



Louise Y Sun

Professor of Anesthesiology, Perioperative and Pain Medicine

CLINICAL OFFICE (PRIMARY)

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ACADEMIC CONTACT INFORMATION

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Bio

BIO

Dr. Louise Sun recently joined the Stanford University School of Medicine as the Chief of Cardiothoracic Anesthesiology and Professor of Anesthesiology, Perioperative and Pain Medicine. She is an Adjunct Scientist at the Institute for Clinical Evaluative Sciences (ICES) in Toronto. Prior to this, she was an Associate Professor of Anesthesiology and Epidemiology, Director of Big Data and Health Bioinformatics Research at the University of Ottawa Heart Institute, and a Clinical Research Chair in Big Data and Cardiovascular Outcomes at the University of Ottawa.

Dr. Sun received her medical degree from McMaster University. She completed her anesthesiology residency at the University of Ottawa and her Masters of Science in Epidemiology at the Harvard School of Public Health, followed by a clinical and research fellowship in cardiac anesthesia at the University of Toronto. She then joined the Division of Cardiac Anesthesiology at the University of Ottawa Heart Institute and was cross appointed as an ICES faculty member.

Dr. Sun's areas of clinical focus are hemodynamic monitoring and heart failure. Her methodologic areas of focus are the conduct of population-based cohort studies using large healthcare databases; predictive analytics; sex and gender epidemiology; patient engagement; innovative methods for data processing and warehousing; and software and applications development. Her research leverages big data and digital technology to bridge key gaps in the delivery of care and outcomes for patients with heart failure and/or undergoing cardiovascular interventions, zooming in on sex/gender and personalized care. She holds several patents and collaborates with health authorities and policy makers to evaluate and report on models of cardiac healthcare delivery.

Dr. Sun is active in the scientific community. She sits on a number of US, Canadian and international editorial boards and scientific and grant review committees, and collaborates nationally and internationally on a variety of population health and data science initiatives. Her patient-centered research program aims to improve access to care and outcomes, focusing on personalized risk stratification and long-term, patient-defined outcomes. She has authored over 100 peer-reviewed papers and published in leading clinical journals including JAMA, JAMA Cardiology, JAMA Internal Medicine, Circulation, JACC, Diabetes Care, and Anesthesiology. Her research program has been well funded by the Canadian Institutes of Health Research (CIHR), the Heart and Stroke Foundation of Canada, and the Ontario Ministry of Health.

CLINICAL FOCUS

- Anesthesia

ACADEMIC APPOINTMENTS

- Professor - University Medical Line, Anesthesiology, Perioperative and Pain Medicine
- Member, Cardiovascular Institute

ADMINISTRATIVE APPOINTMENTS

- Chief, Division of Cardiothoracic Anesthesiology, Stanford University School of Medicine, (2022- present)

PROFESSIONAL EDUCATION

- Board Certification: Advanced Perioperative Transesophageal Echocardiography, National Board of Echocardiography
- Fellowship: University of Toronto (2014) Canada
- Board Certification: Anesthesia, Royal College of Physicians and Surgeons of Canada (2013)
- Masters of Science, Harvard University , Clinical Epidemiology (2013)
- Residency: University of Ottawa (2013) Canada
- Medical Education: McMaster University Michael G. DeGroote School of Medicine (2008) Canada

PATENTS

- Louise Sun. "United States Patent 63/055,620 Health Care Resources Management", University of Ottawa Heart Institute, Jul 23, 2022
- Louise Sun. "United States Patent PCT/CA2021/051033 Health Care Resources Management", University of Ottawa Heart Institute, Institute for Clinical Evaluative Sciences, Jul 23, 2022
- Louise Sun. "United States Patent PCT/CA2022/051085 Systems, Methods and Apparatus for Predicting Hemodynamic Events", University of Ottawa Heart Institute, Jul 12, 2022
- Louise Sun. "United States Patent 63/232,337 Systems, Methods and Apparatus for Predicting Hemodynamic Events", University of Ottawa Heart Institute, Aug 12, 2021

Research & Scholarship

RESEARCH INTERESTS

- Data Sciences

Publications

PUBLICATIONS

- **Spontaneous Coronary Artery Dissection Across the Health Care Pathway: A National, Multicenter, Patient-Informed Investigation.** *Journal of the American Heart Association*
Bouchard, K., Lalande, K., Coutinho, T., Mulvagh, S., Pacheco, C., Liu, S., Saw, J., So, D., Reed, J. L., Chiarelli, A., Stragapede, E., Robert, H., Lappa, et al
2023: e032141
- **Association between Surgeon/anesthesiologist Sex Discordance and One-year Mortality Among Adults Undergoing Noncardiac Surgery: A Population-based Retrospective Cohort Study.** *Annals of surgery*
Etherington, C., Boet, S., Chen, I., Duffy, M., Mamas, M. A., Eddeen, A. B., Bateman, B. T., Sun, L. Y.
2023
- **Socioeconomic disparities in the management and outcomes of acute myocardial infarction.** *Heart (British Cardiac Society)*
Weight, N., Moledina, S., Volgman, A. S., Bagur, R., Wijeyesundera, H. C., Sun, L. Y., Chadi Alraies, M., Rashid, M., Kontopantelis, E., Mamas, M. A.
2023
- **Team principles for successful interdisciplinary research teams.** *American heart journal plus : cardiology research and practice*

- Brown, S. A., Sparapani, R., Osinski, K., Zhang, J., Blessing, J., Cheng, F., Hamid, A., MohamadiPour, M. B., Lal, J. C., Kothari, A. N., Caraballo, P., Noseworthy, P., Johnson, et al
2023; 32: 100306
- **Team principles for successful interdisciplinary research teams** *AMERICAN HEART JOURNAL PLUS: CARDIOLOGY RESEARCH AND PRACTICE*
Brown, S., Sparapani, R., Osinski, K., Zhang, J., Blessing, J., Cheng, F., Hamid, A., Mohamadipour, M., Lal, J., Kothari, A. N., Caraballo, P., Noseworthy, P., Johnson, et al
2023; 32
 - **STICH3C: Rationale and Study Protocol.** *Circulation. Cardiovascular interventions*
Fremes, S. E., Marquis-Gravel, G., Gaudino, M. F., Jolicoeur, E. M., Bédard, S., Masterson Creber, R., Ruel, M., Vervoort, D., Wijeysondera, H. C., Farkouh, M. E., Rouleau, J. L.
2023; 16 (8): e012527
 - **Outcomes Among Patients Hospitalized With Non-COVID-19 Conditions Before and During the COVID-19 Pandemic in Alberta and Ontario, Canada.** *JAMA network open*
McAlister, F. A., Chu, A., Qiu, F., Dong, Y., van Diepen, S., Youngson, E., Yu, A. Y., de Mestral, C., Ross, H. J., Austin, P. C., Lee, D. S., Kadri, S. S., Wijeysondera, et al
2023; 6 (7): e2323035
 - **Impact of the COVID-19 Pandemic on Diabetes-Related Cardiovascular Mortality in the United States.** *Journal of the American Heart Association*
Bashar, H., Kobo, O., Khunti, K., Sun, L. Y., Rutter, M. K., Chew, N. W., Curzen, N., Mamas, M. A.
2023: e028896
 - **Trends In ST-elevation Myocardial Infarction Hospitalisation Among Young Adults: A Binational Analysis.** *European heart journal. Quality of care & clinical outcomes*
Moledina, S. M., Matetic, A., Weight, N., Rashid, M., Sun, L., Fischman, D. L., Van Spall, H. G., Mamas, M. A.
2023
 - **Ethnic Disparities in ST-Segment Elevation Myocardial Infarction Outcomes and Processes of Care in Patients With and Without Standard Modifiable Cardiovascular Risk Factors: A Nationwide Cohort Study.** *Angiology*
Weight, N., Moledina, S., Sun, L., Kragholm, K., Freeman, P., Diaz-Arocutipa, C., Dafaalla, M., Gulati, M., Mamas, M. A.
2023: 33197231182555
 - **Derivation and validation of predictive indices for cardiac readmission after coronary and valvular surgery - A multicenter study.** *American heart journal plus : cardiology research and practice*
Sun, L. Y., Chu, A., Tam, D. Y., Wang, X., Fang, J., Austin, P. C., Feindel, C. M., Alexopoulos, V., Tusevliak, N., Rocha, R., Ouzounian, M., Woodward, G., Lee, et al
2023; 28: 100285
 - **Derivation and validation of predictive indices for cardiac readmission after coronary and valvular surgery - A multicenter study** *AMERICAN HEART JOURNAL PLUS: CARDIOLOGY RESEARCH AND PRACTICE*
Sun, L. Y., Chu, A., Tam, D. Y., Wang, X., Fang, J., Austin, P. C., Feindel, C. M., Alexopoulos, V., Tusevliak, N., Rocha, R., Ouzounian, M., Woodward, G., Lee, et al
2023; 28
 - **Outcomes of ST elevation myocardial infarction in patients with cancer; a nationwide study.** *European heart journal. Quality of care & clinical outcomes*
Dafaalla, M., Abdel-Qadir, H., Gale, C. P., Sun, L., López-Fernández, T., Miller, R. J., Wojakowski, W., Nolan, J., Rashid, M., Mamas, M. A.
2023
 - **Population Study of Sex-Based Outcomes After Surgical Aortic Valve Replacement.** *CJC open*
Rubens, F. D., Clarke, A. E., Lee, D. S., Wells, G. A., Sun, L. Y.
2023; 5 (3): 220-229
 - **CKD-Associated Cardiovascular Mortality in the United States: Temporal Trends From 1999 to 2020.** *Kidney medicine*
Kobo, O., Abramov, D., Davies, S., Ahmed, S. B., Sun, L. Y., Mieres, J. H., Parwani, P., Siudak, Z., Van Spall, H. G., Mamas, M. A.
2023; 5 (3): 100597
 - **Derivation and validation of pragmatic clinical models to predict hospital length of stay after cardiac surgery in Ontario, Canada: a population-based cohort study.** *CMAJ open*
Fottinger, A., Eddeen, A. B., Lee, D. S., Woodward, G., Sun, L. Y.

2023; 11 (1): E180-E190

- **Commentary: "Multimodality advanced cardiovascular and molecular imaging for early detection and monitoring of cancer therapy-associated cardiotoxicity and the role of artificial intelligence and big data".** *Frontiers in cardiovascular medicine*
Sun, L. Y., Echefu, G., Doshi, K., Roberts, M. L., Hamid, A., Cheng, R. K., Olson, J., Brown, S. A.
2023; 10: 982028
- **Comorbidity clusters and in-hospital outcomes in patients admitted with acute myocardial infarction in the USA: A national population-based study.** *PLoS one*
Zghebi, S. S., Rutter, M. K., Sun, L. Y., Ullah, W., Rashid, M., Ashcroft, D. M., Steinke, D. T., Weng, S., Kontopantelis, E., Mamas, M. A.
2023; 18 (10): e0293314
- **Palliative Care Use in Patients With Acute Myocardial Infarction and Do-Not-Resuscitate Status From a Nationwide Inpatient Cohort.** *Mayo Clinic proceedings*
Kobo, O., Moledina, S. M., Mohamed, M. O., Sinnarajah, A., Simon, J., Sun, L. Y., Slawnych, M., Fischman, D. L., Roguin, A., Mamas, M. A.
2022
- **Outcomes From Intraoperative Handovers of Anesthesia Care.** *JAMA*
Jones, P. M., Sun, L. Y., Brenner, M. J.
2022; 328 (18): 1869
- **Differential Patterns and Outcomes of 20.6 Million Cardiovascular Emergency Department Encounters for Men and Women in the United States.** *Journal of the American Heart Association*
Raisi-Estabragh, Z., Kobo, O., Elbadawi, A., Velagapudi, P., Sharma, G., Bullock-Palmer, R. P., Petersen, S. E., Mehta, L. S., Ullah, W., Roguin, A., Sun, L. Y., Mamas, M. A.
2022; 11 (19): e026432
- **Relationship of frailty with excess mortality during the COVID-19 pandemic: a population-level study in Ontario, Canada.** *Aging clinical and experimental research*
Wijeyesundera, H. C., Abdel-Qadir, H., Qiu, F., Manoragavan, R., Austin, P. C., Kapral, M. K., Kwong, J. C., Sun, L. Y., Ross, H. J., Udell, J. A., Roifman, I., Yu, A. Y., Chu, et al
2022; 34 (10): 2557-2565
- **The association between cancer diagnosis, care, and outcomes in 1 million patients hospitalized for acute pulmonary embolism.** *International journal of cardiology*
Mai, A. S., Matetic, A., Elgendy, I. Y., Lopez-Mattei, J., Kotronias, R. A., Sun, L. Y., Yong, J. H., Bagur, R., Van Spall, H. G., Mamas, M. A.
2022
- **Derivation and External Validation of a Clinical Model to Predict Heart Failure Onset in Patients With Incident Diabetes.** *Diabetes care*
Sun, L. Y., Zghebi, S. S., Eddeen, A. B., Liu, P. P., Lee, D. S., Tu, K., Tobe, S. W., Kontopantelis, E., Mamas, M. A.
2022
- **Sex-based differences in referral of heart failure patients to outpatient clinics: a scoping review.** *ESC heart failure*
Chan, E., Rooprai, J., Rodger, J., Visintini, S., Rodger, N., Philip, S., Mielniczuk, L., Sun, L. Y.
2022
- **Impact of the admitting ward on care quality and outcomes in non-ST-segment elevation myocardial infarction: insights from a national registry.** *European heart journal. Quality of care & clinical outcomes*
Moledina, S. M., Shoaib, A., Sun, L. Y., Myint, P. K., Kotronias, R. A., Shah, B. N., Gale, C. P., Quan, H., Bagur, R., Mamas, M. A.
2022; 8 (6): 681-691
- **Comparison of Multidimensional Frailty Instruments for Estimation of Long-term Patient-Centered Outcomes After Cardiac Surgery.** *JAMA network open*
Sun, L. Y., Jabagi, H., Fang, J., Lee, D. S.
2022; 5 (9): e2230959
- **Trends in glucose testing among individuals without diabetes in Ontario between 2010 and 2017: a population-based cohort study.** *CMAJ open*
Chu, A., Shah, B. R., Rashid, M., Booth, G. L., Fazli, G. S., Tu, K., Sun, L. Y., Abdel-Qadir, H., Yu, C. H., Shin, S., Connelly, K. A., Tobe, S., Liu, et al
2022; 10 (3): E772-E780
- **Aortic stenosis post-COVID-19: a mathematical model on waiting lists and mortality.** *BMJ open*

- Stickels, C. P., Nadarajah, R., Gale, C. P., Jiang, H., Sharkey, K. J., Gibbison, B., Holliman, N., Lombardo, S., Schewe, L., Sommacal, M., Sun, L., Weir-McCall, J., Cheema, et al
2022; 12 (6): e059309
- **IGFBP7 as a preoperative predictor of congestive acute kidney injury after cardiac surgery.** *Open heart*
MacMillan, Y. S., Mamas, M. A., Sun, L. Y.
2022; 9 (1)
 - **A standardized definition for right ventricular failure in cardiac surgery patients.** *ESC heart failure*
Jabagi, H., Nantsios, A., Ruel, M., Mielniczuk, L. M., Denault, A. Y., Sun, L. Y.
2022; 9 (3): 1542-1552
 - **Missing the Goal With the 2021 ACC/AHA/SCAI Guideline for Coronary Artery Revascularization.** *The Canadian journal of cardiology*
Ruel, M., Williams, A., Ouzounian, M., Sun, L., Légaré, J. F., Poirier, P., Malas, T., Farkouh, M. E., Chedrawy, E., Hassan, A., Higgins, J., Connelly, K., McClure, et al
2022; 38 (6): 705-708
 - **Addressing disparities of care in non-ST-segment elevation myocardial infarction patients without standard modifiable risk factors: insights from a nationwide cohort study.** *European journal of preventive cardiology*
Moledina, S. M., Rashid, M., Nolan, J., Nakao, K., Sun, L. Y., Velagapudi, P., Wilton, S. B., Volgman, A. S., Gale, C. P., Mamas, M. A.
2022; 29 (7): 1084-1092
 - **Prediction of acute kidney injury risk after cardiac surgery: using a hybrid machine learning algorithm.** *BMC medical informatics and decision making*
Petrosyan, Y., Mesana, T. G., Sun, L. Y.
2022; 22 (1): 137
 - **Representation of patient diversity in anesthesia curricular materials.** *Canadian journal of anaesthesia = Journal canadien d'anesthésie*
Leir, S. A., Sun, L., Fraser, A.
2022
 - **Patient Sex and Postoperative Outcomes after Inpatient Intraabdominal Surgery: A Population-based Retrospective Cohort Study.** *Anesthesiology*
He, J. W., Sun, L. Y., Wijeyesundera, D., Vogt, K., Jones, P. M.
2022; 136 (4): 577-587
 - **Age, Not Sex, Modifies the Effect of Frailty on Long-term Outcomes After Cardiac Surgery.** *Annals of surgery*
Sun, L. Y., Spence, S. D., Benton, S., Beanlands, R. S., Austin, P. C., Bader Eddeen, A., Lee, D. S.
2022; 275 (4): 800-806
 - **Derivation and validation of a clinical risk score to predict death among patients awaiting cardiac surgery in Ontario, Canada: a population-based study.** *CMAJ open*
Sun, L. Y., Wijeyesundera, H. C., Lee, D. S., van Diepen, S., Ruel, M., Eddeen, A. B., Mesana, T. G.
2022; 10 (1): E173-E182
 - **Single Versus Multiple Arterial Revascularization in Patients With Reduced Renal Function: Long-term Outcome Comparisons in 23,406 CABG Patients From Ontario, Canada.** *Annals of surgery*
Hayatsu, Y., Ruel, M., Bader Eddeen, A., Sun, L.
2022; 275 (3): 602-608
 - **Association Between Handover of Anesthesiology Care and 1-Year Mortality Among Adults Undergoing Cardiac Surgery.** *JAMA network open*
Sun, L. Y., Jones, P. M., Wijeyesundera, D. N., Mamas, M. A., Bader Eddeen, A., O'Connor, J.
2022; 5 (2): e2148161
 - **Sex differences after coronary artery bypass grafting with a second arterial conduit.** *The Journal of thoracic and cardiovascular surgery*
Rubens, F. D., Wells, G. A., Coutinho, T., Eddeen, A. B., Sun, L. Y.
2022; 163 (2): 686-695.e10
 - **Establishing an interdisciplinary research team for cardio-oncology artificial intelligence informatics precision and health equity.** *American heart journal plus : cardiology research and practice*
Brown, S. A., Sparapani, R., Osinski, K., Zhang, J., Blessing, J., Cheng, F., Hamid, A., Berman, G., Lee, K., BagheriMohamadiPour, M., Lal, J. C., Kothari, A. N., Caraballo, et al
2022; 13

- **Impact of availability of catheter laboratory facilities on management and outcomes of acute myocardial infarction presenting with out of hospital cardiac arrest.** *Resuscitation*
Dafaalla, M., Rashid, M., Sun, L., Quinn, T., Timmis, A., Wijeyesundera, H., Bagur, R., Michos, E., Curzen, N., Mamas, M. A.
2022; 170: 327-334
- **Drivers and outcomes of variation in surgical versus transcatheter aortic valve replacement in Ontario, Canada: a population-based study.** *Open heart*
Miranda, R. N., Qiu, F., Manoragavan, R., Fremes, S., Lauck, S., Sun, L., Tarola, C., Tam, D. Y., Mamas, M., Wijeyesundera, H. C.
2022; 9 (1)
- **Response to the Comment on "Single Versus Multiple Arterial Revascularization in Patients With Reduced Renal Function Long-Term Outcome Comparisons in 23,406 CABG Patients From Ontario, Canada".** *Annals of surgery*
Hayatsu, Y., Ruel, M., Sun, L. Y.
2021; 274 (6): e824-e825
- **Derivation and validation of predictive indices for 30-day mortality after coronary and valvular surgery in Ontario, Canada.** *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*
Sun, L. Y., Chu, A., Tam, D. Y., Wang, X., Fang, J., Austin, P. C., Feindel, C. M., Oakes, G. H., Alexopoulos, V., Tusevliak, N., Ouzounian, M., Lee, D. S.
2021; 193 (46): E1757-E1765
- **Predictors, Treatments, and Outcomes of Do-Not-Resuscitate Status in Acute Myocardial Infarction Patients (from a Nationwide Inpatient Cohort Study).** *The American journal of cardiology*
Kobo, O., Moledina, S. M., Slawnych, M., Sinnarajah, A., Simon, J., Van Spall, H. G., Sun, L. Y., Zoccai, G. B., Roguin, A., Mohamed, M. O., Mamas, M. A.
2021; 159: 8-18
- **Statins and SARS-CoV-2 Infection: Results of a Population-Based Prospective Cohort Study of 469 749 Adults From 2 Canadian Provinces.** *Journal of the American Heart Association*
McAlister, F. A., Wang, T., Wang, X., Chu, A., Goodman, S. G., van Diepen, S., Jackevicius, C. A., Kaul, P., Udell, J., Ko, D. T., Kwong, J. C., Austin, P. C., Lee, et al
2021; 10 (21): e022330
- **Trends in cardiovascular mortality of cancer patients in the US over two decades 1999-2019.** *International journal of clinical practice*
Kobo, O., Khattak, S., Lopez-Mattei, J., Van Spall, H. G., Graham, M., Cheng, R. K., Osman, M., Sun, L., Ullah, W., Fischman, D. L., Roguin, A., Mohamed, M. O., Mamas, et al
2021; 75 (11): e14841
- **The Impact of the COVID-19 Pandemic on Cardiac Procedure Wait List Mortality in Ontario, Canada.** *The Canadian journal of cardiology*
Tam, D. Y., Qiu, F., Manoragavan, R., Fremes, S. E., Hassan, A., Ko, D. T., Lauck, S. B., Naimark, D., Ouzounian, M., Sander, B., Sun, L., Wijeyesundera, H. C.
2021; 37 (10): 1547-1554
- **The association between cardiac intensive care unit mechanical ventilation volumes and in-hospital mortality.** *European heart journal. Acute cardiovascular care*
Nandiwada, S., Islam, S., Jentzer, J. C., Miller, P. E., Fordyce, C. B., Lawler, P., Alviar, C. L., Sun, L. Y., Dover, D. C., Lopes, R. D., Kaul, P., van Diepen, S.
2021; 10 (7): 797-805
- **Derivation and validation of a clinical model to predict death or cardiac hospitalizations while on the cardiac surgery waitlist.** *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*
Sun, L. Y., Eddeen, A. B., Wijeyesundera, H. C., Mamas, M. A., Tam, D. Y., Mesana, T. G.
2021; 193 (34): E1333-E1340
- **Impact of surgeon and anaesthesiologist sex on patient outcomes after cardiac surgery: a population-based study.** *BMJ open*
Sun, L. Y., Boet, S., Chan, V., Lee, D. S., Mesana, T. G., Bader Eddeen, A., Etherington, C.
2021; 11 (8): e051192
- **Implications of the ISCHEMIA trial on the practice of surgical myocardial revascularization.** *The Journal of thoracic and cardiovascular surgery*
Ruel, M., Sun, L. Y., Farkouh, M. E., Gaudino, M. F.
2021; 162 (1): 90-99
- **Predictors of cumulative cost for patients with severe aortic stenosis referred for surgical or transcatheter aortic valve replacement: a population-based study in Ontario, Canada.** *European heart journal. Quality of care & clinical outcomes*
Sunner, M., Qiu, F., Manoragavan, R., Roifman, I., Tam, D. Y., Fremes, S. C., Sun, L., Rahal, M., Woodward, G., Austin, P. C., Wijeyesundera, H. C.
2021; 7 (3): 265-272

- **Disability-free survival after major cardiac surgery: a population-based retrospective cohort study.** *CMAJ open*
Sun, L. Y., Eddeen, A. B., Mesana, T. G.
2021; 9 (2): E384-E393
- **Patients With Severely Reduced Ejection Fraction Undergoing Revascularization-Is Something Missing?-Reply.** *JAMA cardiology*
Sun, L. Y., Gaudino, M., Ruel, M.
2021; 6 (2): 242
- **Derivation of Patient-Defined Adverse Cardiovascular and Noncardiovascular Events Through a Modified Delphi Process.** *JAMA network open*
Sun, L. Y., Rodger, J., Duffett, L., Tulloch, H., Crean, A. M., Chong, A. Y., Rubens, F. D., MacPhee, E., Mesana, T. G., Lee, D. S., van Diepen, S., Beanlands, R. S., Ruel, et al
2021; 4 (1): e2032095
- **Trends in sex-based differences in outcomes following coronary artery bypass grafting in the United States between 2004 and 2015.** *International journal of cardiology*
Mohamed, W., Mohamed, M. O., Hirji, S., Ouzounian, M., Sun, L. Y., Coutinho, T., Percy, E., Mamas, M. A.
2020; 320: 42-48
- **Sex-specific temporal trends in ambulatory heart failure incidence, mortality and hospitalisation in Ontario, Canada from 1994 to 2013: a population-based cohort study.** *BMJ open*
Sun, L. Y., Mielniczuk, L. M., Liu, P. P., Beanlands, R. S., Chih, S., Davies, R., Coutinho, T., Lee, D. S., Austin, P. C., Bader Eddeen, A., Tu, J. V.
2020; 10 (11): e044126
- **Derivation and Validation of a Clinical Model to Predict Intensive Care Unit Length of Stay After Cardiac Surgery.** *Journal of the American Heart Association*
Sun, L. Y., Bader Eddeen, A., Ruel, M., MacPhee, E., Mesana, T. G.
2020; 9 (21): e017847
- **Impact of physician's sex/gender on processes of care, and clinical outcomes in cardiac operative care: a systematic review.** *BMJ open*
Etherington, N., Deng, M., Boet, S., Johnston, A., Mansour, F., Said, H., Zheng, K., Sun, L. Y.
2020; 10 (9): e037139
- **Long-Term Survival After Surgical or Percutaneous Revascularization in Patients With Diabetes and Multivessel Coronary Disease.** *Journal of the American College of Cardiology*
Tam, D. Y., Dharma, C., Rocha, R., Farkouh, M. E., Abdel-Qadir, H., Sun, L. Y., Wijeyesundera, H. C., Austin, P. C., Udell, J. A., Gaudino, M., Fremes, S. E., Lee, D. S.
2020; 76 (10): 1153-1164
- **Coronary Artery Disease in Patients With Cancer: It's Always the Small Pieces That Make the Bigger Picture.** *Mayo Clinic proceedings*
Mamas, M. A., Brown, S. A., Sun, L. Y.
2020; 95 (9): 1819-1821
- **Can Biomarkers Provide Right Ventricular-Specific Prognostication in the Perioperative Setting?** *Journal of cardiac failure*
Jabagi, H., Ruel, M., Sun, L. Y.
2020; 26 (9): 776-780
- **Direct Implant of a Transcatheter Aortic Valve Prosthesis for Prosthetic Mitral Valve Endocarditis.** *CJC open*
Hayatsu, Y., Dryden, A., Messika-Zeitoun, D., Sun, L. Y., Mesana, T., Ruel, M.
2020; 2 (4): 303-305
- **Incorporation of renal function in mortality risk assessment for pulmonary arterial hypertension.** *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*
Zelt, J. G., Hossain, A., Sun, L. Y., Mehta, S., Chandy, G., Davies, R. A., Contreras-Dominguez, V., Dunne, R., Doyle-Cox, C., Wells, G., Stewart, D. J., Mielniczuk, L. M.
2020; 39 (7): 675-685
- **The Impact of Preoperative Risk on the Association between Hypotension and Mortality after Cardiac Surgery: An Observational Study.** *Journal of clinical medicine*
Ristovic, V., de Roock, S., Mesana, T. G., van Diepen, S., Sun, L. Y.
2020; 9 (7)

- **Long-term Outcomes in Patients With Severely Reduced Left Ventricular Ejection Fraction Undergoing Percutaneous Coronary Intervention vs Coronary Artery Bypass Grafting.** *JAMA cardiology*
Sun, L. Y., Gaudino, M., Chen, R. J., Bader Eddeen, A., Ruel, M.
2020; 5 (6): 631-641
- **Management of Challenging Cardiopulmonary Bypass Separation.** *Journal of cardiothoracic and vascular anesthesia*
Monaco, F., Di Prima, A. L., Kim, J. H., Plamondon, M. J., Yavorovskiy, A., Likhvantsev, V., Lomivorotov, V., Hajjar, L. A., Landoni, G., Riha, H., Farag, A. M., Gazivoda, G., Silva, et al
2020; 34 (6): 1622-1635
- **Defining an Intraoperative Hypotension Threshold in Association with De Novo Renal Replacement Therapy after Cardiac Surgery.** *Anesthesiology*
Ngu, J. M., Jabagi, H., Chung, A. M., Boodhwani, M., Ruel, M., Bourke, M., Sun, L. Y.
2020; 132 (6): 1447-1457
- **Readmission rates following heart failure: a scoping review of sex and gender based considerations.** *BMC cardiovascular disorders*
Hoang-Kim, A., Parpia, C., Freitas, C., Austin, P. C., Ross, H. J., Wijesundera, H. C., Tu, K., Mak, S., Farkouh, M. E., Sun, L. Y., Schull, M. J., Mason, R., Lee, et al
2020; 20 (1): 223
- **Preoperative Risk, Blood Pressure, and Acute Kidney Injury.** *Anesthesiology*
Sun, L. Y.
2020; 132 (3): 416-417
- **The SYNTAX score according to diabetic status: What does it mean for the patient requiring myocardial revascularization?** *The Journal of thoracic and cardiovascular surgery*
Ruel, M., Sun, L. Y., Gaudino, M. F.
2020; 159 (3): 857-860
- **Prospective validation and refinement of the APPROACH cardiovascular surgical intensive care unit readmission score.** *Journal of critical care*
Verma, S., Southern, D. A., Raslan, I. R., Norris, C. M., Graham, M. M., Bagshaw, S. M., Nagendran, J., Maclure, T., Sun, L. Y., Chin, W. D., van Diepen, S.
2019; 54: 117-121
- **Renal insufficiency and severe coronary artery disease: should coronary artery bypass grafting, off-pump coronary artery bypass grafting or percutaneous coronary intervention be performed?** *Current opinion in cardiology*
Hayatsu, Y., Ruel, M., Sun, L. Y.
2019; 34 (6): 645-649
- **The Effect of Preoperative Anemia on Patients Undergoing Cardiac Surgery: A Propensity-Matched Analysis.** *Seminars in thoracic and cardiovascular surgery*
Jabagi, H., Boodhwani, M., Tran, D. T., Sun, L., Wells, G., Rubens, F. D.
2019; 31 (2): 157-163
- **Ethnic differences in acute heart failure outcomes in Ontario.** *International journal of cardiology*
Sun, L. Y., Kimmoun, A., Takagi, K., Liu, P. P., Bader Eddeen, A., Mebazaa, A.
2019; 291: 177-182
- **Sex Differences in Long-Term Survival After Major Cardiac Surgery: A Population-Based Cohort Study.** *Journal of the American Heart Association*
Johnston, A., Mesana, T. G., Lee, D. S., Eddeen, A. B., Sun, L. Y.
2019; 8 (17): e013260
- **The Current Role of Viability Imaging to Guide Revascularization and Therapy Decisions in Patients With Heart Failure and Reduced Left Ventricular Function.** *The Canadian journal of cardiology*
Kandolin, R. M., Wiefels, C. C., Mesquita, C. T., Chong, A. Y., Boland, P., Glineur, D., Sun, L., Beanlands, R. S., Mielniczuk, L. M.
2019; 35 (8): 1015-1029
- **Hypotension and Stroke in Cardiac Surgery: Reply.** *Anesthesiology*
Sun, L. Y., Ruel, M.
2019; 131 (1): 217-218
- **Post-Operative Calcium-Channel Blocker Use After Radial Artery Grafting: Do We Now Have a Definitive Answer?** *Journal of the American College of Cardiology*

- Ruel, M., Sun, L. Y.
2019; 73 (18): 2307-2309
- **Biomarkers in the Diagnosis, Management, and Prognostication of Perioperative Right Ventricular Failure in Cardiac Surgery-Are We There Yet?** *Journal of clinical medicine*
Jabagi, H., Mielniczuk, L. M., Liu, P. P., Ruel, M., Sun, L. Y.
2019; 8 (4)
 - **Utility of Novel Cardioresenal Biomarkers in the Prediction and Early Detection of Congestive Kidney Injury Following Cardiac Surgery.** *Journal of clinical medicine*
Zelt, J. G., Mielniczuk, L. M., Liu, P. P., Dupuis, J. Y., Chih, S., Akbari, A., Sun, L. Y.
2018; 7 (12)
 - **Genetics, coronary artery disease, and myocardial revascularization: will novel genetic risk scores bring new answers?** *Indian journal of thoracic and cardiovascular surgery*
Hui, S. K., Sun, L., Ruel, M.
2018; 34 (Suppl 3): 213-221
 - **Long-Term Outcomes in Patients With Ischemic Cardiomyopathy: Comparative Effectiveness of Coronary Artery Bypass Grafting versus Percutaneous Coronary Intervention**
Sun, L. Y., Chen, R. J., Tu, J., Bader Eddeen, A., Ruel, M.
LIPPINCOTT WILLIAMS & WILKINS.2018
 - **Disability-free survival after coronary artery bypass grafting in women and men with heart failure.** *Open heart*
Sun, L. Y., Tu, J. V., Lee, D. S., Beanlands, R. S., Ruel, M., Austin, P. C., Eddeen, A. B., Liu, P. P.
2018; 5 (2): e000911
 - **Genetics of coronary artery disease: should they impact the choice of revascularization?** *Current opinion in cardiology*
Hui, S. K., Lindale, E., Sun, L., Ruel, M.
2018; 33 (6): 605-612
 - **Sex-Specific Trends in Incidence and Mortality for Urban and Rural Ambulatory Patients with Heart Failure in Eastern Ontario from 1994 to 2013.** *Journal of cardiac failure*
Sun, L. Y., Tu, J. V., Sherrard, H., Rodger, N., Coutinho, T., Turek, M., Chan, E., Tulloch, H., McDonnell, L., Mielniczuk, L. M.
2018; 24 (9): 568-574
 - **Defining an Intraoperative Hypotension Threshold in Association with Stroke in Cardiac Surgery.** *Anesthesiology*
Sun, L. Y., Chung, A. M., Farkouh, M. E., van Diepen, S., Weinberger, J., Bourke, M., Ruel, M.
2018; 129 (3): 440-447
 - **Association of Frailty and Long-Term Survival in Patients Undergoing Coronary Artery Bypass Grafting.** *Journal of the American Heart Association*
Tran, D. T., Tu, J. V., Dupuis, J. Y., Bader Eddeen, A., Sun, L. Y.
2018; 7 (15)
 - **Sex differences in outcomes of heart failure in an ambulatory, population-based cohort from 2009 to 2013.** *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*
Sun, L. Y., Tu, J. V., Coutinho, T., Turek, M., Rubens, F. D., McDonnell, L., Tulloch, H., Eddeen, A. B., Mielniczuk, L. M.
2018; 190 (28): E848-E854
 - **Pivotal contemporary trials of percutaneous coronary intervention vs. coronary artery bypass grafting: a surgical perspective.** *Annals of cardiothoracic surgery*
Ngu, J. M., Sun, L. Y., Ruel, M.
2018; 7 (4): 527-532
 - **Prevalence and Long-Term Survival After Coronary Artery Bypass Grafting in Women and Men With Heart Failure and Preserved Versus Reduced Ejection Fraction.** *Journal of the American Heart Association*
Sun, L. Y., Tu, J. V., Bader Eddeen, A., Liu, P. P.
2018; 7 (12)
 - **The State of Affairs for Cardiovascular Health Research in Indigenous Women in Canada: A Scoping Review.** *The Canadian journal of cardiology*
Prince, S. A., McDonnell, L. A., Turek, M. A., Visintini, S., Nahwegahbow, A., Kandasamy, S., Sun, L. Y., Coutinho, T.

2018; 34 (4): 437-449

- **Association of intraoperative hypotension with acute kidney injury after elective noncardiac surgery.** *Anesthesiology*

Sun, L. Y., Wijeyesundera, D. N., Tait, G. A., Beattie, W. S.

2015; 123 (3): 515-23

- **Trends in Pulmonary Function Testing Before Noncardiothoracic Surgery.** *JAMA internal medicine*

Sun, L. Y., Gershon, A. S., Ko, D. T., Thilen, S. R., Yun, L., Beattie, W. S., Wijeyesundera, D. N.

2015; 175 (8): 1410-2

- **The association between tracheostomy and sternal wound infection in postoperative cardiac surgery patients.** *Canadian journal of anaesthesia = Journal canadien d'anesthésie*

Sun, L., Boodhwani, M., Baer, H., McDonald, B.

2013; 60 (7): 684-91

- **Mean transit time as an index of cerebral perfusion pressure in experimental systemic hypotension.** *Physiological measurement*

Murphy, M. J., Tichauer, K. M., Sun, L., Chen, X., Lee, T. Y.

2011; 32 (4): 395-405