

Samuel Wiebe, MD, MSc, FRCPC

Professor, Departments of Clinical Neurosciences, Paediatrics and Community Health Sciences

Head, Division of Neurology, Alberta Health Services, Calgary Zone

Director of Clinical Research, Hotchkiss Brain Institute



RESEARCH INTERESTS AND ACTIVITIES

Key Words: health outcome assessment, randomized controlled trials, epilepsy, epidemiological studies

Dr. Wiebe has three main research areas: 1) Health outcomes research in neurosciences, particularly the evaluation of medical and surgical interventions, assessment of clinically important change, quality of life, economic analyses and meta-analyses. He has addressed both methodological and clinical aspects of these research areas. 2) Health services research, particularly using linked administrative databases and health surveys, as well as determining the appropriateness and necessity of clinical interventions. 3) Expanding a successful Clinical Research Unit within the Hotchkiss Brain Institute and the Department of Clinical Neurosciences. This unit support study design, data management, and data analysis for clinical research in the neurosciences.

RESEARCH IN PROGRESS

<u>ROLE</u>	<u>FUNDING AGENCY</u>	<u>TITLE OF PROJECT</u>	<u>2010/11 ALLOCATION</u>
Principal investigator	Faculty of Medicine	<i>Hopewell professorship in clinical neurosciences research</i>	160,000
	Hotchkiss Brain Institute	<i>Clinical research unit</i>	150,000
Co- Investigator	Hopewell Professorship	<i>Hopewell professorship for clinical neurosciences research</i>	166,666
	American Epilepsy Society	<i>Critical care EEG research consortium</i>	ongoing
	Public Health Agency of Canada	<i>The validation and development of a case definition for epilepsy</i>	24,000
	Public Health Agency of Canada	<i>Understanding the epidemiology of neurological conditions</i>	134,000
	Hotchkiss Brain Institute Clinical Research Unit	<i>Prospective assessment electroencephalography in comatose neurocritical care patients</i>	15,000
	Eisai	<i>Efficacy and safety of E2007 (perampanel) in refractory partial seizures (E2007-G000-304)</i>	ongoing

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	Eisai	<i>Efficacy and safety of E2007 (perampanel) in refractory partial seizures</i>	ongoing
Co-Investigator	Sepracor	<i>Efficacy and safety of eslicarbazepine acetate as adjunctive therapy for refractory partial seizures</i>	ongoing
	Union Chimique Belge (UCB)	<i>Efficacy and safety of conversion to lacosamide 400mg/day monotherapy in subjects with partial-onset seizures</i>	ongoing
	Union Chimique Belge (UCB)	<i>Long-term use and safety of lacosamide monotherapy as adjunctive therapy in patients with partial-onset seizures</i>	ongoing
	Union Chimique Belge (UCB)	<i>Follow up study of long term safety and efficacy of brivaracetam used as adjunctive treatment in partial onset seizures</i>	ongoing
	Union Chimique Belge (UCB)	<i>Efficacy and safety of brivaracetam in patients with partial onset seizures</i>	ongoing

PUBLICATIONS

Peer-Reviewed Journal Articles

Seiam H, Dhaliwal H, **Wiebe S**. Determinants of quality of life after epilepsy surgery: Systematic review and evidence summary. *Epilepsy and Behavior* 2011;June 20.

Hamiwka L, Macrodimitris S, Tellez-Zenteno JF, Metcalfe A, **Wiebe S**, Kwon CS, Jette N. Social outcomes after temporal or extratemporal epilepsy surgery: A systematic review. *Epilepsia* 2011;52(5):870-9.

French JA, Abou-Khalil BW, Leroy RF, Yacubian EM, Shin P, Hall S, Mansbach H, Nohria V, **Wiebe S**. Randomized, double-blind, placebo-controlled trial of ezogabine (retigabine) in partial epilepsy. *Neurology* 2011;76(18):1555-63.

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Macrodimitris S, \ Sherman EM, Forde S, Tellez-Zenteno JF, Metcalfe A, Hernandez-Ronquillo L, **Wiebe S**, Jette N. Psychiatric outcomes of epilepsy surgery: A systematic review. *Epilepsia* 2011;52(5):880-90.

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- Hinnell C, Coulthart MB, Jansen GH, Cashman NR, Lauzon J, Clark A, Costello F, White C, Midha R, **Wiebe S**, Furtado S. Gerstmann-Straussler-Scheinker disease due to a novel prion protein gene mutation. *Neurology* 2011;76(5):485-7.
- Kwon C, Liu M, Quan H, Thoo V, **Wiebe S**, Jette N. Motor vehicle accidents, suicides, and assaults in epilepsies: A population-based study. *Neurology* 2011;76(9):801-6.
- Macrodimitris S, Wershler J, Hatfield M, Hamilton K, Backs-Dermott B, Mothersill K, Baxter C, **Wiebe S**. Group cognitive-behavioral therapy for patients with epilepsy and comorbid depression and anxiety. *Epilepsy and Behavior* 2011;20(1):83-8.
- Moshe SL, Perucca E, **Wiebe S**, Mathern GW. The international league against epilepsy at the threshold of its second century: Year 1. *Epilepsia* 2011;52(1):185-7.
- Tellez-Zenteno JF, **Wiebe S**, Lopez-Mendez Y. Focal refractory epilepsy: Medical or surgical treatment? Reply. *Revista di Neurologia* 2011;52(1):63-4.
- Badawy RA, Pillay N, Jette N, **Wiebe S**, Federico P. A blinded comparison of continuous versus sampled review of video-EEG monitoring data. *Clinical Neurophysiology* 2010;122(6):1086-90.
- Sherman EM, Brooks BL, Akdag S, Connolly MB, **Wiebe S**. Parents report more ADHD symptoms than do teachers in children with epilepsy. *Epilepsy and Behavior* 2010;19(3):428-35.
- Kwon CS, Liu M, Quan H, **Wiebe S**, McChesney J, Wirrell E, Hamiwka L, Jetté N. The incidence of injuries in persons with and without epilepsy – A population based study. *Epilepsia* 2010;51(11):2247-53.
- Engel J Jr, McDermott MP, **Wiebe S**, Langfitt JT, Erba G, Gardiner I, Stern J, Dewar S, Sperling MR, Jacobs M, Kieburtz K for the Early Randomized Surgical Epilepsy Trial (ERSET) Study Group. Design considerations for a multicenter randomized controlled trial of early surgery for mesial temporal lobe epilepsy. *Epilepsia* 2010;51(10):1978-86.

Abstracts Published in Journals

- Ahmed SN, **Wiebe S**, Mann C, Ohinmaa A. Telemedicine and epilepsy care – a Canada wide survey. *Canadian Journal of Neurological Sciences* 2010;37(6):814-7.
- Badawy RA, Pillay N, Jette N, **Wiebe S**, Federico P. A blinded comparison of continuous versus sampled review of video-EEG monitoring data. *Clinical Neurophysiology* 2010;122(6):1086-90.
- Bowles B, Crupi C, Pigott S, Parrent A, **Wiebe S**, Janzen L, Kohler S. Double dissociation of selective recollection and familiarity impairments following two different surgical treatments for temporal-lobe epilepsy. *Neuropsychologia* 2010;48(9):2640-7.

- Engel J, McDermott MP, **Wiebe S**, Langfitt JT, Erba G, Gardiner I, Stern J, Dewar S, Sperling MR, Jacobs M, Kieburtz K. Design considerations for a multicenter randomized controlled trial of early surgery for mesial temporal lobe epilepsy. *Epilepsia* 2010;51(10):1978-86.
- Hinnell C, Williams J, Metcalfe A, Patten SB, Parker R, **Wiebe S**, Jette N. Health status and health-related behaviors in epilepsy compared to other chronic conditions –a national population-based study. *Epilepsia* 2010;51(5):852-61.
- Jette N, Reid AY, Quan H, Hill MD, **Wiebe S**. How accurate is ICD coding for epilepsy? *Epilepsia* 2010;51(1):62-9.
- Janszky J, Kovacs N, Gyimesi C, Fogarasi A, Doczi T, **Wiebe S**. Epilepsy surgery, antiepileptic drug trials, and the role of evidence. *Epilepsia* 2010;51(6):1004-9.
- Kwan P, Arzimanoglou A, Berg AT, Brodie MJ, Allen HW, Mathern G, Moshe SL, Perucca E, **Wiebe S**, French J. Definition of drug resistant epilepsy; consensus proposal by the ad hoc Task Force of the ILAE Commission on Therapeutic Strategies. *Epilepsia* 2010;51(6):1069-77.
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- McLachlan RS, Pigott S, Tellez-Zenteno JF, **Wiebe S**, Parrent A. Bilateral hippocampal stimulation for intractable temporal lobe epilepsy: Impact on seizures and memory. *Epilepsia* 2010;51(2):304-7.
- Sherman EM, **Wiebe S**. Game-changing, or business as usual? New findings on naming skills after temporal lobe surgery. *Neurology* 2010;74(1):1484-5.
- Sherman EM, Brooks BL, Akdag S, Connolly MB, **Wiebe S**. Parents report more ADHD symptoms than do teachers in children with epilepsy. *Epilepsy and Behavior* 2010;19(3):428-35.
- Tellez-Zenteno JF, **Wiebe S**, Lopez-Mendez Y. Extratemporal epilepsy. Its clinical, diagnostic and therapeutic aspects. *Revista di Neurologia* 2010;51(2):85-94.

GRADUATE STUDENT SUPERVISION

Bijoy Menon, MSc student, Epidemiology (Co-Supervisor)
Thesis Topic: Neuroimaging in stroke

Jonathan Dykeman, MSc student, Department of Community Health Sciences
Thesis Topic: Discontinuation of anticonvulsants in the seizure monitoring unit

Mohammed Almekhlafi, PhD student, Epidemiology (Co-Supervisor)
Thesis Topic: Use of neuroprotective agent in stroke

Lawrence Korngut, MSc student, Department of Community Health Sciences
Thesis Topic: Intranasal insulin for the treatment of diabetic polyneuropathy: A phase II pilot study

Farnaz Amoozegar, MSc student, Clinical Epidemiology
Thesis Topic: Randomized trial of migraine therapy

POSTDOCTORAL RESEARCH FELLOWS

Dr. Bandar AlJafen, Postdoctoral Fellow, Epilepsy and EEG fellowship
Research Topic: Usefulness of intracranial EEG in patients with bilateral temporal epileptogenicity

Dr. Fatema Abdulla, Postdoctoral Fellow, Epilepsy and EEG fellowship
Research Topic: Knowledge of women's issues related to pregnancy in epilepsy: A survey of health care professionals