brain. *Nat.Rev.Neurosci*, 5: 583-9. The historical development from Charles Darwin and William James through Cannon, Bard, Papez and MacLean to present day concepts, with a glance at the future

#Debru A (2006): Time from psychology to neurophysiology: a historical view. *C.R.Biol.* 329: 330-39. An account of the way time perception was studied during the 19<sup>th</sup> century and of the way temporal properties of the nervous system were discovered and explored and, finally, of attempts to find a correlation between the two, thus bringing the discussion up to the 21<sup>st</sup> century

#Fрати P, Frати A, Salvati M, Marinozzi S, Frати R, Angeletti LR, Picirilli M, Gaudio E, Delfini R (2006): Neuroanatomy and cadaver dissection in Italy: History, medico-legal issues, and neurosurgical perspectives. *J.Neurosurg* 105: 789-96. A well-illustrated account of the historical evolution of the Italian anatomical tradition, especially neuroanatomy, from the 4<sup>th</sup> to the 20<sup>th</sup> centuries in relation to the juridical regulations governing the use of cadavers.

Frixione, E (2006): The cytoskeleton of nerve cells in historical perspective. At [http://www.ibro.info/Pub\\_Main\\_Display.asp?Main\\_ID=557](http://www.ibro.info/Pub_Main_Display.asp?Main_ID=557). A beautifully-illustrated account of neuronal cytoskeleton from the seventeenth century to contemporary times

Genton P, Roger J, Guerrini R, Medina MT, Bureau M, Dravet C, Delgado-Escueta AV (2005): History and classification of “myoclonic” epilepsies: from seizures to syndromes to diseases. *Adv. Neurol.* 95: 1-14. A history and classification of the ‘myclonic’ epilepsies through the 19<sup>th</sup> and 20<sup>th</sup> centuries

Gere C (2005): A brief history of brain archiving. IBRO neurohistory at <[http://www.ibro.info/Pub\\_Main\\_Display.asp?Main\\_ID=505](http://www.ibro.info/Pub_Main_Display.asp?Main_ID=505)>. A brief account of brain ‘banks’ beginning in the 1660s and continuing through the 19<sup>th</sup> century with its battles between clergy and the medical colleges on the ‘seat of the soul’ and ending with contemporary cryogenics

#Goebel HH. (2004): The 8<sup>th</sup> Meryon Society Lecture at Worcester College, Oxford. *Neuromuscular Disorders* 14: 822-28. A history of the developing understanding of the muscular dystrophies from the mid-19<sup>th</sup> century with a discussion of how 21<sup>st</sup> century molecular biology can define sub-classes of the condition and in some cases allows retrospective analysis.

Heller AC, Amar AP, Liu CY, Apuzzo ML (2006): Surgery of the mind and mood: a mosaic of issues in time and evolution. *Neurosurgery* 59: 720-33; discussion 733-9. The article traces the evolution of surgical efforts to treat intractable psychiatric diseases from their roots in the nineteenth century to the present day when the coupling of cellular and molecular biology with nanotechnology and neuroimaging provides hope for the future.

Hughes T (2005): The early history of Myasthenia Gravis. *Neuromuscular Disorders* 15: 878-886. Although the first account of Myasthenia Gravis was given by Thomas Willis in 1672 it was not until 1877 that Samuel Wilks gave the first modern description and subsequently English, French and especially German clinicians helped towards an understanding of the disease. This well-referenced paper reviews this history

Hunt AL & Sethi KD (2006): The pull test. *Movement Disorders* 21: 894-99. The pull test is used as a measure of postural instability in Parkinson's disease and this paper describes the history of the diagnosis of this instability from its first description by Romberg in 1855 until the present

#Jellinger KA (2006): A short history of neurosciences in Austria. *J.Neural.Transm* 113: 271-82. A review of the development of the neurosciences in Austria from their inception in the 18<sup>th</sup> century (Franck (1745-1823), Gall (1745-1823) etc.) through the 19<sup>th</sup> century (Meynert (1833-92) etc.) into the 20<sup>th</sup> century (Loewi (1873-1961) von Economo (1876-1931) etc.) including accounts of the origin and development of major research institutes and laboratories

Jellinger KA (2006): Highlights in the history of neurosciences in Austria – review. *Clin Neuropathol* 25: 243-52. An account of major episodes in Austrian neuroscience

Kaitaro T (2004): Brain-mind identities in dualism and materialism: a historical perspective. *Stud Hist Philos Sci part C: Biol & Med Sci*, 35: 627-45. A review of mind-brain identity theories from the times of Descartes, through eighteenth century workers such as Bonnet, Condillac, Locke, La Mettrie and Diderot, to the localisationists of the nineteenth century.

Kaplan PW (2004): Mind, brain, body, and soul: a review of the electrophysiological undercurrents for Dr Frankenstein. *J Clin Neurophysiol* 21: 301-4. At the turn of the 18th century investigators were performing many somewhat macabre experiments on animals and humans, apparently 'reanimating' lifeless limbs and bodies. It is shown how these provided models for Mary Shelley's Dr. Frankenstein and his creation

Keeseey JC (2004): A history of treatments for myasthenia gravis. *Semi. Neurol.* 24: 5-16. A review of the management of MG over the last 125 years showing that in spite of its recognition as an autoimmune disease in the 1970s most treatments have remained empirical

#Keeseey J (2005): How Electric Fish Became Sources of Acetylcholine Receptor. *J.Hist Neurosci.* 14: 149-164. An well-illustrated account of the historical steps by which fish electric organs were eventually shown to be modified motor endplates and thus became a plentiful source of acetylcholine receptor

Kruger J (2005) Zur Geschichte der Neurochirurgie: About the history of neurosurgery. *Zeitschriften Nervenheilkunde Inhalt Heft* 9: 767-862. A short overview of the history of neurosurgery from its beginnings in the second half of the 19<sup>th</sup> century to modern times (in German; English abstract)

#Lecas J-C (2006): Behaviourism and the mechanisation of the mind *C.R.Biol.* 329: 369-97. A discussion of the conceptual roots of behaviourism which led to the very notion of 'consciousness' being frowned upon as otiose and of how this led through Watson, Skinner and many others to a 'mechanical model' of thought

Lee K-S, Lin C-L, Chuang C-L, et al. (2006): Odyssey between the constellations and neuromedicine. *Surgical Neurology* 65: 99-101. A brief discussion of the uses of names of the constellations in neuromedicine.

#Mashour GA, Walker EE, Martuza RL (2005): Psychosurgery: past, present and future. *Brain Research Reviews* 48: 409-419 Psychosurgery's origins date back to the trepanations of antiquity and continues into the present. This article reviews that history, emphasises its 19<sup>th</sup> century rebirth and partial eclipse, and ends with an account of the more sophisticated present and a glance into the future

#Nadeiri S and Erbenli A (2005): History of neurosurgery and neurosurgical applications in Turkey. *Surgical Neurol.* 64: Supplement 2, S115-122. A comprehensive and well-illustrated account of the development of neurosurgery in Turkey from the earliest Neolithic trepanations, through the Seljuk and Ottoman Empires, to the emergence of modern neurosurgery in the Republic

Nannapaneni R, Behari S, Todd NV, Mendelow AD (2005): Retracing 'Ondine's Curse'. *Neurosurgery*, 57: 354-363 'Ondine's curse' is a rare neurological condition resulting from failure of automatic respiration and this well-illustrated article traces the origins of the term, the personalities intertwined with its popularity and its misrepresentation in the medical literature

#Ruisinger MM (2005): Misreading Pictures: Fabricius Hildanus (1560-1634) and the Cure of Spinal Dislocation. *J.Hist.Neurosci.* 14: 334-40. An interesting short account of the dangers of 'presentist' interpretations of ancient pictures

Sattelle DB & Buckingham SD (2006): Invertebrate studies and their ongoing contributions to neuroscience. *Invert.Neurosci* 6: 1-3. Many important neurobiological investigations have used a variety of techniques involving invertebrates as model organisms and this short paper provides a brief review

Sourkes TL (2004): The discovery of lecithin, the first phospholipid. *Bull.Hist.Chem* 29: 9-15. A review of the neurochemical work of Hensing, Fourcroy, Jordan, Vauquelin (white matter of the brain), Courbe and Goble from 1719 to 1874

Sourkes TL (2006): Neuroscience in Nobel Perspective. *J.Hist.Neurosci.* 15: 306-17. Brief accounts of the personalities and achievements of 52 winners of Nobel Prizes associated with neuroscience

\*Tascioglu AO and Tascioglu AB (2005): Ventricular anatomy: illustrations and concepts from antiquity to Renaissance. *Neuroanatomy*, 4: 57-83. Starting with Herophilus and Erasistratus in the third century BC this well-illustrated paper follows the history of ventricular psychophysiology through Galen and the medievals to Leonardo and Vesalius in the Renaissance

#Wade NJ, Hirosho O (2005): From dichoptic to dichotic: historical contrasts between binocular vision and binaural hearing. *Perception* 34: 645-668 A comprehensive account in which studies of binocular vision and binaural hearing are contrasted over historical time, mostly nineteenth century and later, but with many allusions to earlier times as far back as those of Ptolemy and Galen

Wang H, Olivero W, Want D, et al. (2006): Cold as a therapeutic agent. *Acta Neurochirurgica* 148:565-570. The use of cold as a therapeutic agent has a long and colourful history stretching from the Edwin Smith papyrus of 3500 BCE through the military surgery of the

Napoleonic era to the concentration camps of mid-twentieth century Europe and, finally, to the neuroprotective hypothermic techniques of today

Weigel R, Krauss JK, Schmiedek P (2004): Concept of neurosurgical management of chronic subdural haematoma: historical perspectives. *Brit. J. Neurosurg.* 18: 8-18 History of the management of chronic subdural haematoma (CSH) from its earliest beginnings until the 1980s

# Wingate R, Kwint M (2006): Imaging the brain cell: the neuron in visual culture. *Nat. Rev. Neurosci* 7: 745-52. A beautifully-illustrated discussion of how scientific and cultural practices at the time of the neuron's discovery in the 1870s generated a legacy of schematic and simplified neuronal imagery which is only now being revised in the light of new techniques and a changing artistic climate.

Zimmer C (2004): Beyond the Ivory Tower. A distant mirror for the brain. *Science* 303: 43-4. The dawn of neurology in the seventeenth century is compared with the contemporary ferment of interest in the neurosciences

## Obituaries

Calkins DJ (2005): Remembering Bob Rodieck, 1973-2003. *Vis. Neurosci.* 22: 379-81. A special issue of *Visual Neuroscience* devoted to the career and achievements of Robert William Rodieck, Bishop Professor of Ophthalmology, University of Washington, from 1978-1997

Camins MB, Moore FM, Carmel PW (2006): Leonard I. Malis, M.D., 1919-2005: "a legend in his own time." An obituary. *Journal of Neurosurgery* 104:332-333. Malis was a colourful and ingenious innovator, who invented the "Malis" bipolar coagulating forceps. Modern microsurgery in any specialty is impossible without it.

Coyle JT (2005): Julius Axelrod (1912-2004). *Molecular Psychiatry* 10: 225-6. Axelrod was awarded the 1970 Nobel Prize in Medicine or Physiology for 'discoveries concerning humoral transmitters in the nerve terminals and the mechanism for their storage, release and inactivation'

Ganapathy, K (2004): An institution par excellence: Professor B. Ramamurthi 1922-2003. *Surg.Neurol.* 61: 511-514. Balasubramanian Ramamurthi trained at Madras, Edinburgh, Newcastle and the MNI and returning to India in 1850 started the neurosurgical service at the Government General Hospital in Chennai and, in 1951, with colleagues, founded the Neurological Society of India

Gotman, J (2004): Pierre Gloor, 1923-2003. *Clin. Neurophysiol.* 115: 1235-36. An obituary of the polymathic MNI clinical neurophysiologist perhaps best known for his magisterial volume *The Temporal Lobe and Limbic system* (OUP, 1997)

Lawrence C Katz (1956-2005) at [http://www.hhmi.org/news/Katz\\_obit.html](http://www.hhmi.org/news/Katz_obit.html). Best known for his research on the development and function of the mammalian cerebral cortex by combining the use of a variety of techniques ranging from fluorescent tracers to optical imaging of brain slices to electrophysiological recording

# Porter R, Proske U, Mark RF (2004): Archibald Keverell McIntyre 1913-2002. *Historical Records of Australian Science* 15: 77-94 A detailed memoir of the distinguished neuroscientist who did much to establish neurophysiological research in Australasia

Theodore (Ted) Holmes Bullock (1915-2005)

[http://www.ibro/Pub\\_News\\_Display.asp?News\\_Id=1684](http://www.ibro/Pub_News_Display.asp?News_Id=1684). Pre-eminent in the study of the nervous and sensory systems of a number of invertebrates and co-author with Adrian Horridge of *Structure and Function in the Nervous System of Invertebrates* (1965: Freeman)