

A. Name: Andrew (Andy) Roger Willan

B. Education:

PhD (Biostatistics), Epidemiology and Biostatistics, University of Western Ontario, London ON 1979

MSc (Statistics), Queen's University, Kingston ON 1976

BEd (Mathematics and Physical Education), Queen's University, Kingston ON 1972

BA (Economics and Mathematics), York University, Toronto ON 1970

D. Academic Appointments:

Present Position as of July 2002: Senior Scientist, Child Health Evaluative Sciences, SickKids Research Institute, Toronto; Professor, Dalla Lana School of Public Health, University of Toronto; Professor Emeritus, Clinic Epidemiology and Biostatistics, McMaster University

September 1993 to June 2002 - Professor, Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton ON

September 1990 to June 1993 - Associate Professor, Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton ON

January 1989 to May 1990 - Head, Division of Clinical Trials and Epidemiology, Sunnybrook Health Science Centre, Toronto ON

March 1989 to October 1991 - Associate Professor, Department of Preventive Medicine and Biostatistics, University of Toronto, Toronto ON

September 1987 to February 1989 - Associate Professor, Department of Population Medicine, University of Guelph, Guelph ON

April 1985 to August 1987 - Head of Biometry with the Clinical Trials Group, National Cancer Institute of Canada, Queen's University, Kingston ON.

September 1981 to August 1987 - Assistant Professor, Department of Community Health and Epidemiology, Queen's University, Kingston ON.

October 1980 to March 1985 - Biostatistician with the Clinical Trials Group, National Cancer Institute of Canada, Queen's University, Kingston ON

December 1979 to September 1980 - Biostatistician with the Division of Epidemiology at the Cancer Control Agency of British Columbia, Vancouver BC

E. Publications (2008-2014): (52 publications between 2008-2014, only room to show 28)

1. Willan AR, Kowgier ME. Cost-effectiveness Analysis of a Multinational RCT with a Binary Measure of Effectiveness and an Interacting Covariate. *Health Economics* 2008; **17**(7): 777-791.
2. Eckermann S, Willan AR. Time and EVSI wait for no patient. *Value in Health* 2008; **11**(3): 522-526.
3. Eckermann S, Willan AR. The option value of delay in health technology assessment. *Medical Decision Making*, 2008 **28**(3): 300-305.
4. Eckermann S, Briggs A, Willan AR. Health technology assessment in the cost-disutility plane. *Medical Decision Making* 2008; **28**(2): 172-181.
5. Eckermann S, Willan AR. Globally optimal trial design for local decision making. *Health Economics* 2009; **18**(2): 203-216.
6. Willan AR, Kowgier ME. Determining optimal sample sizes for multi-stage randomized clinical trials using value of information methods. *Clinical Trials* 2008; **5**(4): 289-300.
7. Willan AR. Optimal sample size determinations from an industry perspective based on the expected value of information. *Clinical Trials* 2008; **5**(6): 587-594.
8. Eckermann S, Coory M, Willan AR. Indirect comparison: relative risk fallacies and odds solution. *Journal of Clinical Epidemiology* 2009; **62**(10): 1031-1036.

9. **Willan AR**, Eckermann S. Optimal clinical trial design using value of information methods with imperfect implementation. *Health Economics* 2010; **19**(5): 549-561.
10. **Willan AR**. The use of value of information methods in the design and evaluation of clinical trials. In *Economic Evaluation in Child Health*. Ungar WJ. (ed). Oxford University Press 2010.
11. Eckermann S, Karnon J, **Willan AR**. The value of Value of Information: best informing research design and prioritization using current methods. *Pharmacoeconomics* 2010; **28**(9): 699-709.
12. Hossain A, Beyene J, **Willan AR**, Hu P. Approximate Likelihood ratio test for detecting differential expression in microarray data. *Computational Statistics and Data Analysis* 2009; **53**(10): 3685-3695.
13. Eckermann S, Coory M, **Willan AR**. Consistently estimating risk difference when translating evidence to jurisdiction of interest. *PharmacoEconomics* 2011; **29**(2): 87-96.
14. **Willan AR**. Sample size determination for cost-effectiveness trials. *PharmacoEconomics* 2011; **29**(11): 933-949.
15. Eckermann S, Coory M, **Willan AR**. Consistently estimating risk difference when translating evidence to jurisdiction of interest. *PharmacoEconomics* 2011; **29**(2): 87-96.
16. Eckermann S, **Willan AR**. Presenting and summarizing cost and effect evidence to best inform inference and societal decision making when comparing multiple strategies. *PharmacoEconomics* 2011; **29**(7): 563-577.
17. Pullenayegum EM, **Willan AR**. Marginal models for censored longitudinal cost data: appropriate working variance matrices in inverse-probability-weighted GEEs can improve precision. *International Journal of Biostatistics* 2011; **7**(1); www.bepress.com/ijb/vol7/iss1/14.
18. **Willan AR**, Eckermann S. Value of information and pricing new health interventions. *PharmaEconomics* 2012; **30**(6): 447-459.
19. **Willan AR**, Eckermann S. Accounting for between-study variation in value of information methodology. *Health Economics* 2012; **21**(10): 1183–1195.
20. **Willan AR**, Goeree R, Boutis K. Value of Information methods for planning and analyzing clinical studies optimize decision making and research planning. *Journal of Clinical Epidemiology* 2012; **65**(8): 870-876.
21. Hossain A, **Willan AR**, Beyene J. An improved method on Wilcoxon rank sum test for gene selection from microarray experiments. *Communications in Statistics* 2013; **42**(7):1563-1577.
22. Eckermann S, **Willan AR**. Optimal global VOI trials: better aligning manufacturer and decision maker interests and enabling feasible risk sharing. *PharmacoEconomics* 2013; **31**(5):393-401.
23. Hossain A, **Willan AR**, Beyene J. A flexible nonparametric approach to find candidate genes associated to disease in microarray experiments. *Journal of Bioinformatics and Computational Biology* 2013; **11**(2):1250021 (19 pages).
24. Chen MH, **Willan AR**. Determining optimal sample sizes for multistage adaptive randomized clinical trials from an industry perspective using value of information methods. *Clinical Trials* 2013; **10**(1):54–62.
25. Chan KKW, **Willan AR**, Gupta M, Pullenayegum E. Underestimation of uncertainties in health utilities derived from mapping algorithms involving health related quality of life measures: Statistical explanations and potential remedies. *Medical Decision Making* 2014; **34**(7):863-872.
26. **Willan AR**. Bayesian methods for the design, analysis and interpretation of clinical studies. In: Berger VW, Zhang X. (Eds.) *Important Considerations for Clinical Trial Methodologies*. Future Medicine London, 2013. (eISBN 978-1-909453-31-9).
27. Chen MH, **Willan AR**. Value of information methods for assessing a new diagnostic test. *Statistics in Medicine* 2014; **33**(11):1801-1815.
28. **Willan AR**. Bayesian decision theory and the design and analysis of randomized clinical trials. In: van Montfort K, Oud J, and Ghidry W. (Eds.) *Developments in Statistical Evaluation of Clinical Trials*. Springer Berlin Heidelberg, 2014. (ISBN 978-3-642-55345-5).