

CURRICULUM VITAE

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Education

1995 M.Sc. (Integrated) (Statistics) Indian Institute of Technology, Kanpur
1999 Ph.D. (Biostatistics) McGill University, Montreal

Postdoctoral Training

01/1999-05/2000 Department of Health Care Policy, Harvard Medical School,
Boston

Appointments

06/2000-11/2003 Biostatistician
Department of Clinical Epidemiology and Community Studies
St. Mary's Hospital Centre, Montreal

06/2000-12/2010 Assistant Professor (part-time)
Department of Epidemiology and Biostatistics
McGill University, Montreal

11/2003-10/2008 Research Scientist
Technology Assessment Unit
McGill University Health Centre, Montreal

- 1/2007-12/2010 Assistant Professor (part-time)
Department of Medicine
McGill University, Montreal
- 1/2007- Medical Scientist
Division of Clinical Epidemiology
McGill University Health Centre, Montreal
- 11/2008- Director
Technology Assessment Unit
McGill University Health Centre, Montreal
- 01/2011- Associate Professor (full-time)
Department of Medicine and
Department of Epidemiology and Biostatistics (joint appointment)
McGill University, Montreal
- 08/2016- Member
McGill International Tuberculosis Centre

Awards

- Lady Meherbai Tata Scholarship (for higher studies in Public Health), 1995
- Max Stern Recruitment Fellowship from McGill University (for support of PhD research), 1995-1998
- Chercheur Boursier Junior 1 (salary award) from Fonds de la Recherche en Santé du Québec (FRSQ), 2003-2009
- Chercheur Boursier Junior 2 (salary award) from Fonds de la Recherche en Santé du Québec (FRSQ), 2009-2013
- Statistical Science Award (Theoretical Category) from Centers for Disease Control, United States in recognition of article titled 'Modeling conditional dependence between diagnostic tests: A multiple latent variable model' published in *Statistics in Medicine*, 2010
- Statistical Science Award (Theoretical Category) from Centers for Disease Control, United States for article titled 'Evaluating Diagnostic Tests for *Chlamydia trachomatis* in the Absence of a Gold Standard: A Comparison of Three Statistical Methods' published in *Statistical Methods in Biopharmaceutical Research*, 2012
- Charles C. Shepard in the Data Methods and Study Design category from Centers for Disease Control, United States for article titled 'Evaluation of Screening Tests for Detecting *Chlamydia trachomatis*: Bias Associated with the Patient-Infected-Status Algorithm' published in *Epidemiology*, 2012

- Chercheur Boursier Senior (salary award) from Fonds de la Recherche Santé - Québec (FRQS), 2013-2017

Research Grants

(NSERC: Natural Sciences and Engineering Research Council; FRSQ: Fonds de la Recherche en Santé du Québec; CDC: Centers for Disease Control, USA; CIHR: Canadian Institutes of Health Research; CADTH: Canadian Association of Drugs and Technologies and Health; FQRNT: Fonds Québécois de la recherche sur la nature et les technologies; INESSS: Institut Nationale de Santé et des Services Sociaux)

1. NSERC. **Principal Investigator**. "Bayesian inference for biostatistical problems". Total amount: \$40,000. 2001-2005
2. CDC. **Co-Principal Investigator**. "Statistical methods for analyzing results from multiple diagnostic tests" (Co-Principal Investigator: Alula Hadgu). Total amount: US \$2,000. 2001-2002
3. St. Mary's Hospital Centre, Montreal. Co-Investigator. "Study of attitudes towards disclosure of a diagnosis of dementia in elderly subjects attending outpatients clinics" (Principal Investigator: Marie-André Ouimet). Total amount: \$5,000. 2002-2003
4. CIHR. Co-Investigator. "Reducing low birth weight in hookworm endemic areas: An RCT of pre-natal iron vs. iron+albendazole" (Principal Investigator: Theresa Gyorkos). Total amount \$ 237,050. 2002-2004
5. FQRNT. **Co-Principal Investigator**. "Statistical methods for multilevel data" (Co-Principal investigator: James Hanley). Total amount: \$123,000. 2002-2005
6. FRSQ. Co-Investigator. "La dépression chez les personnes âgées : Détection et prise en charge" (Principal Investigator: Jane McCusker). Total amount: \$270,000. 2002-2005
7. FRSQ. Co-Investigator. Groupe interuniversitaire de recherche sur les urgences (GIRU) (Principal Investigator: Danielle Larouche). Total amount : \$1,198,680. 2002-2006
8. FRSQ. **Principal investigator**. "Méthodes statistiques améliorées pour recherche sur les services de santé". Total amount : \$45,000. 2003-2006
9. CDC. **Co-Principal Investigator**. "A hierarchical latent class model for comparing non-gold standard diagnostic tests" (Co-Principal Investigator: Alula Hadgu). Total amount: US \$6000. 2005-2006
10. CADTH. Co-Investigator. "Collaborative development and implementation of a joint HTA unit by two university hospital networks in Montreal, Quebec" (Principal investigator: James Brophy). Total amount: \$100,000. 2005-2007

11. CADTH. **Co-Principal Investigator.** "Bayesian methods for evaluating diagnostic technologies: An application in the health technology assessment of electron beam computed tomography for the screening of coronary artery disease" (Co- Principal Investigator: James Brophy). Total amount: \$84,000. 2005-2006
12. CIHR. Co-Investigator. "A pharmacoepidemiology study of a potential drug interaction between atorvastatin and clopidogrel following percutaneous coronary intervention" (Principal Investigator: James Brophy). Total amount: \$98,500. 2005-2007
13. FRSQ. Co-Investigator. "Épidémiologie clinique et moléculaire et caractérisation des facteurs de virulence du Clostridium difficile dans le contexte d'une éclosion récente au Québec" (Principal Investigator: Vivian Loo). Total Amount: \$1,000,000. 2006-2007
14. Nova Scotia Health Research Foundation/CIHR Regional Partnership Program and IWK Grace Hospital, Halifax. Co-Investigator. "Prognostic Models in Obstetrics" (Principal Investigator: Victoria Allen). Total Amount: \$125,708. 2006-2008
15. NSERC. **Principal Investigator.** "Bayesian methods for diagnostic test studies". Total amount: \$35,000. 2006-2011
16. CIHR. Co-Investigator. "Validation of interferon-gamma assay for the diagnosis of tuberculosis infection in health care workers" (Principal Investigator: Madhukar Pai). Total amount: \$249,285. 2006-2009
17. TDR (The Special Programme for Research and Training in Tropical Diseases). **Co-Principal Investigator.** "Development of a user-friendly interface for statistical analysis programs for diagnostic test studies in the absence of a gold-standard" (Co-Principal Investigator: Lawrence Joseph). Total amount: \$10,000. 2006
18. CIHR. Co-Investigator. "Socioeconomic status and perinatal health" (Principal Investigator: K.S.Joseph). Total amount: \$431,288. 2007-2010
19. CIHR. Co-Investigator. "Antithrombotic treatment intensity and the risk of hemorrhagic complications in the elderly: A population-based study" (Principal Investigator: Linda Levesque). Total amount: \$205,498, 2007-2009
20. CIHR. Co-Investigator. "Non-steroidal anti-inflammatory drugs and cardiovascular risk: An international patient level meta-analysis of observational studies" (Principal Investigator: James Brophy). Total amount: \$151,720. 2007-2009
21. CIHR. Co-Investigator. "A pharmacoepidemiology study of the cardiovascular safety of bisphosphonates" (Principal Investigator: James Brophy). Total amount: \$174,600. 2008-2009
22. CIHR. Co-Investigator. "Validation of sFAS measurement for the diagnosis of acute coronary syndrome" (Principal Investigator: Marie-Josée Hébert). Total amount: \$150,000, 2008-2009

23. CIHR. Co-Investigator. "Prevalence functions for setting prognosis in the neonatal intensive care unit" (Principal Investigator: Shoo Lee). Total amount: \$4,902,135. 2008-2013
24. FQRNT. **Principal Investigator** (of 9 member team). "Méthodes statistiques pour les études multiniveaux". Total amount: \$145,800. 2008-2011
25. CIHR. **Principal Investigator**. "Novel statistical methods for Tuberculosis diagnostic studies" (Co-Principal Investigator: Madhukar Pai). Total amount: \$182,977. 2008-2011
26. CIHR. Co-Investigator. "Innovative approaches for diagnosing tuberculosis in the era of HIV" (Principal Investigator: Madhukar Pai). Total amount: \$301,878. 2008-2011
27. CIHR. **Principal Investigator**. "Statistical methods for meta-analysis of tuberculosis diagnostic studies" (Co-Principal Investigator: Madhukar Pai). Total amount: \$282,798. 2011-2014
28. CIHR. Co-Investigator. "Methods to measure (and measures of) the (actual) mortality reductions produced by cancer screening" (Principal Investigator: James Hanley). Total amount: \$188,250, 2011-2014
29. Grand Challenges Canada. Collaborator. "Fabric Chips: A versatile platform for low-cost, rapid and multiplexed diagnostic tests" (Principal Investigator: Dhananjaya Dendukuri). Achira Labs, India. Subgrant amount for statistical analyses: \$50,000. 2011-2014
30. CIHR. Co-Investigator. "Understanding and Improving Brain Health in HIV Now" (Principal Investigator: Lesley Fellows). Total amount: \$2,492,705, 2012-2017
31. NSERC. **Principal Investigator**. "Bayesian methods for epidemiologic studies". Total amount: \$55,000. 2013-2018
32. CIHR. Co-Investigator. "Comparative effectiveness research for the drug treatment of atrial fibrillation" (Principal Investigator: James Brophy). Total amount: \$81,548, 2013-2015
33. CIHR. **Principal Investigator**. "Statistical methods to support diagnosis of childhood tuberculosis in the absence of a gold-standard reference" (Co-Principal Investigator: Madhukar Pai). Total amount: \$256,932. 2014-2017
34. CIHR. Co-Investigator. "Reducing the burden of hospital-associated Clostridium Difficile infections in Canada through optimal prevention policies: A multidisciplinary individual-based modeling approach" (Principal Investigator: Marc Brisson). Total amount: \$475,368. 2014-2018
35. INESSS. **Principal Investigator**. "Cardiovascular resynchronization therapy for patients with heart failure or heart block in Quebec". \$50,000. 2014

36. CIHR. Co-investigator. "Adolescent cannabis consumption and risk of depression. An evidence-based approach" (Principal Investigator: Gabriella Gobbi). Total amount: \$100,000. 2016

Presentations at seminars or conferences

Oral presentations

1. "Dynamics of spatial and temporal aspects of pearl millet downy mildew". Global Conference on Advances in Research on Plant Diseases and their Management. Udaipur, India. February 1995
2. "Bayesian Approaches to Modeling the Conditional Dependence between Multiple Diagnostic Tests". Joint Statistical Meetings. Baltimore. August 1999
3. "High doses of inhaled corticosteroids and the risk of diabetes". International Conference on Pharmacoepidemiology. Boston. August 1999
4. "Bayesian Approaches to Modeling the Conditional Dependence between Multiple Diagnostic Tests". Center for Statistical Sciences, Brown University, Providence. January 2000
5. "Sample size determination for studies involving two non-gold standard diagnostic tests". Department of Clinical Epidemiology, Montreal General Hospital, Montreal. March 2001
6. "Sample size determination for studies involving two non-gold standard diagnostic tests". Annual Meeting of the Statistical Society of Canada. Vancouver. June 2001
7. "Studies involving diagnostic tests: Issues in sample size calculation and analysis". Department of Clinical Epidemiology and Community Studies, St. Mary's Hospital Centre, Montreal. March 2002
8. "The Identification of Seniors at Risk (ISAR) Screening Tool: New results on concurrent and predictive validity". Annual Meeting of the Canadian Association of Gerontology. Montreal. October 2002
9. "Data analysis options for results from an alternating sequence trial of a reproductive technology". Annual Meeting of the Canadian Statistical Society. Halifax. June 2003
10. "Sample size determination for studies involving two non-gold standard diagnostic tests". Department of Epidemiology and Biostatistics, McGill University, Montreal. September 2003
11. "Comparing the validity of different sources of information on emergency department visits: A latent class analysis". Department of Clinical Epidemiology and Community Studies, St. Mary's Hospital Centre, Montreal. October 2003.

12. "Comparing the validity of different sources of information on emergency department visits: A latent class analysis". Meeting of the Groupe Inter-Universitaire de recherche sur les urgences. Montreal. January 2004
13. "Comparing the validity of different sources of information on emergency department visits: A latent class analysis". Division of Clinical Epidemiology, Royal Victoria Hospital, Montreal. April 2005
14. "Comparing the validity of different sources of information on emergency department visits: A latent class analysis". McGill University Health Centre Annual Research Day. Montreal. June 2005
15. "Bayesian sample size determination for studies involving non-gold standard diagnostic tests". Joint Statistical Meetings. Minneapolis. August 2005
16. "Modeling conditional dependence between multiple diagnostic tests: A hierarchical latent class model". Joint Statistical Meetings. Minneapolis. August 2005
17. "Modeling conditional dependence between multiple diagnostic tests: A hierarchical latent class model". International Biometrics Conference. Montreal. July 2006
18. "Hierarchical models in Epidemiology: An introduction". Unité des recherche en santé des populations. Hôpital du Saint-Sacrament. Québec. October 2006
19. "Testing for HER-2 positive breast cancer: A systematic review and cost-effectiveness analysis". Division of Clinical Epidemiology, McGill University Health Centre. Montreal. October 2006
20. "Testing for HER-2 positive breast cancer: A systematic review and cost-effectiveness analysis". Department of Clinical Epidemiology and Community Studies, St. Marys Hospital Centre. Montreal. November 2006
21. "Review of statistical methods for evaluation of diagnostic tests in the absence of a gold-standard". Diagnostic Experts Evaluation Panel (DEEP) Meeting. Geneva. November 2006
22. "Electron Beam Computed Tomography for screening and detection of coronary artery disease: A systematic review and meta-analysis". Centre for Clinical Epidemiology and Community Studies, Jewish General Hospital. Montreal. January 2007
23. "Modeling conditional dependence due to multiple latent variables: A hierarchical latent class model". Department of Epidemiology and Biostatistics, McGill University. Montreal. February 2007.
24. "BLCM: A user friendly software package for Bayesian estimation of Latent Class Models". Diagnostic Experts Evaluation Panel (DEEP) Meeting. Geneva. November 2007.

25. "Bayesian methods for modeling diagnostic test results in the absence of a gold-standard". St. John's Research Institute, Bangalore, India. December 2007.
26. "A brief overview of meta-analysis". Technology Assessment Unit. McGill University Health Center. March 2008.
27. "Evaluating diagnostic tests for Chlamydia trachomatis in the absence of a gold standard: Application of a multiple latent variable model". McGill University Health Centre Annual Research Day. Montreal. June 2008.
28. "Estimation of latent TB infection prevalence using mixture models". Respiratory Epidemiology and Clinical Research Unit, McGill University, Montreal. December 2008.
29. "Bayesian sample size determination for prevalence and diagnostic test studies in the absence of a gold standard test". Département de mathématique et statistique, Université Laval, Quebec. February 2009.
30. "Comparison of Coblation Tonsillectomy and Electrocautery Tonsillectomy in Pediatric Patients". Atelier enjeux et pratiques, Agence d'évaluation des technologies et des modes d'intervention en santé (AETMIS), Montreal. February 2009.
31. "Clinical efficacy and cost of Allogenic Acellular Dermal Matrix (AADM) in implant-based breast reconstruction of post mastectomy cancer patients". Atelier enjeux et pratiques, Agence d'évaluation des technologies et des modes d'intervention en santé (AETMIS), Montreal. October 2009.
32. "Bayesian approach to adjusting for partial and differential verification bias". Department of Epidemiology and Biostatistics, McGill University. Montreal. October 2009.
33. "Measuring cost-effectiveness: Incremental Cost Effectiveness Ratio vs. Net Benefit". Technology Assessment Unit, McGill University Health Centre, Montreal. November 2009.
34. "Bayesian approach to adjusting for partial and differential verification bias". Centre for Clinical Epidemiology and Community Studies, Jewish General Hospital, Montreal. January 2010.
35. "Meta-analysis of diagnostic test characteristics in the absence of a gold standard reference test". Joint Statistical Meetings of the American Statistical Association. Vancouver. August 2010.
36. "Bayesian meta-analysis of diagnostic test accuracy in the absence of a gold standard reference test". 32nd annual conference of the International Society of Clinical Biostatistics, Ottawa. August 2011.

37. "Est-ce qu'un test de l'antigène urinaire peut améliorer le diagnostic de la pneumonie acquise dans la communauté et accroître l'utilisation des antibiotiques sensibles? Une revue systématique de la preuve". Atelier enjeux et pratiques, Institut nationale d'excellence en santé et en services sociaux (INESSS), Montreal. February 2012.
38. "Evaluation of a diagnostic test in the absence of a gold-standard reference test in the context of a meta-analysis". Centre of Clinical Epidemiology, Jewish General Hospital, Montreal. April 2013.
39. "Diagnostic meta-analysis of a gold-standard reference test". Symposium on 'Methods for Evaluating Medical Tests & Biomarkers' organized by The Cochrane Collaboration, Birmingham, UK. July 2013.
40. "Measuring the mortality reductions due to cancer screening". International Biometrics Conference, Florence, Italy, July 2014.
41. "Bayesian estimation of latent class models in the absence of a gold standard". International Biometrics Conference, Florence, Italy, July 2014.
42. "The importance of recognizing heterogeneity in a meta-analysis: The case of evaluating probiotics for prevention of *C. difficile* diarrhea". Biostatistics Seminar Series. Department of Epidemiology, Biostatistics and Occupational Health. September 2014.
43. "Technology Assessment Unit (TAU) of the MUHC". McGill University Health Centre - Medical Grand Rounds, March 2015.
44. "Bias due to a composite reference standard for evaluating test accuracy: The case of evaluating new tests for *Chlamydia trachomatis*." Centre de recherche de Centre Hospitalier de l'Université de Montréal, Montreal, April 2015.
45. "Diagnostic test evaluation in the absence of a gold-standard: Why composite reference standards should be avoided." McGill University Health Centre - Research Institute, Montreal, April 2016.
46. "The problem with composite reference standards". Symposium on 'Methods for Evaluating Medical Tests & Biomarkers' organized by The Cochrane Collaboration, Birmingham, UK. July 2016 (Keynote address).
47. "Latent class analysis: An indispensable tool for diagnostic research". Special Seminar, Department of Epidemiology, Biostatistics and Occupational Health, McGill University, January 2017
48. "Measuring disease prevalence and diagnostic test accuracy in childhood pulmonary tuberculosis: A solution in the absence of a perfect test". Joint Seminar Series - McGill TB Centre and Respiratory Epidemiology and Clinical Research Unit (RECRU), McGill University Health Centre, January 2017

49. "Estimating the efficacy of probiotics for preventing *C. difficile* diarrhea: Advantages of using a Bayesian approach for meta-Analysis". Webinar organized by Canadian Association of Pharmacy Technicians (CAPT), May 2017

Posters

(* graduate student/post-doctoral fellow/research associate)

1. "Identifying response shift statistically at the individual level". McGill University Health Centre Annual Research Day. Montreal. June 2006
2. "Bayesian estimation of diagnostic test parameters in the presence of verification bias". International Biometrics Conference. Montreal. July 2006 (Presented by *Ying Lu)
3. "Estimation of prevalence of tuberculosis infection among Indian healthcare workers: a comparison of conventional and model-based approaches". 37th Union World Conference on Lung Health of the International Union Against Tuberculosis and Lung Disease. Paris. October 2006 (Presented by Madhukar Pai)
4. "Comparison of Coblation Tonsillectomy and Electrocautery Tonsillectomy in Pediatric Patients". Canadian Agency for Drugs and Technologies in Health (CADTH) Symposium, Ottawa. April 2009
5. "Significance of Positive Cultures from Organ Preservation Fluid in Solid Organ Transplantation". Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), Washington DC. October 2008 (Presented by Cedric Yansouni)
6. "Comparison of Eight Commercial Enzyme Immunoassays for the Detection of Toxigenic *Clostridium difficile* in Stool Samples". Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), San Francisco. August 2009 (Presented by Pierre René)
7. "Risk Factors for Nosocomial *Clostridium difficile* Infection and Colonization". Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), San Francisco. August 2009 (Presented by Vivian Loo)
8. "The use of probiotic *Lactobacillus* in the prevention of *Clostridium difficile* diarrhea in adult inpatients receiving antibiotics". Annual symposium of the Canadian Agency for Drugs and Technologies in Health, Vancouver, 2011 (Presented by *Alison Sinclair)
9. "Efficacy of a gentamicin-collagen sponge for surgical site infection prophylaxis in cardiac and colorectal surgery". Annual symposium of the Canadian Agency for Drugs and Technologies in Health, Vancouver, 2011

10. "Negative pressure wound therapy: Is it effective?". Annual symposium of the Canadian Agency for Drugs and Technologies in Health, Vancouver, 2011 (Presented by Xuanqian Xie)
11. "Deviance Information Criterion (DIC) for Non-Identifiable Models: An Application to Diagnostic Test Evaluation in the Absence of a Gold-Standard Test". 32nd annual conference of the International Society of Clinical Biostatistics, Ottawa, August 2011. (Presented by *Yan Zhou)
12. "Evidence supports use of subglottic secretion drainage endotracheal tubes for prevention of ventilator-associated pneumonia". Canadian Agency for Drugs and Technologies in Health 2012 Symposium, Ottawa, 2012 (Presented by *Xuanqian Xie)
13. "Can a urine antigen test impact on diagnosis of community acquired pneumonia and increase use of targeted antibiotics? A systematic review of the evidence". Canadian Agency for Drugs and Technologies in Health 2012 Symposium, Ottawa, 2012 (Presented by *Alison Sinclair)
14. "A Bayesian framework for estimating the incremental value of a diagnostic test in the absence of a gold standard". Symposium on 'Methods for Evaluating Medical Tests & Biomarkers' organized by The Cochrane Collaboration, Birmingham, UK. July 2013.
15. "A Bayesian framework for estimating the incremental value of a diagnostic test in the absence of a gold standard". Joint Statistical Meetings, Montreal, Canada. August 2013.
16. "An examination of the accuracy of a composite reference standard and the bias associated with it". Joint Statistical Meetings, Montreal, Canada. August 2013. (Presented by *Ian Schiller)
17. "Adjusting for missing covariates in Bayesian latent class models for diagnostic test data". Joint Statistical Meetings, Montreal, Canada. August 2013. (Presented by *Zhuo Yu Wang)
18. "Statistics for quantifying heterogeneity in univariate and bivariate meta-analyses of binary data: The case of meta-analyses for diagnostic accuracy". Joint Statistical Meetings, Montreal, Canada. August 2013. (Presented by *Yan Zhou)
19. "Predictors of asymptomatic *Clostridium difficile* colonization on Hospital admission". Association of Medical Microbiology and Infectious Disease Canada, Victoria, Canada. April 2014. (Presented by *Ling Y. Kong)

Articles published or accepted in peer-reviewed journals

(* graduate student/post-doctoral fellow/research associate)

1. **Dendukuri N**, Joseph L. Bayesian approaches to modeling the conditional dependence between diagnostic tests. *Biometrics*, 57(1):158-67. 2001
2. McCusker J, Verdon J, Tousignant P, Poulin de Courval L, **Dendukuri N**, *Belzile E. Rapid emergency department intervention for older people reduces risk of functional decline: Results of a multicentre randomized trial. *Journal of the American Geriatric Society*, 49(10):1272-81. 2001
3. McCusker J, Cole M, **Dendukuri N**, *Belzile E. Delirium in older medical inpatients and subsequent cognitive and functional status: A prospective study. *Canadian Medical Association Journal*, 165(5):575-583. 2001
4. Cole M, McCusker J, **Dendukuri N**, *Han L. Symptoms of delirium among elderly medical inpatients with or without dementia. *Journal of Neuropsychiatry and Clinical Neurosciences*, 14(2):167-75. 2002
5. **Dendukuri N**, Blais L, LeLorier J. High doses of inhaled corticosteroids and the risk of diabetes. *British Journal of Clinical Pharmacology*, 54(1):59-64. 2002
6. Cole M, Dowson L, **Dendukuri N**, *Belzile E. The prevalence and phenomenology of auditory hallucinations among elderly subjects attending an audiology clinic. *International Journal of Geriatric Psychiatry*, 17(5):444-52. 2002
7. *Tamim H, McCusker J, **Dendukuri N**. Proxy reporting of quality of life using the EQ-5D. *Medical Care*, 40(12):1186-1195. 2002
8. McCusker J, **Dendukuri N**, Tousignant P, Verdon J, Poulin de Courval L, *Belzile E. Rapid two-stage emergency department intervention for seniors: Impact on continuity of care. *Academic Emergency Medicine*, 10(3):233-243. 2003
9. Cole M, **Dendukuri N**, McCusker J, *Han L. An empirical study of different diagnostic criteria for delirium. *Journal of Neuropsychiatry and Clinical Neurosciences*, 15(2):200-207. 2003
10. McCusker J, Jacobs P, **Dendukuri N**, Latimer E, Tousignant P, Verdon J. Cost-effectiveness of a brief 2-stage emergency department intervention for high-risk elders: Results of a randomized controlled trial. *Annals of Emergency Medicine*, 41(1):233-243. 2003.
11. **Dendukuri N**, Normand S-L. T, McNeil B. J. Impact of cardiac service availability on case-selection for angiography and survival associated with angiography. *Health Services Research*, 38:21-40. 2003
12. Cole M, McCusker J, **Dendukuri N**, *Han L. The prognostic significance of sub-syndromal delirium in elderly medical inpatients. *Journal of the American Geriatric Society*, 51:754-760. 2003

13. Cole M, **Dendukuri N**. Risk factors for depression among elderly community subjects: A systematic review and meta-analysis. *American Journal of Psychiatry*, 160(6):1147-1156. 2003
14. McCusker J, Cole M, **Dendukuri N**, Han L, *Belzile E. The course of delirium in older medical inpatients: A prospective study. *Journal of General Internal Medicine*, 18(9):696-704. 2003
15. McCusker J, Cole M, **Dendukuri N**, *Belzile E. Does delirium increase hospital stay? *Journal of American Geriatric Society*, 51(11):1539-46. 2003
16. **Dendukuri N**, McCusker J, *Belzile E. The identification of seniors at risk (ISAR) screening tool: Further evidence on concurrent and predictive validity. *Journal of the American Geriatric Society*, 52(2):290-6. 2004
17. **Dendukuri N**, Rahme E, Bèlisle P, Joseph L. Sample size determination for studies involving two non-gold standard diagnostic tests. *Biometrics*, 60(2):388-97. 2004
18. **Dendukuri N**, McCusker J, Bellavance F, Verdon J, Cardin S. Comparing the validity of different sources of information on emergency department visits: A latent class analysis. *Medical Care*, 43(3):266-75. 2005
19. McCusker J, **Dendukuri N**, Cardinal L, Laplante J, Bambonye L. Nursing Work Environment and Quality of Care: differences between units at the same hospital. *International Journal of Health Care Quality Assurance*, 17(6):313-322. 2004
20. Sewitch MJ, McCusker J, **Dendukuri N**, Yaffe MJ. Depression in frail elders: impact on family caregivers. *International Journal of Geriatric Psychiatry*, 19(7):655-65. 2004
21. Ouimet MA, Dion D, Élie M, **Dendukuri N**, *Belzile E. If you ever had Alzheimer's disease, would you want to know? A survey with 200 cognitively intact elderly subjects. *Canadian Family Physician*, 50:1671-7. 2004
22. McCusker J, Cole M, **Dendukuri N**, *Belzile E. The Delirium Index, a Measure of the Severity of Delirium: New Findings on Reliability, Validity, and Responsiveness. *Journal of the American Geriatric Society*, 52:1744-1749. 2004
23. Cole M, **Dendukuri N**. The feasibility and effectiveness of interventions to prevent the onset of depression in older community subjects: a systematic review. *International Journal of Geriatric Psychiatry*, 19(11):1019-1025. 2004
24. *Naslafkih A, **Dendukuri N**, Brophy JM, Sestier F. Geographical variations in post myocardial infarction mortality and their impact on risk selection. *Journal of Insurance Medicine*, 36:282-91. 2004
25. **Dendukuri N**, Reinhold C. Correlation and Regression. *American Journal of Roentgenology*, 185(1):3-18. 2005

26. McCusker J, Cole M, Dufouil C, **Dendukuri N**, Latimer E, Windholz S, Elie M. The prevalence and correlates of major and minor depression in older medical inpatients. *Journal of the American Geriatrics Society*, 53(8):1344-53. 2005
27. Hadgu A, **Dendukuri N**, Hilden J. The Evaluation of Nucleic Acid Amplification Tests in the Absence of a Perfect Gold-Standard Test: A Review of the Epidemiological and Statistical Issues. *Epidemiology*, 16(5):604-612. 2005
28. Yaffe MJ, Primeau F, McCusker J, Cole MG, *Belzile E, **Dendukuri N**, Elie M, Laplante J. Psychiatric Outpatient Consultation for Seniors - Perspectives of Family Physicians, Consultants and patients/family: a descriptive study. *Biomed Central Family Practice*, 6(1):1-15. 2005
29. **Dendukuri N**, Costa V, McGregor M, Brophy J. A systematic review of probiotics for prevention and treatment of clostridium difficile-associated diarrhea. *Canadian Medical Association Journal*, 173(2):167-70. 2005
30. McCusker J, **Dendukuri N**, Cardinal L, Katofsky, Riccardi, M. Assessment of the work environment of multidisciplinary hospital staff. *International Journal of Quality of Health Care*, 18(6-7):543-51. 2005
31. Grant J, Ramman-Haddad L, **Dendukuri N**, Libman M. Transmission rate of MRSA before and after Introduction of new protocol. *Infection Control and Hospital Epidemiology*, 27(2):191-4. 2006
32. Cole M, McCusker J, Elie M, **Dendukuri N**, Latimer E, *Belzile E. Systematic detection and multidisciplinary care of depression in older medical inpatients: a randomised trial. *Canadian Medical Association Journal*, 174(1):38-44. 2006
33. Ligthart S, Vlemmix V, **Dendukuri N**, Brophy J. The cost-effectiveness of Sirolimus eluting stents - evaluating the evaluations. *Canadian Medical Association Journal*, 176 (2):199-205. 2007
34. **Dendukuri N**, Khetani K, McIsaac M, Brophy J. Testing for HER2 positive breast cancer: A systematic review and cost-effectiveness analysis. *Canadian Medical Association Journal*, 176(10):1429-34. 2007
35. Mesurole B, Kadoch L, El-Khoury M, Lisbona A, **Dendukuri N**, Foulkes W. Sonographic Features of Breast Carcinoma Presenting as Masses in BRCA Gene Mutation Carriers *J of Ultrasound Medicine*, 26:817-824. 2007
36. **Dendukuri N**, Chiu K, Brophy J. Validity of Electron Beam Computed Tomography for Coronary Artery Disease: A Systematic Review and Meta-analysis. *Biomed Central Medicine*, 5(1):35. 2007
37. Mayo NE, Scott SC, **Dendukuri N**, Ahmed S, Wood-Dauphinee S. Identifying response shift statistically at the individual level. *Quality of Life Research*, 17(4):627-39. 2008

38. Pai M, **Dendukuri N**, *Wang L, Joshi R, Kalantri S and Rieder H. Improving the estimation of tuberculosis infection prevalence using T-cell-based assay and mixture models. *International Journal of Tuberculosis and Lung Disease*, 12(8):895-902. 2008
39. Hanley J, **Dendukuri N**. Efficient sampling approaches to address confounding in database studies. *Statistical Methods in Medical Research*, 18(1):81-105. 2008
40. Alkuwari E, Khetani K, **Dendukuri N**, *Wang L, Auger M. Quantitative assessment of nuclear grooves in fine-needle aspirations of the thyroid - a retrospective cytohistological study of 94 cases. *Analytical and Quantitative Cytology and Histology*, 31(3):161-169. 2009.
41. **Dendukuri N**, Hadgu A, *Wang L. Modeling conditional dependence between diagnostic tests: A multiple latent variable model. *Statistics in Medicine*, 28(3):441-61. 2009
42. *van der Avoort C, *Filion K, **Dendukuri N**, Brophy J. Microvolt T-Wave Alternans as a Predictor of Non-Ischemic Cardiac Events: A Systematic Review and Meta-Analysis. *Biomed Central Cardiology*, 9:5. 2009
43. Steingart K, **Dendukuri N**, Henry M, *Schiller I, Payam N, Hopewell PC, Ramsay A, Pai M, Laal S. Performance of purified antigens for serodiagnosis of pulmonary Tuberculosis : a Meta-analysis. *Clinical and Vaccine Immunology*, 16(2):260-76. 2009
44. Filion K, Xie X, van der Avoort C, **Dendukuri N**, Brophy J. Microvolt T-wave alternans and the selective use of implantable cardioverter defibrillators for primary prevention: A cost-effectiveness study. *International Journal of Technology Assessment in Health Care*, 25(2):151-60. 2009
45. *Blagojevic A, Delaney JA, Lévesque LE, **Dendukuri N**, Boivin J-F, Brophy JM. Absence of an interaction between statins and clopidogrel after percutaneous coronary intervention: A cohort study. *Pharmacoepidemiology and Drug Safety*, 18(5):362-9. 2009
46. Oughton M, Loo V, **Dendukuri N**, Fenn S, Lynch A, Libman M. Plain soap and water are superior to alcohol rub and antiseptic wipes for removal of *Clostridium difficile* by handwashing. *Infection Control and Hospital Epidemiology*, 30(10):939-44. 2009
47. Joseph KS, Fahey J, **Dendukuri N**, Allen V, O'Campo P, Dodds L, Liston RM, Allen AC. Recent changes in maternal characteristics by socioeconomic status. *Journal of Obstetrics and Gynecology Canada*, 31(5):422-433. 2009
48. *Fontela PS, Pai N, *Schiller I, **Dendukuri N**, Ramsay A, Pai M. Quality and Reporting of Diagnostic Accuracy Studies in TB, HIV and Malaria: Evaluation Using QUADAS and STARD Standards. *PLOS One*, 4(11):e7753. 2009

49. *Afilalo J, Eisenberg MJ, Morin J, Bergman H, Monette J, Noiseux N, Perrault LP, Alexander KP, Langlois Y, **Dendukuri N**, Chamoun P, Kasparian G, Robichaud S, Gharacholou SM, Boivin J. Gait Speed as an Incremental Predictor of Mortality and Major Morbidity in Elderly Patients Undergoing Cardiac Surgery. *Journal of the American College of Cardiologists*, 56(20): 1668-76, 2010
50. *Filion K, *El-Khoury F, *Bielinski M, *Schiller I, **Dendukuri N**, Brophy J. Omega-3 Fatty Acids In High-risk Cardiovascular Patients: A meta-analysis Of Randomized Controlled Trials. *BMC Cardiovascular Disorders*, 10:24. 2010
51. *Lu Y, **Dendukuri N**, *Schiller I, Joseph L. A Bayesian approach to adjusting for verification bias in diagnostic test studies. *Statistics in Medicine*, 29(24): 2532-43, 2010
52. **Dendukuri N**, Bèlisle P, Joseph L. Bayesian sample size determination for diagnostic test studies in the absence of a gold-standard test: Comparing identifiable to non-identifiable models. *Statistics in Medicine*, 29(26): 2688-97, 2010
53. *Xie X, **Dendukuri N**, McGregor M. Percutaneous Radiofrequency ablation for the treatment of hepatocellular carcinoma: A Health Technology Assessment. *International Journal of Technology Assessment in Health Care*, 26(4): 390-7, 2010
54. *Xie X, McGregor M, **Dendukuri N**. The clinical effectiveness of negative pressure wound therapy: A systematic review. *Journal of Wound Care*, 19(11): 490-5, 2010
55. *DeGroot J, **Dendukuri N**, Bossuyt PM, Reitsma JB, Janssen KJM, Moons KGM. Adjusting for differential verification bias in diagnostic accuracy studies: A Bayesian approach. *Epidemiology*, 22(2): 234-41, 2011
56. **Dendukuri N**, *Wang L, Hadgu A. Evaluating diagnostic tests for *Chlamydia trachomatis* in the absence of a gold-standard: A comparison of 3 statistical methods. *Statistics in Biopharmaceutical Research*, 3(2): 385-397, 2011
57. *Cadieux G, Buckeridge D, Jacques A, Libman M, **Dendukuri N** and Tamblyn R. Accuracy of syndrome definitions based on diagnoses in physician claims. *BMC Public Health*, 11:17, 2011
58. *DeGroot J, Bossuyt PM, Reitsma JB, **Dendukuri N**, Janssen KJM, Moons KGM. Verification problems in diagnostic accuracy studies: consequences and solutions. *British Medical Journal*, 343:d4770, 2011
59. Steingart KR, Flores LL, **Dendukuri N**, *Schiller I, Laal S, Ramsay A, Hopewell PC, Pai M. Commercial serological tests for the diagnosis of active pulmonary and extrapulmonary tuberculosis: An updated systematic review and meta-analysis. 8(8): e1001062, 2011
60. Flores LL, Steingart KR, **Dendukuri N**, *Schiller I, Minion J, Pai M, Ramsay A, Henry M, Laal S. Antigen detection tests for the diagnosis of tuberculosis: A systematic review and meta-analysis. *Clinical and Vaccine Immunology*, 18(10): 1616-1627, 2011

61. Loo V, Bourgault A-M, Poirier L, Lamothe F, Michaud S, Turgeon N, Toye B, Beaudoin A, Frost EH, Gilca R, Brassard P, **Dendukuri N**, Beliveau C, Oughton M, Brukner I, Dascal A. Host and Pathogen Determinants of *C. difficile* Infection and Colonization. *New England Journal of Medicine*, 365(18): 1693-1703, 2011
62. *DeGroot J, **Dendukuri N**, Moons K, Brophy J. Adjustment for selection bias in meta-analysis of diagnostic tests. *American Journal of Epidemiology*, 175(8): 847-53, 2012
63. Hadgu A, **Dendukuri N**, *Wang L. Evaluation of Screening Tests for Chlamydia Trachomatis: Bias Associated with the Patient Infected Status Algorithm. *Epidemiology*, 23: 72-82, 2011
64. René P, Frenette CP, *Schiller I, **Dendukuri N**, Brassard P, Fenn S, Loo VG. Comparison of Eight Commercial Enzyme Immunoassays for the Detection of *Clostridium difficile* from Stool Samples. *Journal of Clinical Microbiology*, 73:94-96, 2012
65. Yansouni CP, **Dendukuri N**, *Liu G, Fernandez M, Frenette C, Paraskevas S, Sheppard DC. Positive Cultures of Organ Preservation Fluid Predict Post-Operative Infections in Solid Organ Transplantation Recipients. *Infection Control and Hospital Epidemiology*, 33 (7): 672-80, 2012
66. **Dendukuri N**, *Schiller I, Joseph L, Pai M. Bayesian meta-analysis of the accuracy of a test for tuberculous pleuritis in the absence of a gold-standard reference. *Biometrics*, doi: 10.1111/j.1541-0420.2012.01773.x, 2012 (Epub ahead of print)
67. *Cadieux G, Buckeridge DL, Jacques A, Libman M, **Dendukuri N**, Tamblyn R. Patient, physician, encounter, and billing characteristics predict the accuracy of syndromic surveillance case definitions. *BMC Public Health*, 12:166, 2012
68. *Zwerling A, Cojocariu M, McIntosh F, Pietrangelo F, Behr MA, Schwartzman K, Benedetti A, **Dendukuri N**, Menzies D, Pai M. TB screening in Canadian Health Care Workers using Interferon-gamma release assays. *PLoS One*, 7(8):e43014, 2012
69. *Ling DI, Crepeau CA, Dufresne M, Khan S, Quach C, **Dendukuri N**, Schwartzman K, Menzies D, Lands LC, Pai M. Interferon-gamma release assays for childhood tuberculosis: do they impact diagnostic and treatment decisions by pediatric respirologists? *Pediatric Infectious Disease Journal*, 31(12):1258-62, 2012
70. *Bally M, **Dendukuri N**, Sinclair A, Ahern SP, Poisson M, Brophy J. A network meta-analysis of antibiotics for treatment of hospitalized patients with suspected or proven methicillin-resistant *Staphylococcus aureus* infection. *International Journal of Antimicrobial Agents*, 40(6):479-95, 2012
71. Verma-Kumar S, Abraham D, **Dendukuri N**, Cheeran JV, Sukumar R, Balaji KN. Serodiagnosis of Tuberculosis in Asian Elephants (*Elephas maximus*) in Southern India: A Latent Class Analysis. *PLoS One*, 7(11):e49548, 2012

72. Steingart KR, Sohn H, *Schiller I, Kloda LA, Boehme CC, Pai M, Dendukuri N. Xpert MTB/RIF assay for pulmonary tuberculosis and rifampicin resistance in adults. *Cochrane Database Syst Rev*, 1:CD009593.pub2, 2013
73. Ling DI, Nicol MP, Pai M, Pienaar S, Dendukuri N, Zar HJ. Incremental value of T-SPOT.TB for diagnosis of active pulmonary tuberculosis in children in a high-burden setting: a multivariable analysis. *Thorax*, 68(9): 860-6, 2013
74. *Sinclair A, *Xie X, Teltscher M, **Dendukuri N**. A urine pneumococcal antigen test (BinaxNOW *Streptococcus pneumoniae*) for the diagnosis of community acquired *Streptococcus pneumoniae* pneumonia: A systematic review and Bayesian meta-analysis. *Journal of Clinical Microbiology*, 51(7): 2303-10, 2013
75. *Zhou Y, **Dendukuri N**. Statistics for quantifying heterogeneity in univariate and multivariate meta-analyses of binary data: The case of meta-analyses for diagnostic accuracy. *Statistics in Medicine*, 33 (16), 2701-2717, 2014
76. Hanley J, McGregor M, *Liu Z, Strumpf E, **Dendukuri N**. Measuring the Mortality Impact of Breast Cancer Screening. *Canadian Journal of Public Health* 104(7): e437-42, 2013
77. Steingart KR, Sohn H, *Schiller I, Kloda LA, Boehme CC, Pai M, Dendukuri N. Xpert MTB/RIF assay for pulmonary tuberculosis and rifampicin resistance in adults. *Cochrane Database Syst Rev*, 1:CD009593.pub3, 2014
78. *Denkinger C, Schumacher SG, Boehme CC, **Dendukuri N**, Pai M, Steingart KR. Xpert[®] MTB/RIF assay for the diagnosis of extrapulmonary tuberculosis: a systematic review and meta-analysis. *European Respiratory Journal*, 44(2):435-46, 2014
79. *Ling DI, Pai M, Schiller I, **Dendukuri N**. A Bayesian framework for estimation of the incremental value of a diagnostic test in the absence of a gold standard. *BMC Research Methods*, 14:67, 2014
80. *Tagmouti S, Slater M, Benedetti A, Kik SV, Banaei N, Cattamanchi A, Metcalfe J, Dowdy D, van Zyl Smit R, **Dendukuri N**, Pai M, *Denkinger C. Reproducibility of Interferon Gamma Release Assays: a Systematic Review. *Annals of the American Thoracic Society*, 11(8): 1267-76, 2014
81. Marelli A, Ionescu-Ittu R, Mackie A, Guo L, **Dendukuri N**, Kaouache M. Life-time Prevalence of Congenital Heart Disease in the General Population from 2000 to 2010. *Circulation*, 130(9):749-756, 2014
82. *Liu Z, Hanley J, Saarela O, **Dendukuri N**. A conditional approach to measure mortality reductions due to cancer screening. *International Statistical Review*, 83(3): 493-510, 2015
83. *Kong LY, **Dendukuri N**, *Schiller I, Bourgault AM, Brassard P, Poirier L, Lamothe F, Béliveau C, Michaud S, Turgeon N, Toye B, Frost E, Gilca R, Dascal A, Loo VG. Predictors of Asymptomatic *Clostridium difficile* Colonization on Hospital Admission. *American Journal of Infection Control*, 43 (3), 248-253, 2015

84. *Cadieux G, Tambllyn R, Buckeridge D, **Dendukuri N**. Validation of diagnostic groups based on healthcare utilization data should adjust for sampling strategy. *Medical Care*, Epub, 2015
85. Buczinski S, Olivett T, **Dendukuri N**. Bayesian estimation of the accuracy of the calf respiratory scoring chart and ultrasonography for the diagnosis of bovine respiratory disease in pre-weaned dairy calves. *Preventive Veterinary Medicine*, 119(3): 227-231, 2015
86. STARD group. STARD 2015: an updated list of essential items for reporting diagnostic accuracy studies. *BMJ* 2015
87. Detjen A, DiNardo A, Leyden J, Steingart K, Menzies D, *Schiller I, Dendukuri N, Mandalakas A. Xpert MTB/RIF for the Diagnosis of Pulmonary Tuberculosis in Children - A systematic review and meta-analysis. *Lancet Infectious Diseases*, 3(6): 452-461, 2015
88. *Schiller I, *van Smeden M, Hadgu A, Libman M, Reitsma JB, **Dendukuri N**. Bias due to composite reference standards in diagnostic accuracy studies. *Statistics in Medicine*, 35(9):1454-70, 2016
89. *Schumacher S, *van Smeden M, **Dendukuri N**, Joseph L, Nicol M, Pai M, Zar H. Diagnostic test accuracy in childhood pulmonary tuberculosis: a Bayesian latent class analysis. *American Journal of Epidemiology*, 184(9): 690-700, 2016
90. Martin J, Polisena J, **Dendukuri N**, Rhainds M, Sampietro-Colom L. Hospital and Regional Health Technology Assessment in Canada: Current State and Next Steps. *International Journal Technology Assessment in Health Care*, 32(3):175-80, 2016
91. Shah M, Hanrahan C, *Wang ZY, **Dendukuri N**, Lawn SD, Denkinger CM, Steingart KR. Lateral flow urine lipoarabinomannan assay for detecting active tuberculosis in HIV-positive adults. *Cochrane Database of Systematic Reviews*, 5:CD011420, 2016
92. *Yee C, *Suarthana E, **Dendukuri N**, Nicolau I, Semret M, Frenette C. Evaluating the Impact of the Multiplex Respiratory Virus Panel PCR Test on the Clinical Management of Suspected Respiratory Viral Infections in Adult Patients in a Hospital Setting. *American Journal of Infection Control*, 44(11): 1396-1398, 2016
93. *Sinclair A, *Xie X, **Dendukuri N**. *Lactobacillus* probiotics in the prevention of *Clostridium difficile* associated diarrhoea: A systematic review and meta-analysis. *CMAJ Open*, 4(4): E706-E718, 2016
94. *Wang Z, **Dendukuri N**, Joseph L. Understanding the effects of conditional dependence in research studies involving imperfect diagnostic tests. *Statistics in Medicine*, 36(3): 466-480, 2016
95. Timsit E, **Dendukuri N**, Schiller I, Buczinski S. Diagnostic accuracy of clinical illness for bovine respiratory disease (BRD) diagnosis in beef cattle placed in feedlots: a systematic literature review and hierarchical Bayesian latent-class meta-analysis. *Preventive Veterinary Medicine*, 135: 67-73, 2016

96. Cadieux G, Campbell J, **Dendukuri N**. Systematic review of the accuracy of antibody tests used to screen asymptomatic adults for hepatitis C infection. *CMAJ Open*, 4(4): E737-E745, 2016
97. Kostoulas P, Nielsen SS, Branscum AJ, Johnson WO, **Dendukuri N**, Dhand NK, Gardner IA. STARD-BLCM: Standards for the reporting of diagnostic accuracy studies that use Bayesian latent class models. *Preventive Veterinary Medicine*, 138:37-47, 2017
98. *Xie X, *Sinclair A, **Dendukuri N**. Incorporating the results of a diagnostic meta-analysis in a cost-effectiveness analysis in the absence of a gold-standard reference test. *Research Synthesis Methods*, doi: 10.1002/jrsm.1243, 2017
99. Dufour S, Durocher J, Dubuc J, **Dendukuri N**, Hassan S, Buczinski S. Bayesian estimation of sensitivity and specificity of a milk pregnancy-associated glycoprotein-based ELISA and of transrectal ultrasonographic exam for diagnosis of pregnancy at 28 to 45 days following breeding in dairy cows. *Preventive Veterinary Medicine*, 140:122-133, 2017
100. *Wang Z, **Dendukuri N**, Pai M, Joseph L. Taking costs and diagnostic test accuracy into account when designing prevalence studies: An application to childhood tuberculosis prevalence. Accepted by *Medical Decision Making*
101. *Bally M, **Dendukuri N**, *Rich B, Nadeau L, Helin-Salmivaara A, Garbe E, Brophy JM. Risk of acute myocardial infarction with NSAIDs in real-world use: a Bayesian meta-analysis of individual patient data. *British Medical Journal (BMJ)*, 357:j1909, 2017
102. Semret M, *Schiller I, Jardin B-A, Frenette C, Loo VG, Papenburg J, McNeil SA, **Dendukuri N**. Multiplex Respiratory Virus Testing for Antimicrobial Stewardship: A prospective assessment of antimicrobial utilization and clinical outcomes among hospitalized adults. Accepted by *Journal of Infectious Diseases*

Letters in peer-reviewed journals

1. **Dendukuri N**, Brophy J. Inappropriate use of meta-analysis to estimate efficacy of probiotics. *American Journal of Gastroenterology*, 102(1): 201. 2007
2. Hanley JA, **Dendukuri N**, Begg CB. Multiple Imputation for Correcting Verification Bias. *Statistics in Medicine*, 26(15): 3046-3047, 2007
3. Steingart K, **Dendukuri N**, Schiller I. In reply to False-positive XpertW MTB/RIF assays in previously treated patients. *International Journal of Tuberculosis and Lung Disease*, 19(3):366-367, 2015

Non-peer reviewed letters

1. *van Smeden M, Reitsma JB, *Schiller I, **Dendukuri N**. Commentary on: “A Meta-Analysis of Typhoid Diagnostic Accuracy Studies: A Recommendation to Adopt a Standardized Composite Reference”. URL: <http://www.plosone.org/annotation/listThread.action?root=87981>

Manuscripts submitted for peer-review

(* graduate student/post-doctoral fellow/research associate)

1. *Almeida N, *Suarthana E, **Dendukuri N**, Brophy J. Cardiac Resynchronization Therapy in Heart Failure: Do Evidence-based guidelines follow the evidence? Submitted to *Circulation: Cardiovascular Quality and Outcomes*
2. **Dendukuri N**, Schiller I, de Groot J, Libman M, Moons KGM, Reitsma JB, van Smeden M. Concerns with using composite reference standards in diagnostic research. Submitted to *British Medical Journal*
3. *Wang Z, **Dendukuri N**, Zar H, Joseph L. Modeling Conditional Dependence Among Multiple Diagnostic Tests. Submitted to *Biometrics*
4. Abulhasan YB, Rachel SP, Chatillon-Angle M-O, Alabdulrahee NS, *Schiller I, **Dendukuri N**, Angle MR, Frenette CP. “Healthcare-Associated Infections in the Neurological Intensive Care Unit: Results of a 6-year Surveillance Study at a Major Tertiary Care Center” Submitted to *American Journal of Infection Control*

Technology Assessment Reports prepared for McGill University Health Centre

(available from <http://www.mcgill.ca/tau>)

(* graduate student/post-doctoral fellow/research associate)

1. **Dendukuri N**, Costa V, McGregor M, Brophy J. Probiotics for the prevention and treatment of *Clostridium difficile*. January 2005.
2. **Dendukuri N**, Brophy J. Cerebral microdialysis as a tool for neuromonitoring following brain injury. July 2005
3. **Dendukuri N**, Brophy J. Testing for HER2 positive breast cancer: A cost-effectiveness analysis. March 2006

4. *Chiu K, **Dendukuri N**, Brophy J. Bayesian meta-analysis of electron beam computed tomography for predicting risk of hard outcomes and association with angiography. January 2007
5. *Xie X, **Dendukuri N**, McGregor M. Comparison of Coblation Tonsillectomy and Electrocautery Tonsillectomy in Pediatric Patients. December 2008
6. *Esfandiari S, **Dendukuri N**, McGregor M. Clinical efficacy and cost of Allogenic Acellular Dermal Matrix (AADM) in implant-based breast reconstruction of post mastectomy cancer patients. May 2009
7. *Nassef M, **Dendukuri N**, McGregor M. L'utilisation des implants Carmustine (Gliadel wafer) chez les patients atteints de gliome malin. May 2009
8. *Xie X, **Dendukuri N**, McGregor M. Percutaneous Radiofrequency Ablation for treatment of hepatocellular carcinoma. May 2009
9. *Pan I, **Dendukuri N**, McGregor M. Efficacy and cost-effectiveness of Collatamp-G for infection prophylaxis in cardiac surgery. December 2009
10. *Xie X, **Dendukuri N**, McGregor M. Radiofrequency ablation for treatment of Barrett's esophagus: A systematic review and cost analysis. December 2009
11. *Pan I, **Dendukuri N**. Subthalamic Deep Brain Stimulation (DBS): Clinical efficacy, safety and cost compared to medical therapy for the treatment of Parkinson's Disease. December 2009
12. *Xie X, **Dendukuri N**, McGregor M. The use of probiotics in the prevention and treatment of Clostridium Difficile diarrhea: An Update. December 2009
13. *Pan I, **Dendukuri N**. Efficacy and cost-effectiveness of a gentamicin-loaded collagen sponge as an adjuvant antibiotic prophylaxis for colorectal surgery. June 2010
14. *Pan I, **Dendukuri N**, McGregor M. Argon beam coagulation in orthopaedic, urological and thoracic surgery at the MUHC: A Brief Report. December 2010
15. **Dendukuri N**, *Xie X, McGregor M. Fiducial markers for improving treatment margins in radiotherapy for prostate cancer. March 2011
16. Sinclair A, Xie X, **Dendukuri N**. The Use of Lactobacillus probiotics in the Prevention of Antibiotic Associated Clostridium Difficile Diarrhea. October 2011
17. *Sinclair A, *Xie X, **Dendukuri N**. The clinical effectiveness and cost of a pneumococcal urine antigen immunochromatographic test (BinaxNOW Streptococcus pneumoniae) in the diagnosis of community acquired Streptococcus pneumoniae pneumonia in patients admitted to hospital. December 2011
18. *Xie X, *Nicolau I, McGregor M, **Dendukuri N**. Subglottic Secretion Drainage Endotracheal Tubes for Prevention of Ventilator-Associated Pneumonia. December 2011

19. *Nicolau I, *Pan I, *Xie X, McGregor M, **Dendukuri N**. Drotrecogin Alfa (Activated) in Severe Sepsis: An update. March 2012
20. *Sinclair A, **Dendukuri N**, McGregor M. Use of serum procalcitonin levels in treatment decisions for adult patients in the intensive care unit. July 2012
21. *Nicolau I, **Dendukuri N**. Balloon Catheter Dilation for Chronic Rhinosinusitis. October 2012
22. *Nicolau I, *Xie X, McGregor M, **Dendukuri N**. Evaluation of Acellular Dermal Matrix for Breast Reconstruction: An Update. November 2012
23. *Xie X, **Dendukuri N**, McGregor M. Single-dose Intraoperative Radiotherapy Using Intrabeam for Early-stage Breast cancer: A Health Technology Assessment. November 2012
24. *Sinclair A, *Nicolau N, *Xie X, **Dendukuri N**, McGregor M. The effectiveness and safety of rituximab (anti-CD20) in neurologic autoimmune diseases. August 2013
25. *Nicolau I, **Dendukuri N**. Renal denervation for resistant hypertension. August 2013
26. *Xie X, *Benjamin Rich, **Dendukuri N**. Islet transplantation in patients with Type 1 diabetes mellitus. April 2014
27. *Sinclair A, **Dendukuri N**. Excimer laser atherectomy for uncrossable lesions and improperly deployed coronary stents. June 2014
28. *Almeida N, **Dendukuri N**. Single-dose Intraoperative Radiotherapy Using Intrabeam for Early-stage Breast cancer: An Update. June 2015
29. *Suarthana E, *Almeida N, **Dendukuri N**. Cardiac resynchronization therapy in heart failure. January 2016
30. *Saab L, *Suarthana E, *Almeida N, **Dendukuri N**. Use of biventricular pacing in atrioventricular heart block. January 2016
31. *Almeida N, **Dendukuri N**. Radiofrequency ablation for the treatment of Barretts esophagus with high-grade and lowgrade dysplasia: An update. May 2016
32. *Forero F, **Dendukuri N**. A Mini-Health Technology Assessment of Linear and Radial Endobronchial Ultrasound (EBUS) and Electromagnetic Navigation Bronchoscopy (ENB) in the Diagnosis and Staging of Lung Cancer in Adults. May 2016
33. *Almeida N, *Saab L, **Dendukuri N**. Use of Extracorporeal Membrane Oxygenation for Cardiac Life Support in adult subjects. May 2017
34. *Almeida N, **Dendukuri N**. Plerixafor as first-line choice for stem cell mobilization in non-Hodgkins Lymphoma and multiple myeloma patients. May 2017

Statistical Software

(Available online at <http://www.medicine.mcgill.ca/epidemiology/dendukuri/>)

1. WinBUGS programs for modeling conditional dependence between two non-gold standard diagnostic tests using fixed or random effects
2. LCMR: An R library to estimate latent class models with random effects using a Bayesian approach
3. BLCM: A user-friendly program for Bayesian estimation of latent class models
4. HSROC: R library for joint meta-analysis of diagnostic test sensitivity and specificity with or without a gold standard reference

Peer Review

Peer review for journals

American Journal of Epidemiology, American Journal of Managed Care, Annals of Internal Medicine, Biometrics, BMC Research Methods, Canadian Journal of Statistics, Clinical Psychology Review, Communications in Statistics, Computational Statistics and Data Analysis, Disease Markers and Cancer Biomarkers, Epidemiology, Indian Journal of Medical Research, International Journal of Tuberculosis and Lung Disease, Journal of Clinical Gastroenterology, Medical Decision Making, Open Medicine, Personalized Medicine, PLOS One, Radiology, South African Statistical Journal, Statistics in Medicine, Statistical Methods for Biopharmaceutical Research, The Lancet

Member of peer-review committee for research grant proposals

1. Canadian Institutes of Health Research (CIHR) Operating Grants Competition (Fall 2009, Winter 2013, Winter 2015)
2. Fonds de la Recherche en Santé du Québec (FRSQ) Operating Grants Competition (2010-2012)
3. Fonds de la Recherche en Santé du Québec (FRSQ) Chercheur Boursier Competition (2015)
4. Fonds de la Recherche en Santé du Québec (FRSQ) Chercheur Boursier Competition (2016)

External reviewer of research protocols/grant proposals/conference abstracts

1. Natural Science and Engineering Research Council of Canada (NSERC)

2. Canadian Agency for Drugs and Technologies in Health (CADTH)
3. ZonMw: The Netherlands Organisation for Health Research and Development
4. Health Technology Assessment International (HTAi)
5. Medical Research Council (MRC), United Kingdom

External examiner of graduate theses

- 2010, Marie-Claude Breton, Ph.D., Le risque de mortalité périnatale à l'asthme et à l'utilisation de corticostéroïdes inhalés pendant le grossesse, Faculté de pharmacie Université de Montréal (Supervisor: Lucie Blais)
- 2017, Tracy Yuen, Generating evidence to streamline the clinical pathway in autism spectrum disorder using simulation models: Cost-effectiveness comparisons of screening and genetic testing strategies, Institute of Health Policy, Management and Evaluation, University of Toronto (Supervisor: Wendy Ungar)

Teaching (outside of McGill University)

- Workshop on Bayesian Methods for Health Technology Assessment. Three-hour workshop at Canadian Association for Drugs and Technologies in Health (CADTH) 2009 Symposium, Ottawa. April 2009
- Introduction to Bayesian methods in Biostatistics. Two-week course at Indian Institute of Public Health, Hyderabad. April 2009
- Introduction to Bayesian methods in Biostatistics. One-week course at Indian Institute of Public Health, Hyderabad. April 2010
- One-day workshop on Bayesian methods for adjustment of bias in epidemiologic studies (with Paul Gustafson, University of British Columbia). June 2010
- Lecture on Bayesian Methods for Meta-analysis. One-hour workshop at Réseau Québécois de recherche sur l'usage des médicaments (RQRUM) Workshop on Meta-analysis, Montreal. May 2011
- Lectures on 'Diagnostic test evaluation in the absence of a gold-standard' as part of course on 'Advanced tuberculosis diagnostic research', Montreal. July 2011
- Lectures on 'Bayesian estimation' and 'Latent class models' as part of workshop on 'Diagnostic test evaluation in the absence of a (gold) reference standard', Julius Centre for Primary Care and Health Sciences, Utrecht, Netherlands. September 2011
- Lectures on 'Diagnostic test evaluation in the absence of a gold-standard' as part of course on 'Advanced tuberculosis diagnostic research', Montreal. July 2012

- One-day workshop on 'Introduction to Bayesian analysis in Biostatistics', St. John's Research Institute, Bangalore, India. November 2012
- Two-day workshop on 'Bayesian latent class models for prevalence estimation and diagnostic test evaluation in the absence of a gold-standard', Faculty of Veterinary Medicine, Université de Montréal, Ste. Hyacinthe, Quebec. November 2015
- Workshop on 'Accessible Bayesian Methods for Evidence Based Medicine' at the Canadian Association for Drugs and Technologies in Health (CADTH) Symposium. April 2016
- Workshop on 'Accessible Bayesian Methods for Health Technology Assessment' at the Canadian Association for Drugs and Technologies in Health (CADTH). December 2016

McGill University Activities (Department of Epidemiology and Biostatistics unless otherwise specified)

Teaching

- Sep - Nov 2000, Guest lecturer, 513-607A: Principles of Inferential Statistics, 4 credits
- June 2001, Instructor, 513-694L: Inferential Statistics II, 2 credits
- Jan - Feb 2002, Co-Instructor, 513-651B: Bayesian Methods in Medicine, 1 credit
- June 2002, Instructor, 513-694L: Inferential Statistics II, 2 credits
- June 2003, Instructor, 513-694L: Inferential Statistics II, 2 credits
- June 2005, Instructor, 513-694L: Inferential Statistics II, 2 credits
- Mar - May 2006, Co-Instructor, 513-668: Statistical Models in Epidemiology, 2 credits
- June 2006, Instructor, 513-694L: Inferential Statistics II, 2 credits
- Jan - Apr 2008, Co-Instructor, BIOS602: Regression models, 3 credits
- Nov 2008, Guest lecturer, EPIB 628: Measurement in Epidemiology, 3 credits
- Nov 2009, Guest lecturer, EPIB 628: Measurement in Epidemiology, 3 credits
- Feb 2010, Guest lecturer, BIOS602: Regression models, 3 credits
- Jan - Mar 2011, Instructor, POTH 618[†]: An introductory course in regression analysis, 3 credits
- Jan - Mar 2012, Instructor, POTH 618[†]: An introductory course in regression analysis, 3 credits
- June 2012, Instructor, EPIB 642: Introduction to Health Technology Assessment, 1 credit
- Jan - Apr 2013, Instructor, POTH 628[†]: An introductory course in regression analysis, 3 credits
- May 2013, Instructor, EPIB 642: Introduction to Health Technology Assessment, 1 credit
- June 2014, Instructor, EPIB 642: Introduction to Health Technology Assessment, 2 credits
- Nov 2014, Guest lecturer, EPIB 642: Economic Evaluation of Health Programmes, 2 credits

- June 2016, Instructor, EPIB 670: Introduction to Health Technology Assessment, 2 credits
- Sep - Dec 2016, Instructor, EXMD 634[‡]: Introduction to Quantitative Research Methods for Experimental Medicine, 3 credits
- Nov 2016, Guest lecturer, EPIB 675: Knowledge Synthesis, 2 credits
- June 2017, Instructor, EPIB 670: Introduction to Health Technology Assessment, 2 credits

†: Department of Physical and Occupational Therapy, McGill University

‡: Department of Experimental Medicine, McGill University

Student/Trainee supervision

Graduate students

- 2002, Elizabeth Turner[†], M.Sc., Analysis of Prostate Specific Antigen "trajectories": Statistical Challenges (co-supervisor (James Hanley))
- 2003-2004, Raluca Ionescu-Ittu, M.Sc., Impact of continuity of care on emergency department return visits among seniors in Québec (co-supervisor Jane McCusker)
- 2004-2006, Ying Lu, M.Sc., Adjusting for verification bias in the absence of a gold-standard test: A Bayesian analysis (co-supervisor Lawrence Joseph)
- 2005-2006, Jordie Croteau[‡], M.Sc., Bayesian methods for meta-analysis of odds ratios (co-supervisor Jean-Francois Angers, Université de Montréal)
- 2006-2008, Ana Blagojevic, M.Sc., A pharmacoepidemiology study of a potential drug interaction between atorvastatin and clopidogrel following a percutaneous coronary intervention (PCI) (co-supervisor James Brophy)
- 2008-2011, Guoyuan Liu, M.Sc., Influence of Prior Distribution on Bayesian Inference for Small Proportion (co-supervisor Elham Rahme)
- 2009-2011, Joris de Groot (from Julius Centre for Health Sciences and Primary Care, University of Utrecht, Netherlands), Bayesian methods for adjusting for verification bias in diagnostic studies
- 2011-2015, Zhihui Liu, Ph.D., Statistical methods for Evaluating Cancer Screening (co-supervisor James Hanley)

- 2010-, Michelle Bally, Ph.D., Non-steroidal anti-inflammatory drugs and cardiovascular risk: An international patient-level meta-analysis (co-supervisor James Brophy)
- 2011-2013, Zhuo Yu Wang, M.Sc., Bias from ignoring between test covariance induced by a missing covariate in diagnostic test data (co-supervisor Lawrence Joseph)
- 2012-2015, Jiayi Ni, M.Sc., Exposure time window and protopathic bias: a simulation study (co-supervisor Elham Rahme)
- 2013-2015 Maarten van Smeden (from Julius Centre for Health Sciences and Primary Care, University of Utrecht, Netherlands), Methods for evaluating a diagnostic test in the absence of a gold-standard reference: Latent class models and composite reference standards,
- 2013-2015, Zhuo Yu Wang, PhD, Methods for diagnostic studies in the absence of a gold-standard reference (co-supervisor Lawrence Joseph)

‡: Department of Mathematics & Statistics, McGill University

‡: Département de Mathématiques & Statistiques, Université de Montréal

Post-doctoral fellows

- Fouad El-Khoury, 2007, Meta-analysis of Fish Oil treatment for secondary prevention of heart disease
- Michael Bielinski, 2007, Meta-analysis of C-reactive protein for predicting risk of heart disease
- Yan Zhou, 2010-2012, Bayesian methods for evaluation of diagnostic tests
- Benjamin Rich, 2013-, Network meta-analysis

Visiting students

- Keith Chiu (Warwick University, United Kingdom), 2005, Systematic review and meta-analysis of electron beam computed tomography scores for predicting heart disease
- Suzanne Ligthart (Radboud University, Netherlands), 2006, Predictors of conclusions of cost-effectiveness analyses of drug eluting stents

- Floorje Vlemmix (Radboud University, Netherlands), 2006, Predictors of conclusions of cost-effectiveness analyses of drug eluting stents
- Maggy Wassef (Ulysses Program in Health Technology Assessment, Université de Montréal), 2008, Evaluation of a screening program for cervical cancer

Member of graduate student thesis committee

- 2001-2002, Neena Abraham, M.Sc., The effectiveness of sedation in the performance of diagnostic upper gastrointestinal endoscopy: A randomized controlled trial (Supervisor Jean-Paul Collett)
- 2006-2007, Hina Ansari, M.Sc., Inequities in Access to Health Care by Income and Private Insurance Coverage: A Longitudinal Analysis (Supervisor Amelie Quesnel-Vallée)
- 2006-2010, Genviève Cadieux, Ph.D., Automated syndromic surveillance: assessing and optimizing physician billing claims accuracy (Supervisor Robyn Tamblyn)
- 2009, Jonathan Afilalo, M.Sc., Frailty Assessment Before Cardiac Surgery (Jean-François Boivin)
- 2009-2012, Daphne Ling, Ph.D., Applications of new model-based approaches to evaluate interferon-gamma release assays for diagnosis of tuberculosis (Supervisor Madhukar Pai)
- 2010-2011, Lyndsay Richardson, M.Sc., Human Papillomavirus (HPV) DNA testing with cytology triage in cervical screening: Influence of revealed versus concealed HPV status (Supervisor Eduardo Franco)
- 2011-2015, Samuel Schumacher, Ph.D., Clinical Impact and Cost-Effectiveness of Point-Of-Care Molecular Tests for the Diagnosis of Tuberculosis in a High Burden Setting (Supervisor Madhukar Pai)
- 2015-, Tanya Murphy, Ph.D., Impact of Quebec daycare system on maternal and child health (Supervisors: Seungmi Yang and Jay Kaufman)
- 2015-, Oliver Lasry, Ph.D., Studying prevalence and treatment of traumatic brain injury using administrative data (Supervisors: David Buckeridge)

Internal examiner of graduate theses

- 2003, Andrew Kmetz, Ph.D., Methodologic issues in the analysis of data from a population based osteoporosis study: Adjusting for selection bias and measurement error

- 2003, Stephen Vida, M.Sc., An 18-month prospective cohort study of functional outcome of delirium in the elderly
- 2005, Mark Oremus, Ph.D., Use of medications in the Alzheimer's disease population: Physician and caregiver perspectives
- 2006, Khajak Ishak, Meta-analysis of multivariate outcomes: Concepts and Applications
- 2010, Ella Huszti, Ph.D., Markov modeling of disease progression and mortality
- 2012, Menglan Pang, M.Sc., A study of non-collapsibility of the odds ratio via marginal structural models and logistic regression models
- 2017, Kathryn Morrison, Ph.D., A methodological framework for environmental public health surveillance with a practical example in wildfire smoke

Examiner on PhD Protocol Defense

- 2006, Martin Ladouceur, Bayesian analysis of continuous diagnostic tests
- 2011, Lisa Ronald, Treatment of Active Tuberculosis and Latent Tuberculosis Infection in Quebec: A Population-Based Study and Cost-Effectiveness Analysis
- 2013, Luc Villandré, Bridging the gap between phylogenetic clusters and features of a sexual contact network
- 2014, Rebecca Burnes, New statistical methods for using confounders measured in a small subset to enhance the analysis of comparative effectiveness and safety of drugs in large administrative databases
- 2015, Yishu Wang, Improving accuracy of time-to-event analyses with time-varying drug exposures to account for exposure measurement errors and residual confounding

Committee membership

- 2003-2006, Member of curriculum committee, EBOH
- 2004-2007, Member of research committee, Department of Radiology, MUHC
- 2008, Member of Biostatistics admissions committee, EBOH
- 2009, Member of biostatistics admissions committee, EBOH
- 2007-2009, Member of executive committee, Division of Clinical Epidemiology, MUHC

- 2014-2015, Member of recruitment committee for Boehringer-Ingelheim chair in Pharmacoepidemiology, EBOH
- 2016, Member of PhD Epidemiology Comprehensive Exam committee, EBOH
- 2017, Member of PhD Epidemiology Comprehensive Exam committee, EBOH

Seminar series organization

- 2000-2003, Department of Clinical Epidemiology and Community Studies, St. Mary's Hospital Centre
- 2004-2005, Division of Clinical Epidemiology, Royal Victoria Hospital
- 2005-2006, Technology Assessment Unit, MUHC
- October 2008, Division of Clinical Epidemiology, MUHC
- 2012-2013, Biostatistics Seminar Series, EBOH
- October 2013, Division of Clinical Epidemiology, MUHC