

# Jeremy A. Labrecque

Postdoctoral research fellow, Causal Inference Group  
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## Current position

[Postdoctoral research fellow](#), Epidemiology Department, *Erasmus MC* 2017-present

## Education

*McGill University* (Montreal, Canada), Ph.D. Epidemiology 2018 Thesis: [Conditional cash transfers and child health](#)

*McGill University* (Montreal, Canada), M.Sc. Epidemiology 2013  
Thesis: [Estimating health-selective migration in patients with systemic lupus erythematosus or Sjogren's from administrative data](#)

*McGill University* (Montreal, Canada), M.Sc. Renewable resources 2009  
Thesis: [Indicator species of soil nutrients and poplar plantation productivity in southeastern Quebec](#)

*McGill University* (Montreal, Canada), B.Sc. Epidemiology 2003  
Honours thesis: The spatial distribution of sedge species in North America using principal component analyses

## Publications

### *Published articles*

1. **Labrecque JA**, Hunink MMG, Ikram MA, Ikram MK. [Do Case-Control Studies Always Estimate Odds Ratios?](#) *American Journal of Epidemiology* 2021;190(2):318-321.
2. **Labrecque JA**, Kaufman JS, Huang JY. [Genetic instruments with too many strings: acknowledging pleiotropy and population structure in Mendelian Randomization studies.](#) 2019. *European Heart Journal* 2020;41(7):892-893.
3. **Labrecque JA**, Swanson SA. [Mendelian randomization with multiple exposures: The importance of thinking about time.](#) *International Journal of Epidemiology* 2020;49(4):1158-1162.
4. **Labrecque JA**, Kaufman JS. [State-level heterogeneity in the health profile of people living in households receiving Bolsa Familia in Brazil.](#) *Cadernos de Saude Publica* 2019;35(6):1-12.
5. **Labrecque JA**, Swanson SA. [Interpretation and potential biases of Mendelian randomization estimates with time-varying exposures.](#) *American Journal of Epidemiology.* 2018;188(1):231-238.
6. **Labrecque JA**, Swanson SA. [Understanding the assumptions underlying instrumental variable analyses: A brief review of falsification strategies and related tools.](#) *Current Epidemiology Reports.* 2018;5(3):214-220.
7. **Labrecque JA**, Kaufman JS, Balzer LB, Maclehose RF, Strumpf E, Matijasevich A, Santos IS, Schmidt KH, Barros AJD. [Effect of a conditional cash transfer program on length-for-age and](#)

- weight-for-age in Brazilian infants at 24 months using doubly-robust, targeted estimation. *Social Science & Medicine*. 2018;211:9-15.
8. **Labrecque JA**, Swanson SA. Target trial emulation: teaching epidemiology and beyond. *European Journal of Epidemiology*. 2017;32:473-475.
  9. **Labrecque JA**, Kaufman JS. Can a quasi-experimental design be a better idea than an experimental one? *Epidemiology*. 2016;27(4):500-502.
  10. **Labrecque JA**, Kyle RP, Joseph L, Bernatsky S. Health-selective migration among patients with rheumatoid arthritis in Quebec: a cohort study using administrative data. *Rheumatology International*. 2016;36(9):1275-1279.
  11. Burgess S, Swanson SA, **Labrecque JA**. Are Mendelian randomization investigations immune from bias due to reverse causation? *European Journal of Epidemiology*. 2021 (published online ahead of print).
  12. Huang JY, **Labrecque JA**. From GWAS to PheWAS: the search for causality in big data . *The Lancet Digital Health*. 2019, e101-e103.
  13. Burgess S, **Labrecque JA**. Mendelian randomization with a binary exposure variable: interpretation and presentation of causal estimates. *European Journal of Epidemiology*. 2018;33(10):947-952.
  14. Lamballais S, Jansen PR, **Labrecque JA**, Ikram MA, White T. Genetic scores for adult subcortical volumes associate with subcortical volumes during infancy and childhood. *Human Brain Mapping*. (online ahead of print)
  15. Lara M, **Labrecque JA**, van Lenthe FJ, Voortman RG. Estimating reductions in ethnic inequalities in child adiposity from hypothetical diet, screen time and sports participation interventions. *Epidemiology*. 2020;31(5):736-744.
  16. Rodriguez-Ayllon M, Derks I, van den Dries M, Esteban-Cornejo I, **Labrecque JA**, Yang-Huang J, Raat H, Vernooij MW, White T, Ortega FB, Tiemeier H, Muetzel RL. Associations of physical activity and screen time with white matter microstructure in children from the general population. *NeuroImage*. 2020;205:1-8.
  17. Diemer EW, **Labrecque JA**, Tiemeier H, Swanson SA. Application of the instrumental inequalities to a Mendelian randomization study with multiple proposed instruments. *Epidemiology*. 2020;31(1):65-74.
  18. van der Willik, KD, Rojas-Saunero LP, **Labrecque JA**, Ikram MA, Schagen SB, Stricker BH, Ruiters R. Pathology-confirmed versus non pathology-confirmed cancer diagnoses: incidence, participant characteristics, and survival *European Journal of Epidemiology*. 2019.
  19. Swanson SA, **Labrecque JA**, Hernan MA. Causal null hypotheses of sustained treatment strategies: What can be tested with an instrumental variable? *European Journal of Epidemiology*. 2018;33(8):723-728.
  20. Nandi A, Jahagirdar D, Dimitris M, **Labrecque JA**, Strumpf EC, Kaufman JS, Vincent I, Atabay E, Harper S, Earle A, Heymann J. The Impact of Parental and Medical Leave Policies on Socioeconomic and Health Outcomes in OECD Countries: A Systematic Review of the Empirical Literature. *Milbank Quarterly*. 2018;96(3):434-471.

21. Schmidt KH, **Labrecque JA**, Santos IS, Matijasevich A, Barros FC, Barros AJD. [Focus and coverage of \*Bolsa Familia\* Program in the Pelotas 2004 birth cohort.](#) *Revista de Saude Publica.* 2017;51:22.
22. Bernatsky S, Clarke AE, Niaki OZ, **Labrecque JA**, Schanberg L, Silverman ED, Hayward K, Imundo L, Brunner HI, Haines KA, Cron RQ, Oen K, Wagner-Weiner L, Rosenberg AM, O'Neil KM, Duffy CM, von Scheven E, Joseph L, Lee JL, Ramsey-Goldman R. [Malignancy in Pediatric-onset Systemic Lupus Erythematosus](#) *Journal of Rheumatology.* 2017;44(10):1484-1486.
23. Niaki OZ, Clarke AE, Ramsey-Goldman R, Yeung R, Hayward K, Oen K, Duffy CM, Rosenberg A, O'Neil KM, von Scheven E, Schanberg L, **Labrecque JA**, Tse SM, Hasija R, Lee JL, Bernatsky S. [Malignancy incidence in 5294 patients with juvenile arthritis.](#) *Rheumatic and Musculoskeletal Diseases Open.* 2016;2(1):e000212.
24. Bernatsky S, Ramsey-Goldman R, Boivin JF, Joseph L, Petri MA, Zoma A, Manzi S, Urowitz MB, Gladman DD, Fortin PR, Ginzler EM, Yelin E, Bae SC, Wallace DJ, Edworthy SM, Jacobsen S, Gordon C, Dooley MA, Peschken CA, Hanly JG, Alarcon GS, Nived O, Ruiz-Irastorza G, Isenberg D, Rahman A, Witte T, Aranow C, Kamen DL, Steinsson K, Askanase A, Barr SG, Criswell LA, Sturfelt G, Patel NM, Senecal JL, Zummer M, Pope JE, Ensworth S, El-Gabalawy H, McCarthy T, Dreyer L, **Labrecque JA**, St. Pierre Y, Sibley J, Clarke AE. [Cancer Risk Factors in SLE: Multivariate Regression Analysis in 16,409 Patients.](#) *Journal of Autoimmune Diseases and Rheumatology.* 2014;2:100-103.
25. Bernatsky S, Clarke AE, **Labrecque JA**, von Scheven E, Schanberg LE, Silverman ED, Brunner HI, Haines KA, Cron RQ, O'Neil KM, Oen K, Rosenberg AM, Duffy CM, Joseph L, Lee JL, Kale M, Turnbull EM, Ramsey-Goldman R. [Cancer risk in childhood-onset systemic lupus.](#) *Arthritis Research & Therapy.* 2013;15(6):R198.
26. Widdifield J, **Labrecque JA**, Lix L, Paterson JM, Bernatsky S, Tu K, Ivers N, Bombardier C. [Systematic review and critical appraisal of validation studies to identify rheumatic diseases in health administrative databases.](#) *Arthritis Care & Research.* 2013;65(9):1490-1503.
27. Bernatsky S, Ramsey-Goldman R, **Labrecque JA**, Joseph L, Petri MA, Zoma A, Manzi S, Urowitz MB, Gladman DD, Fortin PR, Ginzler EM, Yelin E, Bae SC, Wallace DJ, Edworthy SM, Jacobsen S, Gordon C, Dooley MA, Peschken CA, Hanly JG, Alarcon GS, Nived O, Ruiz-Irastorza G, Isenberg D, Rahman A, Witte T, Aranow C, Kamen DL, Steinsson K, Askanase A, Barr SG, Criswell LA, Sturfelt G, Patel NM, Senecal JL, Zummer M, Pope JE, Ensworth S, El-Gabalawy H, McCarthy T, Dreyer L, Sibley J, St. Pierre Y, Clarke AE. [Cancer risk in systemic lupus: an updated international multi-centre cohort study.](#) *Journal of Autoimmunity.* 2013;42:130-135.
28. Tessier Cloutier B, Clarke AE, Ramsey-Goldman R, Wang Y, Foulkes W, Gordon C, Hansen JE, Yelin E, Urowitz MB, Gladman D, Fortin PR, Wallace DJ, Petri M, Manzi S, Ginzler EM, **Labrecque JA**, Edworthy S, Dooley MA, Senecal JL, Peschken CA, Bae SC, Isenberg D, Rahman A, Ruiz-Irastorza G, Hanly JG, Jacobsen S, Nived O, Witte T, Criswell LA, Barr SG, Dreyer L, Sturfelt G, Bernatsky S. [Breast cancer in systemic lupus erythematosus.](#) *Oncology.* 2013;85(2):117-121.
29. Bernatsky S, Lix L, O'Donnell S, Lacaille D, CANRAD Network. [Consensus statements for the use of administrative health data in rheumatic disease research and surveillance.](#) *Journal of Rheumatology.* 2013;40(1):66-73.

30. Barnabe C, Joseph L, Belisle P, **Labrecque JA**, Barr SG, Fritzler MJ, Svenson LW, Peschken CA, Hemmelgarn B, Bernatsky S. [Prevalence of autoimmune inflammatory myopathy in the first nations population of Alberta, Canada.](#) *Arthritis Care & Research.* 2012;64(11):1715-1719.
31. Barnabe C, Joseph L, Belisle P, **Labrecque JA**, Edworthy S, Barr SG, Fritzler MJ, Svenson LW, Hemmelgarn B, Bernatsky S. [Prevalence of systemic lupus erythematosus and systemic sclerosis in the First Nations population of Alberta, Canada.](#) *Arthritis Care & Research.* 2012;64(1):138-143.
32. Vinet E, **Labrecque JA**, Pineau CA, Clarke AE, St-Pierre Y, Platt R, Bernatsky S. [A population-based assessment of live births in women with systemic lupus erythematosus.](#) *Annals of the Rheumatic Diseases.* 2012;71(4):557-559.

*Submitted and under review:*

## **Conferences and presentations**

### *Chaired sessions*

Triangulation of Causal Effect Estimates, *52st Annual Meeting of the Society for Epidemiologic Research.* June 18-21, 2019. Minneapolis, USA.

### *Presentations*

You keep using that model. I do not think it means what you think it means: When multivariable regression doesn't estimate what we think it does. *Center for Quantitative Methods, Erasmus MC.* September 11, 2019. Rotterdam, the Netherlands.

How target trials can help clarify questions in perinatal epidemiology. *52nd Annual Meeting of the Society for Epidemiologic Research.* June 18-21, 2019. Minneapolis, USA.

Formalizing triangulation with counterfactuals. *52nd Annual Meeting of the Society for Epidemiologic Research.* June 18-21, 2019. Minneapolis, USA.

How target trials can help clarify questions in perinatal epidemiology. Health Research Day, Erasmus MC. April 11, 2019. Rotterdam, the Netherlands.

The reason for time is so that everything doesn't happen at once. *Center for Quantitative Methods, Erasmus MC.* February 20, 2019. Rotterdam, the Netherlands.

Thinking about time in the context of MR. *University of Bristol Epidemiology Seminar.* February 11, 2019. Bristol, United Kingdom.

Mendelian randomization and time-varying exposures. *Masterclass on Mendelian randomization and health inequalities.* November 8, 2018. Rotterdam, the Netherlands.

Workshop on Mendelian randomization. *Erasmus MC Department of Public Health.* October 20, 2018. Rotterdam, the Netherlands.

How should we interpret estimates from Mendelian randomization studies? *NORFACE.* October 9, 2018. Rotterdam, the Netherlands

How Mendelian randomization works and, more importantly, when it works. *Erasmus MC Epidemiology Seminar*. July 16, 2018. Rotterdam, the Netherlands.

Challenges to the interpretation of Mendelian randomization estimates with time-varying exposures. *51st Annual Meeting of the Society for Epidemiologic Research*. June 19-22, 2018. Baltimore, USA.

Epidemiology and Counterfactuals. *Erasmus Statistics Day*. May 20, 2018. Erasmus University, Rotterdam, the Netherlands.

Challenges to the interpretation of Mendelian randomization estimates with time-varying exposures. *Cohorts for Heart and Aging Research in Genomic Epidemiology Investigator Meeting*. April 18, 2018. Rotterdam, The Netherlands. (poster)

Time-varying exposures in Mendelian randomization. *Mendelian randomization half-day symposium*. March 28, 2018. Cambridge, United Kingdom.

Mendelian randomization with time-varying exposures. *Center for Quantitative Methods, Erasmus MC*. February 28, 2018. Rotterdam, the Netherlands.

Potential biases in Mendelian Randomization with time-varying exposures. *SER Digital Conference*. November 10, 2017. Online conference.

Potential biases in Mendelian Randomization studies: Considerations when exposures vary over the life-course. *Mendelian Randomization Conference*. July 12, 2017. Bristol, UK.

Examining potential mediators of the effect of a conditional cash transfer program on child height and weight at 24 months. *50th Annual Meeting of the Society for Epidemiologic Research*. June 22, 2017. Seattle, USA.

Positivity implies the existence of instrumental variables. *49th Annual Meeting of the Society for Epidemiologic Research*. June 22, 2016. Miami, USA. (poster)

Doubly-robust estimation of the effect of a conditional cash program on infant growth. *49th Annual Meeting of the Society for Epidemiologic Research*. June 22, 2016. Miami, USA.

Impact of a Brazilian cash transfer program on infant growth to 24 months. *48th Annual Meeting of the Society for Epidemiologic Research*. June 17, 2015. Denver, USA. (poster)

Regression discontinuity in epidemiology: quantifying bias due to forcing variable misreporting. *47th Annual Meeting of the Society for Epidemiologic Research*. June 24-27, 2015. Seattle, USA. (poster)

Estimating health-selective migration in patients with rheumatoid arthritis using administrative data. *47th Annual Meeting of the Society for Epidemiologic Research*. June 17, 2013. Boston, USA. (poster)

Lupus, Sjogren's and residential mobility: A hierarchical logistic regression model estimating the association between lupus, Sjogren's and a person's ability to change residences. *Canadian Arthritis Network 2011 Annual Scientific Conference*. Oct 27-29. Quebec City, Canada.

Within-province migration rates among systematic lupus erythematosus patients in Quebec. *MUHC Research Institute 8th Annual Research Day*. June 9, 2011. Montreal, Canada.

Within-province migration rates among systematic lupus erythematosus patients in Quebec. *Epidemiology, Biostatistics and Occupational Health Student Society Research Day*. April 27, 2011. Montreal, Canada.

Preliminary analyses of spatial clustering of the prevalence of systemic autoimmune rheumatic diseases in Montreal, Quebec. *Epidemiology, Biostatistics and Occupational Health Student Society Research Day*. April 28, 2010. Montreal, Canada.

A population-based, ecological investigation of the relationship between road density and systemic autoimmune rheumatic diseases (SARDs) prevalence. *Canadian Rheumatology Association 65th Annual Meeting and Scientific Programme*. February 3-6, 2010. Quebec City, Canada.

Preliminary analyses of spatial clustering of the prevalence of systemic autoimmune rheumatic diseases in Montreal, Quebec. *Canadian Rheumatology Association 65th Annual Meeting and Scientific Programme*. February 3-6, 2010. Quebec City, Canada.

### Visiting researcher

Universidade Federal de Pelotas, Pelotas, Brazil, (June-July 2012, December 2014, March-April 2015)

### Student supervision

Interim leader of the Causal Inference Group, Department of Epidemiology, Erasmus MC  
Medical student project in child psychiatry.

### Teaching

Course	Year	Location
Study Design	2021	Erasmus MC
Mendelian randomization (GE10)	2020-21	Erasmus MC
HDS PhD Course: Advanced Methods, Marginal structural models	2020	Berlin, Germany
Principles in Causal Inference (EP01)	2018-20	Erasmus MC
Public Health Research: Analysis of Determinants (HS02)	2018-20	Erasmus MC
Measuring health inequalities	May 2019	University of Antwerp, Belgium
Inverse probability of treatment weighting	November, 2018	Essen, Germany
Causal inference workshop	May 4-6, 2015	Vitória, Brazil
Epidemiologic Analysis	Fall 2016	McGill University

<b>Grant or award</b>	<b>Year</b>	<b>Amount</b>
Banting CIHR Postdoctoral Fellowship	2020-2022	\$150,000 CAD
NWO Replication Grant	2019-2021	€80,000 EUR
Banting and Best CIHR Doctoral Fellowship	2013-2016	\$105,000 CAD
Graduate Research Enhancement and Travel Awards, McGill University	2016	\$750 CAD
Health Disparities: Inter-Generational Dynamics and Empirical Assessment Strategies Studentship	2013-2014	\$6,000 CAD
Society for Epidemiologic Research dissertation workshop	2013	\$1,500 USD
Graduate Excellence Fellowship, McGill University	2012-2013	\$10,100 CAD
Graduate Research Enhancement and Travel Awards, McGill University	2013	\$1,000 CAD
Graduate Excellence Award, McGill University	2012	\$2,417 CAD
Provost's Graduate Fellowship, McGill University	2011	\$1,500 CAD
Graduate Student Award, The Arthritis Society	2010-2012	\$20,000 CAD
Research Studentship, Public Health Agency of Canada	2010-2012	\$20,000 CAD

## **Awards and funding**

### **Scientific referee**

#### *Journals*

American Journal of Epidemiology	British Medical Journal (BMJ)
Epidemiology ( <a href="#">Exemplary reviewer 2018</a> )	European Journal of Epidemiology
International Journal of Epidemiology	Journal of Epidemiology and Community Health
Social Science and Medicine	Statistics in Medicine
Therapeutic Advances in Chronic Disease	Scientific Reports
Maternal & Child Nutrition	PLOS ONE
Preventive Medicine	Journal of Rheumatology
Cadernos de Saude Publica	Paediatric and Perinatal Epidemiology
Epidemiologic Methods	Genetic Epidemiology
Journal of Causal Inference	The Lancet: Respiratory Medicine

For more information about my peer review activities, see my [Publons](#) page.

#### *Scientific meetings*

- Society for Epidemiologic Research Annual Meeting
- Canadian Society for Epidemiology Biostatistics Biennial Conference
- Mendelian Randomization conference

### **Committees**

[Education Committee member](#), Society for Epidemiology Research, 2018-present.

Media Chair, Society for Epidemiology Research Student and Post-Doc Committee  
President, *Epidemiology, Biostatistics and Occupational Health Student Society*, McGill University, 2013-2014.

Vice-president, *Epidemiology, Biostatistics and Occupational Health Student Society*, McGill University, 2011-2013.

Organizer of the Erasmus MC Epidemiology Journal Club, 2017-present.

Organizer of the McGill Social Epidemiology Journal Club, 2011-2013.

Academic curriculum representative, Department of Epidemiology, Biostatistics and Occupational Health, McGill University, 2010-2011.

## **Languages**

Fluent: English, French, Spanish, Portuguese

Basic: Dutch