

Curriculum Vitae of

PATRICK J. MCDONALD MD, MHSc, FRCSC

EMPLOYMENT/APPOINTMENTS

- 2016- present **Head- Division of Pediatric Neurosurgery**
British Columbia Children's Hospital
Vancouver, BC, Canada
- 2016- present **Associate Professor of Surgery (Neurosurgery)**
Faculty of Medicine, University of British Columbia
Vancouver, BC, Canada
- 2016- present **Alcan Chair in Neurosciences**
Faculty of Medicine, University of British Columbia
Vancouver, BC, Canada
- 2016- present **Faculty Member**
National Core for Neuroethics
University of British Columbia
Vancouver, BC, Canada
- 2016-present **Clinical Investigator**
Child and Family Research Institute
Vancouver, BC, Canada
- 2012- 2015 **Associate Professor of Pediatrics and Child Health**
College of Medicine, Faculty of Health Sciences
University of Manitoba, Winnipeg, Canada
- 2009- 2015 **Scientist**
Children's Hospital Research Institute of Manitoba
Winnipeg, Manitoba, Canada
- 2009- 2015 **Associate Professor of Surgery**
College of Medicine, Faculty of Health Sciences
University of Manitoba, Winnipeg, Canada
- 2009- 2015 **Director of Research**
Section of Neurosurgery
University of Manitoba, Winnipeg, Canada

- 2004- 2015 **Program Director, Neurosurgery Training Program**
College of Medicine, Faculty of Health Sciences
University of Manitoba, Winnipeg, Canada
- 2005- 2015 **Research Associate**
Centre for Professional and Applied Ethics
University of Manitoba, Winnipeg, Canada
- 2002- 2015 **Attending Neurosurgeon**
Winnipeg Children's Hospital, Winnipeg, Canada
Health Sciences Centre, Winnipeg, Canada
- 2002- 2008 **Assistant Professor of Surgery**
College of Medicine, Faculty of Health Sciences
University of Manitoba, Winnipeg, Canada

EDUCATION/TRAINING/QUALIFICATIONS

- 2014-present **Diplomate- American Board of Pediatric Neurological Surgery**
- 2002- 2004 **Master of Health Science, Bioethics**
Joint Centre for Bioethics, Institute of Medical Science
University of Toronto, Toronto, Canada
- 2001-2002 **Chief Clinical Fellow in Pediatric Neurosurgery**
Division of Neurosurgery,
Hospital for Sick Children, Toronto, Canada
- 2001-present **Fellow (FRCSC)**
Division of Surgery, Royal College of Physicians and Surgeons of Canada
- July 7, 2001 **Specialist Certificate- Neurosurgery**
Royal College of Physicians and Surgeons of Canada
- 1993- 2001 **Neurosurgery Residency Program**
Division of Neurosurgery,
University of Toronto, Toronto, Canada
- 1992- 1993 **Surgical Intern**
St. Michael's Hospital
University of Toronto, Toronto, Canada
- 1988-1992 **Doctor of Medicine, with honours**
Faculty of Medicine

University of Toronto, Toronto, Canada

RESEARCH GRANTS

- 1. Targeting the CSF microbiota to optimize CSF shunt infection treatment**
2016-2021
Source: National Institutes of Health (NINDS)- USA
Amount: \$2,043,343
Role: Site investigator
- 2. A randomized controlled trial of anterior versus posterior entry site for cerebrospinal fluid shunt insertion**
2015-2018
Source: Patient-Centered Outcomes Research Institute Grant #CER-1403013857
Amount: \$2,514,333 (USD)
Role: Site investigator
- 3. Conflicts of interest in neurosurgical research: Comparing voluntary disclosure with company data**
July 2014- August 2015
Source: College of Medicine, University of Manitoba BSc Med Program
Amount: \$10,000
Role: Principal Investigator/ Supervisor
- 4. Novel neuro-imaging assessment of cerebrovascular reactivity and default-mode networks in adolescent sports-related concussion**
January 2014- December 2015
Source: Department of Surgery, University of Manitoba
Amount: \$13,785
Role: Principal Investigator
- 5. Characterization of Pediatric Thalamic Brain Tumours in Canada**
March 2009- February 2012
Source: C17 Research Network
Amount: \$120,000
Role: Local Principal Investigator
- 6. Youth Involvement in Health Care Decisions: Ethical, Social and Cultural Perspectives**
2009-2010
Source: Manitoba Health Research Council
Amount: \$50,000
Role: Co-investigator
- 7. Thalamic Brain Tumours in Canada in the MRI era**
January 2008-January 2010

- Source: Brain Tumour Foundation of Canada
Amount: \$25,000
Role: Local Principal Investigator
8. **Youth Involvement in Health Care Decisions: Ethical, Social and Cultural Perspectives**
July 2008- June 2011
Source: Canadian Institutes of Health Research
Amount: \$95,853
Role: Co-investigator
 9. **Implementation of an Injury Prevention Program in Rural Manitoba**
September 2007- August 2009
Source: ThinkFirst Foundation of Canada
Amount: \$16,500
Role: Principal Investigator
 10. **Attitudes and Perceptions of Patients, Surgeons and Referring Physicians Towards Wait Lists in Neurosurgery- A Qualitative Study**
July 2006- August 2009
Source: Health Sciences Centre Foundation, Winnipeg
Amount: \$17,387
Role: Principal Investigator:
 11. **The Use of Sham Surgery Arms in Clinical Trials in Neurosurgery- A Survey of Canadian Neurosurgeons**
July 2007- June 2008
Source: Centre for Professional and Applied Ethics, University of Manitoba
Amount: \$5000
Role: Principal Investigator
 12. **Gap Junctions in Epilepsy**
July 1998- June 1999
Source: Savoy Foundation for Epilepsy Research
Amount: \$15,000
Role: Principal Investigator
 13. **The Role of Gap Junction in an *in vitro* Model of Epilepsy**
July 1997- June 1998
Source: Glaxo-Wellcome/CCNS/Medical Research Council of Canada
Amount: \$45,000
Role: Principal Investigator

PEER REVIEW

- ***Editorial Review Board***
 - Canadian Journal of Neurological Sciences
- ***Grant Reviewer for:***
 - Canadian Institutes of Health Research
 - PSI Foundation, Toronto, Ontario
 - Sick Kids Foundation, Toronto Ontario
 - College of Reviewers- Canada Research Chairs Program
 - Children's Hospital Research Institute of Manitoba, Winnipeg, Manitoba
 - Department of Surgery, University of Manitoba
- ***Ad hoc Manuscript Peer Reviewer for:***
 - British Medical Journal
 - BMC Neurology
 - Canadian Journal of Neurological Sciences
 - Medical Decision Making
 - Journal of the American College of Surgeons
 - Journal of Clinical Medicine
 - Journal of Neurosurgical Sciences
 - Journal of Pediatric Neurology
 - Journal of Pediatric Surgery
 - Journal of Sports Engineering and Technology
 - PLoS Medicine
 - SQU Medical Journal
 - The Physician and Sports Medicine
- ***Abstract reviewer for***
 - Canadian Neurosciences Federation Congress- 2013-present
 - Hydrocephalus 2015- 7th Meeting of the International Society for Hydrocephalus and CSF Disorders

AWARDS

2008 University of Manitoba Outreach Award

PUBLICATIONS

1. Hansen G, **McDonald PJ**, Martin D, Vallance JK:
Pre-Trauma Centre management of intracranial pressure in severe pediatric TBI.
Pediatric Emergency Care 2016 (accepted for publication)
2. Ellis MJ, **McDonald PJ**, Cordingly D, Mansouri B, Ritchie L:
Retirement from sport- Considerations following pediatric sports-related
concussion: Case illustrations and institutional approach.
Neurosurg Focus 40(4):E8, 2016.
3. Ellis MJ, Ritchie L, Selci E, Chu S, **McDonald PJ**, Russell K:
Googling concussion care: a critical appraisal of online concussion healthcare
providers and practices in Canada.
Clin J Sport Med 2016 (epub ahead of print)
4. **McDonald PJ**: Ventriculoperitoneal shunt failure from spontaneous knotting of
the peritoneal catheter.
CMAJ 188(5):E97, 2016.
5. Steinbok P, Gopalakrishnan CV, Hengel AR, Vitali AM, **McDonald PJ**, Hukin J,
et. al:
Pediatric thalamic tumors in the MRI era: a Canadian perspective.
Childs Nerv Syst 32(2): 269-80, 2016.
6. Russell K, Ritchie L, Vis S, Chu S, Selci E, **McDonald PJ**, Ellis MJ:
Measuring the scientific impact of sports-related concussion research: a citation
analysis study.
Curr Research: Concussion 2(3): 113-121, 2015.
7. Zeiler FA, Silvaggio J, Iancu D, **McDonald PJ**:
Secondary vein of Galen malformation treated with combined endovascular and
endoscopic approach.
Interdisciplinary Neurosurg 2015 2:164-167.
8. Zeiler FA, Janik MK, **McDonald PJ**, Kaufmann AM, Fewer D, Butler J,
Schroeder G, West M:
Gamma Knife radiosurgery for pediatric arteriovenous malformations: a Canadian
experience.
Can J Neurol Sci 43(1):82-6, 2016.
9. Ellis MJ, Leiter J, Hall T, **McDonald PJ**, Sawyer S, Silver N, Bunge M, Essig M:
Neuroimaging findings in sports-related concussion: clinical article.
J Neurosurg Pediatrics 16:241-247, 2015.

10. Haji F, Clarke DB, Matte M, Brandman DM, Brien S, deRibaupierre S, O’Kelly C, Christie S, Wallace MC, **McDonald PJ**, Kulkarni AV, Walling S, Macleod A: Teaching for the transition: the Canadian neurosurgery “Rookie Camp” for PGY-1 trainees.
Can J Neurol Sci 42(1):25-33, 2015.
11. Ellis MJ, **McDonald PJ**:
Co-existent sports-related concussion and cervical SCIWORA in an adolescent: case report.
Curr Sports Med Rep 14(1):20-2, 2015.
12. Shih F, Yip S, **McDonald PJ**, Chudley AE, Del Bigio MR:
Oncogenic codon 13 NRAS mutations in a primary mesenchymal brain neoplasm and nevus of a child with neurocutaneous melanosis.
Acta Neuropathol Commun 2(1): 140, 2014.
13. Daymont C, **McDonald PJ**, Wittmeier K, Reed MH, Moffat M:
Variability of physicians’ thresholds for neuroimaging in children with recurrent headache.
BMC Pediatr 14(1):162, 2014.
14. Zeiler FA, Kaufmann AM, **McDonald PJ**, Fewer D, Butler J, Schroeder G, West M:
Radiosurgery for high grade neoplasms: A Canadian experience.
Can J Neurol Sci 40(6):783-89, 2013.
15. Bush J, Wertzer T, Del Bigio MR, Embil J, **McDonald PJ**, Krawitz S:
Outcomes of persons with blastomycosis involving the central nervous system.
Diag Microbiol Infect Dis 76(2):175-81, 2013.
16. Zeiler FA, Bigder M, Kaufman A, **McDonald PJ**, Fewer D, Butler J, Schroeder G, West M:
Gamma Knife surgery in the treatment of pituitary adenomas: Results of a single centre.
Can J Neurol Sci 40(4):546-52, 2013.
17. Bigder M, Zeiler FA, **McDonald PJ**, Kaufmann AM, Fewer D, Butler J, Schroeder, West M:
Gamma Knife stereotactic radiosurgery for large vestibular schwannomas: The Manitoba experience.
Can J Neurol Sci 40(3):342-7, 2013.
18. Zeiler FA, **McDonald PJ**, Kaufmann A, Fewer D, Butler J, Schroeder G, West M:

- Gamma Knife radiosurgery of cavernous sinus meningiomas: An institutional review.
Can J Neurol Sci 39(6):757-62, 2012.
19. Zeiler FA, **McDonald PJ**:
Decompressive craniectomy in traumatic brain injury: the “Edge Effect”
Can J Neurol Sci 39(5):652-3, 2012.
 20. Drake JM, Singhal A, Kulkarni AV, Deveber G, Cochrane DD and the Canadian Pediatric Neurosurgery Study Group (**McDonald PJ**- contributor):
Consensus definitions of complications for accurate recording and comparisons of surgical outcomes in pediatric neurosurgery.
J Neurosurg Pediatrics 10(2): 89-95, 2012.
 21. Thorington K, Zeiler F, **McDonald PJ**:
Novel MRI changes after Gamma Knife for hypothalamic hamartoma in a child.
Can J Neurol Sci 39(4):541-543, 2012.
 22. Zeiler F, **McDonald PJ**, Kaufmann A, Fewer D, Butler J, Schroeder G, West M:
Gamma Knife radiosurgery for cerebral arteriovenous malformations: Results of treatment of 69 consecutive patients at a single centre.
Can J Neurol Sci 38(6): 851-7, 2011.
 23. Spence J, Pasterkamp H, **McDonald PJ**:
Isolated central sleep apnea in Type I Chiari malformation: Improvement after surgery.
Ped Pulmonol 45(11): 1141-4, 2010.
 24. Kulkarni AV, Drake JM, Kestle JR, Mallucci CL, Sgouros MD, Constantini S, and the Canadian Pediatric Neurosurgery Study Group (**McDonald PJ**- contributor):
Predicting who will benefit from endoscopic third ventriculostomy compared with shunt insertion in childhood hydrocephalus using the ETV Success Score.
J Neurosurg Pediatrics 6(4):310-315, 2010.
 25. Kulkarni AV, Drake JM, Kestle JR, Mallucci CL, Sgouros S, Constantini S; for the Canadian Pediatric Neurosurgery Study Group (**McDonald PJ**- contributor):
Endoscopic third ventriculostomy vs Cerebrospinal fluid shunt in the treatment of hydrocephalus in children: A propensity score-adjusted analysis.
Neurosurg 67(3):588-93, 2010.
 26. Kulkarni AV, Warf BC, Drake JM, Mallucci CL, Sgouros S, Constantini S and the Canadian Pediatric Neurosurgery Study Group (**McDonald PJ**- contributor):

- Surgery for hydrocephalus in sub-Saharan Africa versus developed nations: a risk adjusted comparison of outcome.
Child's Nerv Syst 26(12):1711-7, 2010.
27. **McDonald PJ**, Kulkarni AV, Farrokhyar F, Bhandari M:
Ethical issues in surgical research.
Can J Surg 53(2):133-6, 2010.
28. Zeiler FA, **McDonald PJ**:
Traumatic spinal cord transection in a child after non-penetrating injury.
Can J Neurol Sci 37(2):400-401, 2010.
29. **McDonald PJ**:
Death and injury due to all-terrain vehicles- A disturbing trend
Can J Neurol Sci 37(2):300-301, 2010.
30. **McDonald PJ**:
For want of a single letter, the child was lost...almost.
Can J Neurol Sci 36(6):791-2, 2009.
31. Kulkarni AV, Drake JM, et al. for the Canadian Pediatric Neurosurgery Study Group (**McDonald PJ**- contributor):
Endoscopic third ventriculostomy in the treatment of childhood hydrocephalus.
J Pediatr 155(2):254-259 2009.
32. Chaze B, **McDonald PJ**:
Head Injuries in Winter Sports: downhill skiing, snowboarding, sledding, snowmobiling, ice skating and ice hockey.
Phys Med Rehabil Clin N Am 20(1):287-93, 2009.
33. Ellis MJ, Kazina C, Del Bigio MR, **McDonald PJ**:
Treatment of recurrent ventriculoperitoneal shunt failure associated with persistent cerebrospinal fluid eosinophilia and latex allergy by use of an "extracted" shunt.
J Neurosurg- Peds 1(3):237-9, 2008.
34. Chaze B, **McDonald PJ**:
Head injuries in winter sports.
Neurol Clin 26(1):325-32, 2008.
35. Ellis MJ, **McDonald PJ**:
Acute extradural hematoma secondary to skull metastasis from esophageal carcinoma.
Can J Neurol Sci 34(4):491-3, 2007.

36. Drake JM, for the Canadian Pediatric Neurosurgery Study Group (**McDonald PJ-contributor**):
Endoscopic third ventriculostomy in pediatric patients: The Canadian experience.
Neurosurg 60:881-6, 2007.

37. **McDonald PJ**:
Reflections on the mentoring of a young surgeon.
Can J Surg 49(3):164-7, 2006.

38. **McDonald PJ**:
There's a bug in your head.
Hasting Cent Rep 36(3):7, 2006

39. Tonkikh A, Janus C, El-Behary H, Penefather P, Samoilova M, **McDonald P**,
Ouanounou A, Carlen P:
Calcium chelation improves spatial learning and synaptic plasticity in aged rats.
Exp Neurol 197(2):291-300, 2006.

40. Beiko J, **McDonald PJ**:
Tension pneumocephalus: The Mount Fuji sign.
Can J Neurol Sci 32(4):538, 2005.

41. **McDonald PJ**, Matouk CC, Papsin B, Rutka JT:
Clival osteoblastoma in a child.
J Neurosurg 98(5):1133, 2003.

42. Jahromi SS, Pelletier MR, **McDonald PJ**, Khosravani H, Carlen PL:
Antiepileptic efficacy of Topiramate: Assessment in two *in vitro* seizure models.
Br Research 872:20-28, 2000.

43. **McDonald P**, Provias J, Guha A:
Primary intracranial fibrosarcoma with intratumoral hemorrhage:
Neuropathological diagnosis with review of the literature.
J Neuro-Oncol 35:133-139, 1997.

44. **McDonald PJ**, Rutka JT:
Middle fossa arachnoid cysts that come and go: the natural history of arachnoid
cysts.
Ped Neurosurg 26:48-52, 1997.

PUBLICATIONS- Non-Medical

1. **McDonald P:**
Helmets save cyclists' brains.
Winnipeg Free Press June 29, 2010, p A19
2. **McDonald P:**
There's a bug in your head.
in Klass P: *Real Life of a Pediatrician*
Kaplan Publishing 2009, p 129-30.

BOOK CHAPTERS

1. Phillips D, **McDonald PJ**, Bartels U:
Craniopharyngiomas,
in Scheinemann K, Bouffet E: **Pediatric Neuro-oncology**-Springer, 2015
2. **McDonald PJ:**
Conflicts of interest,
in Bernstein M, Ammar M: **Neurosurgical Ethics in Practice**
Springer, 2014
3. **McDonald PJ:**
Informed consent,
in Bernstein M, Ammar M: **Neurosurgical Ethics in Practice**
Springer, 2014
4. **McDonald PJ**, Gupta N:
Ethical issues in pediatric neurosurgery,
in Albright AL, Pollock IM, Adelson PD: **Principles and Practice of Pediatric Neurosurgery 3rd Ed.**
Thieme, 2014
5. Zeiler FA, **McDonald PJ:**
Hydrocephalus,
in Lynn DJ, Newton HB, Rae-Grant A: **5-Minute Neurology Consult- 2nd Ed.**
Lippincott, 2012, p 234-5
6. Kulkarni AV, **McDonald PJ:**
Meningiomas in Children,
in Tonn JC, Grossman S, Rutka JT: **Oncology of CNS Tumors- 2nd Ed.**
Springer-Verlag 2010, p 539-544

7. Thorington K, Kazina C, **McDonald PJ**:
Epidural Spine Tumors in Children,
in Tonn JC, Grossman S, Rutka JT: **Oncology of CNS Tumors- 2nd Ed.**
Springer-Verlag 2010, p 637-644.
8. **McDonald PJ**, Gupta N, Peacock W:
Ethical Issues in Pediatric Neurosurgery,
in Albright AL, Pollock IM, Adelson PD: **Principles and Practice of Pediatric Neurosurgery.**
Thieme, 2007, p 49-55.
9. Kazina C, **McDonald PJ**:
Epidural Spine Tumours in Children,
in Tonn JC, Grossman S, Rutka JT: **Neuro-Oncology of CNS Tumours.**
Springer-Verlag, 2006, p 575-81.
10. Kulkarni AV, **McDonald PJ**:
Pediatric Meningiomas,
in Tonn JC, Grossman S, Rutka JT: **Neuro-Oncology of CNS Tumours.**
Springer-Verlag, 2006, p 485-90.
11. Matouk CC, **McDonald PJ**, Drake JM:
Midbrain Gliomas,
in Berger MS, Brem H: **Textbook of Neuro-Oncology.**
Elsevier, 2005, p 599-603.
12. Matouk CC, **McDonald PJ**:
Hydrocephalus,
in Lynn DJ, Newton HB, Rae-Grant A: **5-Minute Neurology Consult.**
Lippincott, 2004, p 230-31.
13. **McDonald PJ**, Wallace MC:
Pediatric Aneurysms,
in LeRoux PD, Winn HR: **Management of Intracranial Aneurysms.**
Saunders, 2004, p 357-62.

ABSTRACTS (Peer Reviewed)

1. Schon ER, Kulkarni AV, **McDonald PJ**:
Conflicts of interest in neurosurgical research- comparing company voluntary physician disclosure to mandatory company data.
Canadian Neurological Sciences Federation, 51st Annual Conference, Quebec City QC, June 2016.
2. Schon ER, Kulkarni AV, **McDonald PJ**:

- Conflicts of interest in neurosurgical research: Effects of the 2013 Sunshine Act on voluntary disclosure.
Canadian Bioethics Society Annual Meeting, Toronto ON, May 28, 2016.
3. McLelland R, Del Bigio MR, **McDonald PJ**:
Retrospective review of histologic findings in pediatric ventriculoperitoneal shunt malfunction.
43rd Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery. Seattle, WA. December 2015.
 4. Ellis MJ, **McDonald PJ**, Leiter J:
Neuroimaging in pediatric sports-related concussion.
CASEM Sport Med Conference. Ottawa, ON. February 12, 2015.
 5. Ellis MJ, **McDonald PJ**, Leiter J, Much A:
Neuro-imaging findings in pediatric sports-related concussion.
2015 Traumatic Brain Injury Conference. Toronto, ON. January 30, 2015.
 6. **McDonald PJ**, Much A, Ellis MJ:
Neuro-imaging findings in pediatric sports-related concussions: a clinical study.
43rd Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery. Amelia Island, Florida, December 2014.
 7. Bader T, Lin L, Thanasupawat T, Klonisch T, Wang W, Pu J, Sun HD, **McDonald P**, Del Bigio M, Issaivanan M:
PRDX1 as a radiosensitization agent in ATRT. *Can J Neurol Sci* 41(S2), 2014.
 8. Shash H, **McDonald P**, Wrogemann J, Ahsanuddin A, Matsuda K, Soni R, Vanan M:
Primary central nervous system post-transplant lymphoproliferative disorder in child treated with reduced immunosuppression alone- Case report and review of the literature. *Neuro-onc*, 16(S1), 2014.
 9. **McDonald PJ**, Cochrane DD, Albright LA:
Pediatric neurosurgery in Kenya- the experience of 2 Canadian pediatric neurosurgeons. *Can J Neurol Sci*, 2014.
 10. Szelemej P, Zeiler FA, Kaufmann AM, **McDonald PJ**, Fewer D, Butler J, Schroeder G, West M:
Gamma knife radiosurgery in the treatment of brain metastases from lung cancers: results from a single centre. *Can J Neurol Sci*, 2014.

11. Schon E, **McDonald PJ**:
Disclosure of conflicts of interest in published pediatric neurosurgery research: How do we compare? *42nd Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery*. Toronto, Canada, December 2013.
12. Bigder M, Zeiler FA, **McDonald P**, Fewer D, Butler J, Schroeder, West M:
Gamma Knife for cerebral arteriovenous malformations at a single centre. *11th International Stereotactic Radiosurgery Congress*, Toronto, Canada, June 2013
13. Bigder M, Zeiler FA, **McDonald P**, Fewer D, Butler J, Schroeder, West M:
Gamma Knife in the treatment of pituitary macroadenomas: Results of a single centre. *11th International Stereotactic Radiosurgery Congress*, Toronto, Canada, June 2013.
14. Bigder M, Zeiler FA, **McDonald P**, Fewer D, Butler J, Schroeder, West M:
Gamma Knife radiosurgery for large vestibular schwannomas: A Canadian experience. *11th International Stereotactic Radiosurgery Congress*, Toronto, Canada, June 2013.
15. **McDonald P**, Wrongemann J, Krawitz S, Del Bigio M, Eisenstat D:
Management of progressive gliomatosis cerebri in a child with combination oral chemotherapy.
15th International Symposium on Pediatric Neuro-Oncology
Toronto, Canada, June 2012.
16. Thielmann AC, Zeiler FA, Kaufmann A, **McDonald PJ**, Fewer D, Butler J, Schroeder G, West M:
Gamma knife radiosurgery in the treatment of metastatic breast cancer.
Can J Neurol Sci 39(S3), pS47, 2012.
17. Zeiler FA, Bidger M, Kaufmann A, **McDonald PJ**, Fewer D, Butler J, Schroeder G, West M: Gamma knife in the treatment of pituitary macroadenomas: results of a single centre. *Can J Neurol Sci* 39(S3), pS25, 2012.
18. **McDonald PJ**, Schon E, Ellis MJ, Kazina C: Conflict of interest in pediatric neurosurgery research- Comparing company data to surgeon disclosure. *Annual Meeting of the AANS/CNS Joint Section on Pediatric Neurosurgery* Austin, Texas, USA, December 2011.
19. Zeiler F, Kaufmann A, Fewer D, **McDonald P**, Butler J, Schroeder G, West M:
Gamma knife stereotactic radiosurgery: an institutional review of the treatment of cavernous sinus meningiomas. *Gamma Knife in the Americas*, Pittsburgh PA, USA, September 2011.

20. Zeiler F, Kaufmann A, Fewer D, **McDonald P**, Butler J, Schroeder G, West M: Gamma knife surgery for cerebral arteriovenous malformations: results of 69 consecutive patients at a single centre. *Gamma Knife in the Americas*, Pittsburgh PA, USA, September 2011.
21. Zeiler F, Kaufmann A, Fewer D, **McDonald P**, Butler J, Schroeder G, West M: Gamma knife stereotactic radiosurgery: an institutional review in the treatment of cavernous sinus meningiomas. *Canadian Radiosurgery Society*, Winnipeg MB, September 2011.
22. Ellis MJ, Kazina CJ, **McDonald PJ**: Central nervous system blastomycosis in children: the Manitoba experience. *Can J Neurol Sci* 38(3) Suppl 1, p. S35, 2011.
23. Zeiler F, **McDonald P**, Kaufmann A, Fewer D, Butler J, Schroeder G, West M: Gamma knife surgery for cerebral arteriovenous malformations. *Can J Neurol Sci* 38(3) Suppl 1, p. S92, 2011.
24. **McDonald PJ**, Zeiler F, Kulkarni A: Documentation of ethical process and review in neurosurgical research. *Brain Matters 2- 2nd International Neuroethics Conference*, Montreal, Quebec, Canada, May 2011.
25. **McDonald PJ**: The ethics of sham surgery arms in neurosurgical research: a neurosurgeon's perspective. *Brain Matters 2- 2nd International Neuroethics Conference*, Montreal, Quebec, Canada, May 2011.
26. Zeiler F, Kaufmann A, Fewer D, **McDonald P**, Butler J, Schroeder G, West M: Gamma Knife radiosurgery for cerebral arteriovenous malformations: Results of treatment of 69 consecutive patients at a single centre. *10th Biennial Congress of the International Stereotactic Radiosurgery Society*, Paris, France, May 2011.
27. Zeiler F, Kaufmann A, Fewer D, **McDonald P**, Butler J, Schroeder G, West M: Gamma Knife stereotactic radiosurgery: an institutional review in the treatment of cavernous sinus meningiomas. *10th Biennial Congress of the International Stereotactic Radiosurgery Society*, Paris, France, May 2011.
28. Zeiler F, Kaufmann A, Fewer D, Schroeder G, **McDonald P**, Butler J, West M: Gamma Knife radiosurgery for cerebral arteriovenous malformations: Results of treatment of 69 consecutive patients at a single centre. *Surgery Research Forum, Department of Surgery, University of Manitoba*, January 14, 2011.
29. Chudley AE, Siu V, **McDonald P**, Swaroop A, Holden J, Lewis S, Rajcan-Separovic E: A distinctive and recurring phenotype associated with an unique 17q25.3 duplication in two unrelated individuals. *31st Annual D.W. Smith Workshop on Malformations and Morphogenesis*, Union, Washington, August 2010.

30. Zeiler FA, Nesbitt J, Kaufmann AM, Schroeder G, **McDonald P**, Fewer D, West M: Gamma Knife surgery for cerebral arteriovenous malformations: results of treatment of 69 consecutive patients at a single centre. *Can J Neurol Sci* 37(3) Suppl 1, p. S96, 2010.
31. Kulkarni AV, Ellis MJ, Laperriere N, Ng E, Schwartz M, West M, Schroeder G, **McDonald PJ**: Starting a pediatric gamma knife program: The experience of two Canadian Centres. *15th International Meeting of Leksell Gamma Knife Society* Athens, Greece, May 2010.
32. Zeiler F, **McDonald PJ**: Documentation of ethical process in neuroscience research published in the CJNS. *44th Congress of the Canadian Neurological Sciences Federation*, Halifax, Nova Scotia, June 2009.
33. Zeiler F, Nesbitt J, Schroeder G, Butler J, Kaufmann A, Fewer D, **McDonald P**, West M. Gamma Knife Radiosurgery for Arteriovenous Malformations: results of treatment of 69 consecutive patients at a single center. *Canadian Radiosurgery Society*, St. John's, NFLD, June 2009.
34. Ellis MJ, Laperriere N, Ng E, Schroeder G, Schwartz M, West M, Kulkarni AV, **McDonald PJ**: Early experience with pediatric Gamma Knife radiosurgery in Canada. *44th Congress of the Canadian Neurological Sciences Federation Halifax*, Nova Scotia, June 2009.
35. **McDonald PJ**: Caring for patients in remote areas: The challenges of pediatric neurosurgery in Canada's North. *Annual Meeting of the American Society of Pediatric Neurosurgery*, Hawaii, 2009.
36. **McDonald PJ**: Adolescent refusal of life-sustaining therapy in neuro-oncology- A framework for decision-making. *19th Annual Meeting of the Canadian Bioethics Society*, St. John's NL, 2008.
37. Krawitz S, Marchuk G, Embil J, **McDonald PJ**, Del Bigio MR: Blastomycosis involving the central nervous system: The Manitoba experience. *Can J Neurol Sci* 34:500, 2007.
38. Marchuk G, Del Bigio M, Krawitz S, Embil J, **McDonald P**: Early neurosurgical intervention in the management of central nervous system blastomycosis. *Can J Neurol Sci* 34:500, 2007.
39. **McDonald PJ**: The ethics of sham surgery arms in randomized clinical trials. *18th Annual Meeting of the Canadian Bioethics Society*, Toronto, 2007.
40. Ellis M, **McDonald PJ**: CNS blastomycosis in children: The University of Manitoba experience. *Annual Meeting of the AANS/CNS Joint Section on Pediatric Neurosurgery* Denver, 2006.

41. Zwai, **McDonald PJ**: MRI changes after Gamma Knife radiosurgery for hypothalamic hamartoma in a child. *Canadian Radiosurgery Society*, Niagara-on-the-Lake, 2006.
42. Kilgour A, **McDonald PJ**: Neuropsychological improvement following endoscopic third ventriculostomy for arrested hydrocephalus. *Can J Neurol Sci* 32:500, 2006.
43. **McDonald PJ**: Neuro-oncological applications of neuro-endoscopy: The University of Manitoba experience. *12th Annual Canadian Neuro-oncology Meeting*, Winnipeg, 2006.
44. Drake JM, for the Canadian Pediatric Neurosurgery Study Group (**McDonald PJ**-contributor): Endoscopic third ventriculostomy in pediatric patients: The Canadian Experience. *33rd Annual Meeting of the International Society for Pediatric Neurosurgery*, Vancouver, 2005
45. Marchuk G, **McDonald PJ**: The use of ventriculosubgaleal shunts in the treatment of hydrocephalus in premature infants. *Can J Neurol Sci* 30:500, 2005.
46. Hader W, Steinbok P, **McDonald PJ**, et al.: Canadian survey of surgery for intractable epilepsy in children. *Can J Neurol Sci* 30:500, 2005.
47. **McDonald PJ**, Drake JM, Lamberti M, Rutka J, Humphreys RP, Dirks PB: Falling CSF shunt rates for myelomeningocele in Canada. *Annual Meeting of the AANS/CNS Joint Section on Pediatric Neurosurgery*, San Francisco, 2004
48. Del Bigio MR, **McDonald PJ**: Prospective histologic study of blocked hydrocephalus shunt catheters. *Can J Neurol Sci* 30:500, 2004.
49. Dirks PB, Drake JM, Lamberti M, Rutka JT, Humphreys RP, **McDonald PJ**: Falling ventriculoperitoneal shunt rates in myelomeningocele. *31st Annual Meeting of the International Society for Pediatric Neurosurgery*, Monte Carlo, 2003.
50. Rutka JT, Otsubo H, Blount J, Hader W, **McDonald PJ**, Snead OC: Complications of invasive subdural grid monitoring in children. *Annual Meeting of the Congress of Neurological Surgeons*, Philadelphia, 2002.
51. **McDonald PJ**, Dirks PB, Humphreys RP, Rutka JT, Drake JM: Does valve opening pressure correlate with incidence of decompressive hemorrhage in neonatal hydrocephalus? *Annual Meeting of the American Association of Neurological Surgeons*, Chicago, 2002.

52. **McDonald PJ**, Tymianski M, Porter PJ, Wallace MC: The role of intraoperative angiography in the resection of high grade arteriovenous malformations. *Annual Meeting of the American Association of Neurological Surgeons*, Toronto, 2001.
53. Tator CH, Rutka J, Tamber MS, **McDonald PJ**: Surgery after failed radiosurgery for acoustic neuromas. *Annual Meeting of the American Association of Neurological Surgeons*, Toronto, 2001.
54. **McDonald PJ**, Pelletier MR, Carlen PL: Putative gap junctional blockers, but not conventional antiepileptics, block epileptiform discharges in piriform cortex. *Society for Neuroscience*, New Orleans, 1997.
55. **McDonald PJ**, Pelletier MR, Carlen PL: Gap junctional blockers reduce epileptiform discharges in an intractable model of epilepsy in the piriform cortex. *Annual Meeting of the American Epilepsy Society*, Boston, 1997.

INVITED TALKS/PRESENTATIONS

1. How to prepare for your Royal College oral exam. Division of Neurosurgery, University of Toronto Brain School, Toronto ON. February 27, 2015.
2. Pediatric Neurosurgery in Kenya. Canadian Pediatric Neurosurgery Study Group Annual Meeting, Banff AB. February 18, 2015.
3. Conflicts of interest in surgical research. Surgical Suites Rounds, British Columbia Children's Hospital, Vancouver BC. December 12, 2014.
4. Mentoring new pediatric neurosurgeons. 85th Anniversary of Neurosurgery at Sick Kids- Fellows Reunion, Toronto ON. December 6, 2013.
5. Ethical dilemmas for the mid-level practitioner. Mid-level Practitioners Course. 42nd Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, Toronto, ON, Canada- December 3, 2013.
6. Mentoring in surgery: It doesn't end with residency. 90th Anniversary of Neurosurgery in Canada Symposium, Toronto, ON, Canada- October 6-8, 2013.
7. Ethical issues in clinical research: Introduction to principles. endMS Research and Training Network Summer School, Winnipeg, MB, Canada- May 16, 2012.

8. Ethics of placebo- Neurobiology of Placebo Course. 46th Annual Congress of the Canadian Neurological Sciences Foundation, Vancouver B.C., Canada- June 17, 2011.
9. Ethical Issues in Clinical Research- Expert Panel. Council for Canadian Child Health Research/Canadian Child Health Clinician Scientist Program Joint Trainee Symposium, Winnipeg, MB- October 15, 2010.
10. Surgical options in the treatment of pediatric epilepsy. Rocky Mountain Neuroscience Symposium, Kananaskis, Alberta- March 7, 2009.
11. The ethics of placebo surgery in randomized clinical trials. University of Calgary Neuroscience Rounds, Calgary, Alberta- March 6, 2009.
12. Ethical process in neurosurgical research. Neuroscience Rounds, University of Manitoba- November 14, 2008.
13. Operating against the odds: The problem of futility. Department of Surgery Grand Rounds, University of Manitoba- October 22, 2008.
14. The ethics of placebo surgery in clinical trials- A neurosurgeon's perspective. Health, Ethics and Law Rounds, University of Manitoba- September 12, 2008.
15. Endoscopic third ventriculostomy for Arrested Hydrocephalus in Adults. Neuroscience Rounds, University of Manitoba- February 15, 2008.
16. Endoscopic third ventriculostomy for adult hydrocephalus. 7th Annual Meeting of the Canadian Pediatric Neurosurgery Study Group- February 20, 2008- Banff, Alberta.
17. Adolescent Refusal of Treatment: A Legal and Ethical Framework for Decision-Making. Pediatric Residents ½ Day, University of Manitoba- November 7, 2007, Winnipeg, Manitoba.
18. Myelomeningocele and Spinal Disorders. Plastic Surgery Residents Seminar Series, University of Manitoba- May 9, 2007, Winnipeg, Manitoba.
19. Craniofacial Disorders. Pediatric Neurology Rounds, Winnipeg Children's Hospital- April 17, 2007- Winnipeg, Manitoba.
20. Adolescent refusal of life sustaining treatment in neuro-oncology. 6th Annual Meeting of the Canadian Pediatric Neurosurgery Study Group- February 21, 2007- Horseshoe Valley, Ontario.
21. Canadian Association of Neuroscience Nurses Workshop. Surgical Aspects of CNS Blastomycosis- November 21, 2006- Winnipeg, Manitoba

22. Endoscopic Neurosurgery. Grand Rounds, Department of Surgery, University of Manitoba- May 31, 2006, Winnipeg, Manitoba.
23. Canadian Life Insurance Medical Officers Association 61st Annual Meeting. Benign Brain Tumours in Children- May 16, 2006- Winnipeg, Manitoba
24. Canadian Association of Neuroscience Nurses Spring Workshop- Consent, Assent and Informed Permission in Children- April 21, 2006-Winnipeg, MB
25. Third Ventriculostomy for Arrested Hydrocephalus in Adults. 5th Annual Meeting of the Canadian Pediatric Neurosurgery Study Group. Halifax NS, February 18, 2006.
26. Pediatric Applications of Gamma Knife Radiosurgery- Division of Neurosurgery, The Hospital for Sick Children. Toronto ON, December 1, 2005.
27. Clinical Research and Nursing Network Annual Meeting- Ethical Dilemmas in Medicine. Winnipeg, MB. October 14, 2005.
28. Introduction to Clinical Research Ethics. Neurosurgery Resident Research Day, University of Manitoba- November 5, 2005, Winnipeg, Manitoba.
29. Craniofacial Neurosurgery. Pediatric Small Group Discussion Series, Department of Pediatrics, University of Manitoba- October 13, 2005, Winnipeg, Manitoba.
30. Canadian Association of Neuroscience Nurses Spring Workshop- Everyday Ethics on the Wards. Winnipeg, MB. April 8, 2005.
31. Stereotactic radiosurgery in children- Experience with the Gamma Knife. 4th Annual Meeting of the Canadian Pediatric Neurosurgery Study Group, Whistler, B.C. (February 2005)
32. Advances in Neuro-oncology:Medulloblastoma- Surgical Management. 39th Annual Meeting of the Canadian Congress of Neurological Sciences. Calgary, AB, June 9 2004.
33. The Ethics of Placebo Surgery in Experimental Treatments of Parkinson's Disease. Neuroscience Rounds, University of Manitoba- June 4, 2004, Winnipeg, Manitoba.
34. Hydrocephalus and Guidelines for the Management of Suspected CSF Shunt Malfunction. Children's Hospital Trauma Rounds- March 31, 2004, Winnipeg, Manitoba

35. A Neurosurgeons Introduction to First Nations Health Care. Grand Rounds- Joint Centre for Bioethics, University of Toronto. Toronto, ON, March 24, 2004.
36. Traumatic Cerebrovascular Injuries in Children. Grand Rounds, Department of Surgery, University of Manitoba- January 28, 2004, Winnipeg, Manitoba.
37. Ethics and Pediatric Neurosurgery. Frontiers in Pediatric Neurosurgery, Toronto ON, May 31, 2003.
38. Ventriculosubgaleal Shunts. 3rd Annual Meeting of the Canadian Pediatric Neurosurgery Study Group, Ottawa ON (February 2004).
39. Ethics and Pediatric Neurosurgery. 3rd Annual Meeting of the Canadian Pediatric Neurosurgery Study Group, Ottawa ON (February 2004).
40. Solo Pediatric Neurosurgery in Canada: A survey. Canadian Pediatric Neurosurgery Study Group, Banff, AB (February 2003)
41. Revascularization strategies in pediatric Moya Moya disease- Neurosurgery Grand Rounds- Department of Neurosurgery- State University of New York at Buffalo, Buffalo New York- February 5, 2002.
42. Percutaneous shunt revision with electrocautery- Pediatric Ground Rounds, Children's Hospital of Western Ontario, London ON- December 5, 2001.
43. Pediatric Moya Moya Disease- Pediatric Ground Rounds, Children's Hospital of Western Ontario, London ON- December 5, 2001.
44. Spinal Dysraphism- Department of Urology, the Hospital for Sick Children, Toronto ON- November 4, 2001.
45. Revascularization strategies in pediatric Moya Moya disease- Neuroscience Rounds, Winnipeg Health Sciences Centre, University of Manitoba, Winnipeg MB- October 18, 2001
46. Gap junctions in epilepsy: A novel therapeutic target- Neuroscience Rounds, Winnipeg Health Sciences Centre, University of Manitoba, Winnipeg MB- October 18, 2001.
47. Update on spinal dysraphism- Department of Pediatrics, the Hospital for Sick Children, Toronto ON- August 24, 2001.
48. The role of gap junctions in an *in vitro* model of epilepsy in the piriform cortex- Toronto Western Hospital Research Institute, Toronto ON- May 1998
49. Gap junctions in epilepsy- Bloorview Epilepsy Research Group, Toronto, 2008.

COMMITTEE/BOARD MEMBERSHIP/SOCIETIES

- ***Royal College of Physicians and Surgeons of Canada***
 - Neurosurgery Examination Committee- Examiner- 2006-2010
 - Neurosurgery Written Examination Committee- 2011-present
 - Neurosurgery Specialty Committee- 2004- present
 - Principles of Surgery- Examination Committee 2006-2013

- ***University of Manitoba***
 - Biomedical Research Ethics Board, Faculty of Medicine 2006-2012
 - Faculty of Medicine- Postgraduate Medical Education Committee- Executive Member, 2010-present
 - Residency Program Committee, Section of Neurosurgery- Chair
 - Postgraduate Surgical Education Committee, Department of Surgery
 - Postgraduate Surgery Scholarship Subcommittee, Department of Surgery- Chair, 2009-present
 - Research Advisory Committee- Department of Surgery, University of Manitoba, 2012-present

- ***Winnipeg Regional Health Authority***
 - Pediatric Surgery Standards Committee- 2003-present
 - Neurosurgery Standards Committee- Chair- 2004-present
 - Surgical Standards Committee- 2010-present

- ***Winnipeg Children's Hospital***
 - Pediatric Surgery Council- 2002- present
 - Pediatric Trauma Committee- 2002-present
 - Institute Research Committee- Children's Hospital Research Institute of Manitoba- 2010-present

- ***Other***
 - Board of Directors- Canadian Bioethics Society- 2014-present
 - Partnership/Community Relations Coordinator- Canadian Bioethics Society- 2014-present
 - Secretary-Treasurer- Canadian Neurosurgical Society- 2014-present
 - Member- Scientific Program Committee, Canadian Neurological Sciences Federation- 2013-present
 - Manitoba Representative- Canadian Neurosurgical Society, 2012-present
 - Think First Canada- Board of Directors, 2005-2012
 - Think First Manitoba- Director 2003-2012
 - Transplant Manitoba Gift of Life Program- Advisory Board

- McKenzie Prize Selection Committee- Canadian Neurosurgical Society, 2011-present

MEMBERSHIPS/SOCIETIES

- AANS/CNS Section on Pediatric Neurological Surgery
- American Society of Pediatric Neurosurgeons
- Canadian Bioethics Society
- Canadian League Against Epilepsy
- Canadian Neurosurgical Society
- Canadian Pediatric Neurosurgery Study Group
- Children's Oncology Group
- Congress of Neurological Surgeons
- International Neuroethics Society
- International Society for Pediatric Neurosurgery

TEACHING (*Dossier available on request*)

- ***Curriculum and Guideline Development***
 - Introduction to Bioethics- Masters of Physician Assistant Studies Program, Faculties of Medicine and Graduate Studies, University of Manitoba
 - VP Shunt Guidelines- Winnipeg Children's Hospital and Winnipeg Regional Health Authority
 - Curriculum in Bioethics for Neurosurgery Residents
 - Neurosurgery Resident Curriculum- University of Manitoba
- ***Undergraduate Teaching***
 - Med I: Medical Humanities- Seminar leader, 2004-15
 - Med I: Medical Ethics- Seminar leader, 2004-15
 - Med II: Neuroscience Course- Seminar leader, 2007-15
 - Med II: Clinical Skills Program- Demonstrator, 2005-15
 - Med I-II: Early clinical exposure (18 students)
 - Med III: Surgery Seminars- Neurosurgical Emergencies (2002-15)
 - Med III: Mentorship Program (10 students)- 2010-2015
 - Med IV: Community Health Clerkship Program- supervised 4 student projects)
 - Summer Research Students- Krystal Thorington, Michael Ellis, Fred Zeiler, Emma Schon, Robyn McLelland

- **Graduate Teaching**
 - Course Director- Bioethics- Masters of Physician Assistant Studies Program, Faculties of Medicine and Graduate Studies, University of Manitoba
- **Postgraduate Teaching**
 - Neurosurgery Residency Training Program
 - Supervise biweekly Mortality and Morbidity Rounds
 - Supervise Resident Teaching Curriculum
 - Supervise biweekly Oral Exams
 - Pediatric Residents
 - Issues in Pediatric Neurosurgery Seminar leader (1-2 times per year)
 - Ethical Issues in Pediatrics (2 times per year)
 - Surgery Clinic experience for Pediatric residents (4 residents)
 - Principles of Surgery Seminars (for PGY 1 & 2 surgery residents)
 - Neurosurgical Emergencies (2004-present)
- **Other**
 - Neurosurgery Physician Assistant Seminar Series
 - Pediatric neurosurgery issues for the Clinical Assistant
 - Hydrocephalus
 - Health Sciences Centre Annual Ethics Course- lecturer
 - Models of Ethics Consultation
 - ThinkFirst Manitoba
 - Head injury prevention presentations at Elementary and Secondary Schools in the Winnipeg area

REFEREES

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