

## JAMES P. MCALLISTER, PhD PUBLICATIONS

### PEER-REVIEWED JOURNAL ARTICLES

1. Das GD, Lammert GL, **McAllister JP**. (1974). Contact guidance and migratory cells in the developing cerebellum. *Brain Res*, 69(1), 13-29.
2. Pfaffenroth MJ, Das GD, **McAllister JP**. (1974). Teratologic effects of ethylnitrosourea on brain development in rats. *Teratology*, 9(3), 305-15.
3. **McAllister JP II**, Das GD. (1977). Neurogenesis in the epithalamus, dorsal thalamus and ventral thalamus of the rat: an autoradiographic and cytological study. *J Comp Neurol*, 172(4), 647-86.
4. **McAllister JP**, Wells J. (1981). The structural organization of the ventral posterolateral nucleus in the rat. *J Comp Neurol*, 197(2), 271-301.
5. Hull CD, **McAllister JP**, Levine MS, Adinolfi AM. (1981). Quantitative developmental studies of feline neostriatal spiny neurons. *Brain Res*, 227(3), 309-32.
6. **McAllister JP 2nd**, Olmstead CE, Villablanca JR, Gomez F. (1982). Residual cerebellothalamic terminal fields following hemispherectomy in the cat. *Neurosci Lett*, 29(1), 25-9.
7. Wells J, **McAllister JP 2nd**. (1982). The development of cerebellar primordia transplanted to the neocortex of the rat. *Brain Res*, 256(2), 167-79.
8. Villablanca JR, Olmstead CE, Sonnier BJ, **McAllister JP 2nd**, Gomez F. (1982). Evidence for a crossed corticorubral projection in cats with one cerebral hemisphere removed neonatally. *Neurosci Lett*, 33(3), 241-6.
9. Olmstead CE, Villablanca JR, Sonnier BJ, **McAllister JP**, Gomez F. (1983). Reorganization of cerebellorubral terminal fields following hemispherectomy in adult cats. *Brain Res*, 274(2), 336-40.
10. **McAllister JP 2nd**, Maugans TA, Shah MV, Truex RC Jr. (1985). Neuronal effects of experimentally induced hydrocephalus in newborn rats. *J Neurosurg*, 63(5), 776-83.
11. **McAllister JP 2nd**, Walker PD, Zemanick MC, Weber AB, Kaplan LI, Reynolds MA. (1985). Morphology of embryonic neostriatal cell suspensions transplanted into adult neostriata. *Brain Res*, 355(2), 282-6.
12. Levine MS, Adinolfi AM, Fisher RS, Hull CD, Buchwald NA, **McAllister JP**. (1986). Quantitative morphology of medium-sized caudate spiny neurons in aged cats. *Neurobiol Aging*, 7(4), 277-86.
13. Walker PD, **McAllister JP 2nd**. (1986). Anterograde transport of horseradish peroxidase in the nigrostriatal pathway after neostriatal kainic acid lesions. *Exp Neurol*, 93(2), 334-47.
14. Walker PD, Chovanes GI, **McAllister JP 2nd**. (1987). Identification of acetylcholinesterase-reactive neurons and neuropil in neostriatal transplants. *J Comp Neurol*, 259(1), 1-12.
15. Zemanick MC, Walker PD, **McAllister JP 2nd**. (1987). Quantitative analysis of dendrites from transplanted neostriatal neurons. *Brain Res*, 414(1), 149-52.
16. Walker PD, **McAllister JP 2nd**. (1987). Minimal connectivity between neostriatal transplants and the host brain. *Brain Res*, 425(1), 34-44.
17. Chovanes GI, **McAllister JP 2nd**, Lamperti AA, Salotto AG, Truex RC Jr. (1988). Monoamine alterations during experimental hydrocephalus in neonatal rats. *Neurosurgery*, 22(1 Pt 1), 86-91.
18. Lovely TJ, **McAllister JP 2nd**, Miller DW, Lamperti AA, Wolfson BJ. (1989). Effects of hydrocephalus and surgical decompression on cortical norepinephrine levels in neonatal cats. *Neurosurgery*, 24(1), 43-52.
19. **McAllister JP 2nd**, Cober SR, Schaible ER, Walker PD. (1989). Minimal connectivity between six month neostriatal transplants and the host substantia nigra. *Brain Res*, 476(2), 345-50.
20. Lovely TJ, Miller DW, **McAllister JP 2nd**. (1989). A technique for placing ventriculoperitoneal shunts in a neonatal model of hydrocephalus. *J Neurosci Methods*, 29(3), 201-6.
21. Wolfson BJ, **McAllister JP 2nd**, Lovely TJ, Wright LC, Miller DW, Salotto AG. (1989). Sonographic evaluation of experimental hydrocephalus in kittens. *AJNR Am J Neuroradiol*, 10(5), 1065-7.
22. Wright LC, **McAllister JP 2nd**, Katz SD, Miller DW, Lovely TJ, Salotto AG, Wolfson BJ. (1990). Cytological and cytoarchitectural changes in the feline cerebral cortex during experimental infantile hydrocephalus. *Pediatr Neurosurg*, 16(3), 139-55.
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24. Williamson EC, Pearson HE, **McAllister JP 2nd**. (1992). Gliosis and ganglion cell death in the developing cat retina during hydrocephalus and after decompression. *Brain Res Dev Brain Res*, 70(1), 47-52.

25. Hale PM, **McAllister JP 2nd**, Katz SD, Wright LC, Lovely TJ, Miller DW, Wolfson BJ, Salotto AG, Shroff DV. (1992). Improvement of cortical morphology in infantile hydrocephalic animals after ventriculoperitoneal shunt placement. *Neurosurgery*, 31(6), 1085-96; discussion 1096.
26. Kriebel RM, Shah AB, **McAllister JP 2nd**. (1993). The microstructure of cortical neuropil before and after decompression in experimental infantile hydrocephalus. *Exp Neurol*, 119(1), 89-98.
27. Harris NG, **McAllister JP 2nd**, Conaughty JM, Jones HC. (1996). The effect of inherited hydrocephalus and shunt treatment on cortical pyramidal cell dendrites in the infant H-Tx rat. *Exp Neurol*, 141(2), 269-79.
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29. **McAllister JP 2nd**, Chovan P, Steiner CP, Johnson MJ, Ayzman I, Wood AS, Tkach JA, Hahn JF, Luciano MG. (1998). Differential ventricular expansion in hydrocephalus. *Eur J Pediatr Surg*, 8 Suppl 1, 39-42.
30. **McAllister JP 2nd**, Mangano FT, Jones HC, Kriebel RM. (1998). The microglial response in experimental infantile hydrocephalus. *Eur J Pediatr Surg*, 8 Suppl 1, 62.
31. Mangano FT, **McAllister JP 2nd**, Jones HC, Johnson MJ, Kriebel RM. (1998). The microglial response to progressive hydrocephalus in a model of inherited aqueductal stenosis. *Neurol Res*, 20(8), 697-704.
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33. **McAllister JP II**, Wood AS, Johnson MJ, Connelly RW, Skarupa DJ, Secic M, Luciano MG, Harris NG, Jones HC. (1999). Neuronal activation during the progression of experimental neonatal hydrocephalus. *Neurosurg Focus*, 7(4), E13.
34. Abdolvahabi RM, Mitchell JA, Diaz FG, **McAllister JP 2nd**. (2000). A brief review of the effects of chronic hydrocephalus on the gonadotropin releasing hormone system: implications for amenorrhea and precocious puberty. *Neurol Res*, 22(1), 123-6.
35. **McAllister JP 2nd**. (2000). Hydrocephalus enters the new millennium: an overview. *Neurol Res*, 22(1), 2-3.
36. Kriebel RM, **McAllister JP 2nd**. (2000). Pathology of the hippocampus in experimental feline infantile hydrocephalus. *Neurol Res*, 22(1), 29-36.
37. Ding YC, Lai Q, **McAllister JP II**, Canady AI. (2001). Impaired motor learning in children with hydrocephalus. *Pediatr Neurosurg*, 34, 182-189.
38. Ding Y, **McAllister JP 2nd**, Yao B, Yan N, Canady AI. (2001). Neuron tolerance during hydrocephalus. *Neuroscience*, 106(4), 659-67.
39. Ding Y, Yao B, Lai Q, **McAllister JP**. (2001). Impaired motor learning and diffuse axonal damage in motor and visual systems of the rat following traumatic brain injury. *Neurol Res*, 23(2-3), 193-202.
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41. Ding Y, Young CN, Li J, Luan X, **McAllister JP 2nd**, Clark JD, Diaz FG. (2003). Reduced inflammatory mediator expression by pre-reperfusion infusion into ischemic territory in rats: a real-time polymerase chain reaction analysis. *Neurosci Lett*, 353(3), 173-6.
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43. Ding Y, Li J, Luan X, Lai Q, **McAllister JP 2nd**, Phillis JW, Clark JC, Guthikonda M, Diaz FG. (2004). Local saline infusion into ischemic territory induces regional brain cooling and neuroprotection in rats with transient middle cerebral artery occlusion. *Neurosurgery*, 54(4), 956-64; discussion 964-5.
44. Li J, Luan X, Lai Q, Clark JC, **McAllister JP 2nd**, Fessler R, Diaz FG, Ding Y. (2004). Long-term neuroprotection induced by regional brain cooling with saline infusion into ischemic territory in rats: a behavioral analysis. *Neurol Res*, 26(6), 677-83.
45. Eskandari R, **McAllister JP**, Miller JM, Ding Y, Ham SD, Shearer DM, Way JS. (2004). Effects of hydrocephalus and ventriculoperitoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex. *J Neurosurg*, 101(2 Suppl), 196-210.
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48. Wang A, Cao T, Tang H, Liang X, Black C, Salley SO, **McAllister JP**, Auner GW, Ng KY. (2006). Immobilization

- of polysaccharides on a fluorinated silicon surface. *Colloids Surf B Biointerfaces*, 47(1), 57-63.
49. Miller JM, Kumar R, **McAllister JP 2nd**, Krause GS. (2006). Gene expression analysis of the development of congenital hydrocephalus in the H-Tx rat. *Brain Res*, 1075(1), 36-47.
  50. Liang X, Wang A, Cao T, Tang H, **McAllister JP 2nd**, Salley SO, Ng KY. (2006). Effect of cast molded rifampicin/silicone on Staphylococcus epidermidis biofilm formation. *J Biomed Mater Res A*, 76(3), 580-8.
  51. Patel KR, Tang H, Grever WE, Simon Ng KY, Xiang J, Keep RF, Cao T, **McAllister JP 2nd**. (2006). Evaluation of polymer and self-assembled monolayer-coated silicone surfaces to reduce neural cell growth. *Biomaterials*, 27(8), 1519-26.
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  53. Tang H, Wang A, Liang X, Cao T, Salley SO, **McAllister JP 3rd**, Ng KY. (2006). Effect of surface proteins on Staphylococcus epidermidis adhesion and colonization on silicone. *Colloids Surf B Biointerfaces*, 51(1), 16-24.
  54. **McAllister JP 2nd**, Abdolvahabi RM, Walker ML, Mitchell JA, Jones HC. (2007). Effects of congenital hydrocephalus on the hypothalamic gonadotrophin-releasing hormone system. *Neurosurg Focus*, 22(4), E4.
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  58. Miller JM, **McAllister JP II**. (2007). Reduction of astrogliosis and microgliosis by cerebrospinal fluid shunting in experimental hydrocephalus. *Cerebrospinal Fluid Research*, 4(5).
  59. Parthasarathy KS, Cheng YC, **McAllister JP 2nd**, Shen Y, Li J, Deren K, Haacke EM, Auner GW. (11/01/2007). Biocompatibilities of sapphire and borosilicate glass as cortical neuroprostheses. *Magn Reson Imaging*, 25(9), 1333-1340.
  60. Williams MA, **McAllister JP**, Walker ML, Kranz DA, Bergsneider M, Del Bigio MR, Fleming L, Frim DM, Gwinn K, Kestle JR, Luciano MG, Madsen JR, Oster-Granite ML, Spinella G. (2007). Priorities for hydrocephalus research: report from a National Institutes of Health-sponsored workshop. *J Neurosurg*, 107(5), 345-357.
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  63. Nagra G, Li J, **McAllister JP 2nd**, Miller J, Wagshul M, Johnston M. (2008). Impaired lymphatic cerebrospinal fluid absorption in a rat model of kaolin-induced communicating hydrocephalus. *Am J Physiol Regul Integr Comp Physiol*, 294(5), R1752-9.
  64. Li J, **McAllister JP 2nd**, Shen Y, Wagshul ME, Miller JM, Egnor MR, Johnston MG, Haacke EM, Walker ML. (2008). Communicating hydrocephalus in adult rats with kaolin obstruction of the basal cisterns or the cortical subarachnoid space. *Exp Neurol*, 211(2), 351-61.
  65. Wagshul ME, **McAllister JP II**, Rashid S, Li J, Egnor MR, Walker ML, Yu M, Smith SD, Zhang G, Chen JJ, Benveniste H. (2009). Ventricular dilation and elevated aqueductal pulsations in a new experimental model of communicating hydrocephalus. *Exp Neurol*, 218(1), 33-40.
  66. Deren KE, Forsyth J, Abdullah O, Hsu EW, Klinge PM, Silverberg GD, Johanson CE, **McAllister JP 2nd**. (2009). Low levels of amyloid-beta and its transporters in neonatal rats with and without hydrocephalus. *Cerebrospinal Fluid Research*, 6(1), 4.

## **REVIEW ARTICLES**

1. **McAllister JP II**. (1996). Infantile hydrocephalus: incidence and cost. *Hydrocephalus News & Notes*, 4(1), 4-5.
2. **McAllister JP II**. (1996). Prenatal onset hydrocephalus: fetal diagnosis. *Hydrocephalus News & Notes*, 4(2), 8-9.
3. **McAllister JP II**. (1996). The first Frank E. Nulsen MD hydrocephalus research fellowship. *Hydrocephalus News & Notes*, 4(2), 6-7.

## **BOOK CHAPTERS**

1. **McAllister JP II**, Chovan P. (1998). Neonatal hydrocephalus: mechanisms and consequences. In Frim DM, Madsen JR (Eds.), *Neurosurgery Clinics of North America. Neurosurgery of the Neonate* (pp. 73-93). Philadelphia: W.B.

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2. Del Bigio MR, **McAllister JP II**. (1999). Pathophysiology of hydrocephalus. In Choux M, DiRocco CE, Hockley AD, Walker ML (Eds.), *Pediatric Neurosurgery*. London: Churchill Livingstone.

### **CONFERENCE PROCEEDINGS**

1. Mangano FM, Kriebel RM, Jones HC, **McAllister JP II**. (1998). The effects of progressive hydrocephalus on the sensorimotor system in a model of inherited aqueductal stenosis. *27th annual meeting of the American Association of Neurological Surgeons Pediatric Section*.
2. Li ZG, Canady AI, Ham SD, Sood SS, Diaz FG, **McAllister JP II**. (1999). Apoptosis and dark neurons in hydrocephalic brains. *World Conference on Pediatric Neurosurgery*.
3. Jaboro CA, Lagman AL, Safadi MR, Auner GW, Li J, **McAllister JP**, Finlayson P, Naik R. (2002). A Surface Study of Chronically Implanted Biocompatible Materials on Neural Tissue for Chemical Drug Delivery. *Materials Research Society Symposium*.
4. Safadi MR, Auner G, Iezzi R, **McAllister JP**, Abrams G. (2003). Development of a Microfluidic Drug Delivery Neural Prosthesis Using a Wide Bandgap Semiconductor Waveguide Structure. *SPIE Proceedings, Symposium on Micromachining and Microfabrication*.
5. Ding Y, Li J, Phillis JW, **McAllister JP**, Guthikonda M, Diaz FG. (2003). Local Brain Hypothermia Induced by Pre-reperfusion Infusion of Cold Saline into the Middle Cerebral Artery Supplied Territory in the Treatment of Experimental Stroke. *6th International Conference on Stroke*.
6. Auner GW, Siy P, Naik R, Wenger L, Ng G, Newaz P, **McAllister JP**, Iezzi R, Abrams G. (2003). Integration of Nanotechnology with Microsystems. *Sensors Expo and Conference on Nanotechnology and MEMS/MST/Micromachines*.
7. Diaz FG, Li J, Phillis JW, **McAllister JP**, Guthikonda M, Ding Y. (2003). Neuroprotection by Local Saline Infusion and Induced Regional Brain Cooling in Ischemic Territory of Rats with Transient Middle Cerebral Artery. *56th Annual Meeting of the Neurosurgical Society of America, Jointly sponsored by AANS*.

### **OTHER (Commentary/Letters/Editorials/Case Reports/Video/Film)**

#### **Patents**

1. Iezzi R, Auner G, Abrams GW, **McAllister JPII**. (2000). Method and Apparatus for Activating Caged Molecules for Visual Prosthesis. U.S. Patent No. 60/212,214. Washington, D.C.:U.S. Patent and Trademark Office.
2. Iezzi R, Auner GW, **McAllister JPII**, Abrams GW. (2000). Method and Device for Optically Activating Caged Molecules for Visual Prosthesis. U.S. Patent No. 60/212,214. Washington, D.C.:U.S. Patent and Trademark Office.
3. Auner GW, Abrams GW, Iezzi R, **McAllister JPII**. (2001). Method and Apparatus for Activating Molecules to Stimulate Neurological Tissue. U.S. Patent No. 09/881-549. Washington, D.C.:U.S. Patent and Trademark Office.
4. Naik R, Ng S, Abrams G, **McAllister JPII**, Iezzi R. (2002). Self-Assembled Nanobump Array Structures and A Method To Fabricate Such Structures. U.S. Patent No. 20040145053. Washington, D.C.:U.S. Patent and Trademark Office.

### **PENDING PUBLICATIONS**

#### **Book Chapters**

1. **McAllister JP II**. (2009). Experimental Hydrocephalus. In Winn HR (Ed.), *Youman's Neurological Surgery* (6th). Elsevier.

#### **Abstracts**

1. Li J, Miller JM, Egnor MR, Wagshul M, Stewart C, Walker ML, **McAllister JP II**. (In Press). A clinically-relevant model of communicating hydrocephalus in adult rats [Abstract]. *Journal of Neurotrauma*.
2. Steele JJ III, Switzer RC, Rafols JA, **McAllister JP II**. (In Press). Neuronal degeneration in a novel murine model of closed head injury [Abstract]. *Journal of Neurotrauma*.