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Professional Overview:

Dr. Jeevan Nagendran was born and raised in Edmonton, Alberta. Upon attaining an undergraduate degree in Chemical Engineering followed by a Doctor of Medicine, both at the University of Alberta, Dr. Jeevan Nagendran completed his postgraduate cardiac surgery residency training at the University of Alberta. During his time as a resident in cardiac surgery, he also completed a PhD in Experimental Medicine through the Royal College of Physicians & Surgeons of Canada via the Clinical Investigator Program at the University of Alberta. Following residency training, Dr. Jeevan Nagendran completed fellowship training at Western University. His fellowship experience at Western was focused on minimally invasive cardiac surgery and aortic surgery. This included endoscopic/robotic techniques, transcatheter valve implantation and open surgery for thoracic aortic pathology.

Current Research Interests:

- Tissue engineered heart valves
- Cardiac Metabolism

Publications:

1. **Nagendran J**, Moore MD, Norris CM, Khani-Hanjani A, Graham MM, Freed DH, Nagendran J. The Varying Effects of Obesity and Morbid Obesity on Outcomes Following Cardiac Transplantation. *Int J Obes (Lond)*. 2016 Apr;40(4):721-724.
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2. **Nagendran J**, Al-Habib HF, Kiaii B, Chu WA. Minimally invasive endoscopic repair of atrial septal defects via right minithoracotomy. *Multimed Man Cardiothorac Surg*. 2016 Feb doi: 10.1093/mmcts/MMV042.
3. Bozso SJ, **Nagendran J**, Chu MW. Minimally Invasive Repair of Partial Atrioventricular Canal Defect. *Can J Cardiol*. 2016 Feb;32(2):270.e3-5.
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4. Dolinsky VW, Soltys CL, Rogan KJ, Chan AY, **Nagendran J**, Wang S, Dyck JRB. [Resveratrol prevents pathological but not physiological cardiac hypertrophy](#). *J Mol Med (Berl)*. 2015 Apr;93(4):413-25
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5. **Nagendran J**, Catrip J, Diamantouros P, Teefy P, Kiaii B, Chan I, Goela A, Holzhey DM, Chu MW. Symetis Valve Implantation in Failing Freestyle With Close Proximity Between Coronary Ostia and Annulus. *Ann Thorac Surg*. 2015 Apr;99(4):e87-8.
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6. Zordoky BN*, **Nagendran J***, Pulinilkunnil T*, Kienesberger PC, Waller TJ, Kemp BE, Steinberg G, Dyck JRB. AMPK-dependent inhibitory phosphorylation of ACC is not essential for maintaining myocardial fatty acid oxidation. *Circ Res*. 2014 Aug 15;115(5):518-24.
**Contributed equally to this work*
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7. **Nagendran J**, Norris CM, Appoo JJ, Ross DB, Nagendran J. Left Ventricular End-Diastolic Pressure

- Predicts Survival in Coronary Artery Bypass Graft Surgery Patients. *Ann Thorac Surg*. 2014 Apr;97(4):1343-7.
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8. Pulinilkunnil T, Kienesberger PC, **Nagendran J**, Sharma N, Young ME, Dyck JRB. Cardiac-specific adipose triglyceride lipase over-expression protects from cardiac steatosis and dilated cardiomyopathy following diet-induced obesity. *Int J Obes (Lond)*. 2014 Feb;38(2):205-15.
(Impact Factor: 5.004)
9. **Nagendran J**, Pulinilkunnil T, Kienesberger PC, Fung D, Febbraio M, Dyck JRB. Cardiomyocyte-specific ablation of CD36 improves post-ischemic functional recovery. *J Mol Cell Cardiol*. 2013 Oct;63:180-8.
(Impact Factor: 5.218)
10. Dolinsky VW, Chakrabart S, Pereira TJ, Tatsujiro O, Levasseur J, Beker D, Morton JS, **Nagendran J**, Lopaschuk GD, Davidge ST, Dyck JRB. Resveratrol Prevents Hypertension and Cardiac Hypertrophy in Hypertensive Rats and Mice. *Biochim Biophys Acta*. 2013 May 22;1832(10):1723-1733.
(Impact Factor: 5.39)
11. **Nagendran J**, Norris CM, Graham MM, MacArthur RG, Keiser T, Maitland A, Meyer SR. Coronary Artery Bypass Grafting versus Percutaneous Coronary Intervention for Patients with Severe Left Ventricular Dysfunction: Superior Outcomes with Surgery. *Ann Thorac Surg*. 2013 Dec;96(6):2038-44.
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12. Kienesberger PC, Pulinilkunnil T, **Nagendran J**, Young ME, Bogner-Strauss JG, Hckl H, Khadour R, Heydari E, Haemmerle G, Zechner R, Kershaw EE, Dyck JR. Early structural and metabolic cardiac remodelling in response to inducible cardiomyocyte-specific adipose triglyceride lipase ablation occurs in the absence of pronounced changes in PPAR α activity. *Cardiovasc Res*. 2013 Aug 1;99(3):442-51.
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13. **Nagendran J**, Oudit GY, Bakal JA, Light PE, Dyck JRB, McAlister FA. Are users of sulfonylureas at

- the time of an acute coronary syndrome at risk of poorer outcomes? *Diabetes Obes Metab.* 2013 Nov;15(11):1022-8.
(Impact Factor: 6.36)
14. Pulinilkunnil T, Kienesberger PC, **Nagendran J**, Waller TJ, Young ME, Kershaw EE, Korbitt G, Haemmerle G, Zechner R, Dyck JRB. Myocardial ATGL Over-expression Protects Diabetic Mice from Developing Lipotoxic Cardiomyopathy. *Diabetes.* 2013 May;62(5):1464-77.
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15. **Nagendran J**, Kienesberger PC, Pulinilkunnil T, Zordoky B, Sung MM, Kim T Young ME, Dyck JRB. Cardiomyocyte-Specific ATGL Over-Expression Prevents Doxorubicin-Induced Cardiac Dysfunction in Female Mice. *Heart.* 2013 Jul;99(14):1041-7.
(Impact Factor: 5.595)
16. Schroeder MA, Lau AZ, Chen AP, **Nagendran J**, Barry J, Gu Y, Hu X, Tyler DJ, Clarke K, Dyck JRB, Connelly KA, Wright GA, Cunningham CH. Non-invasive Assessment of Metabolic Substrate Selection in the Failing Pig Heart Using Hyperpolarized ¹³C Magnetic Resonance. *Eur J Heart Fail.* 2013 Feb;15(2):130-40.
(Impact Factor: 6.526)
17. Kienesberger PC, Pulinilkunnil T, **Nagendran J**, Dyck JRB. Myocardial Triacylglycerol Metabolism. *J Mol Cell Cardiol.* 2013; Feb;55:101-10 [Review article]
(Impact Factor: 5.12)
18. **Nagendran J**, Waller TJ, Dyck JRB. AMPK Signaling and the Control of Substrate use in the Heart. *Mol Cell Endocrinol*, 2013; Feb 25;366(2):180-93. [Review article]
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19. Gill RS, Karmali S, **Nagandran J**, Frazier HO, Sherman V. Combined Ventricular Assist Device Placement with Adjustable Gastric Band (VAD-BAND): A Promising New Technique for Morbidly Obese Patients Awaiting Potential Cardiac Transplantation. *Journal Clin Med Res.* 2012; Apr;4(2):127-9.
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20. Jones LW, Antonelli J, Masko EM, Broadwater G, Lascola CD, Fels D, Dewhirst MW, Dyck JR, **Nagendran J**, Flores CT, Betof AS, Nelson ER, Pollak M, Dash RC, Young ME, Freedland SJ. Exercise Modulation of the Host - Tumor Interaction in an Orthotopic Model of Murine Prostate Cancer. *J Appl Physiol*. 2012 Jul;113(2):263-72.
(Impact Factor: 3.73)
21. Gill RS, Cheung PY, Yu XY, Al-Aklabi M, **Nagendran J**, Quinonez LG, Li JYQ, Miller J, Ross D, Rebeyka IM, Li J. Beta-3-adrenoceptor Antagonist SR59230A Attenuates the Imbalance of Systemic Oxygen Transport Induced by Dopamine in Newborn Lambs. *Clin Med Insights: Cardiol*, 2012;6:45-51.
22. Kienesberger PC, Pulinilkunnil T, Sung MM, **Nagendran J**, Haemmerle G, Kershaw EE, Young ME, Light PE, Oudit GY, Zechner R, Dyck JR. Myocardial ATGL Over-expression Decreases the Reliance on Fatty Acid Oxidation and Protects Against Pressure Overload-Induced Cardiac Dysfunction. *Mol Cell Biol*, 2012 Feb;32(4):740-50.
(Impact Factor: 5.94)
23. Durgan DJ, Pat BM, Laczy B, Bradley JA, Tsai JY, Grenett MH, Ratcliffe WF, Brewer RA, **Nagendran J**, Villegas-Montoya C, Zou C, Zou L, Johnson RL, Dyck JR, Bray MS, Gamble KL, Chatham JC, Young ME. O-GlcNAcylation: a novel post-translational modification linking myocardial metabolism and the cardiomyocyte circadian clock. *J Biol Chem*, 2011 Dec 30;286(52):44606-19.
(Impact Factor: 5.33)
24. Gill RS, Al-Adra DP, **Nagendran J**, Campbell S, Shi X, Haase E, Schiller D. Treatment of gastric cancer with peritoneal carcinomatosis by cytoreductive surgery and HIPEC: a systematic review of survival, mortality, and morbidity. *J Surg Oncol*, 2011 Nov 1;104(6):692-8.
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25. Durgan DJ, Tsai JY, Grenett MH, Pat BM, Ratcliffe WF, Villegas-Montoya C, Garvey ME, **Nagendran J**, Dyck JR, Bray MS, Gamble KL, Gimble JM, Young ME. Evidence suggesting that the cardiomyocyte circadian clock modulates responsiveness of the heart to hypertrophic stimuli in mice. *Chronobiol Int*, 2011 Apr.;28(3):187-203.
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Triton X-100 Levels in Decellularized Rat Aortic Valve Tissue. *Cell Preserv Technol*, 2005; 3(3): 149-155.

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27. Meyer SR, **Nagendran J**, Desai LS, Rayat GR, Churchill TA, Anderson CC, Rajotte RV, Lakey JRT, Ross DB. Decellularization reduces the immune response to aortic valve allografts in the rat. *The Journal of Thoracic and Cardiovascular Surgery*, 2005; 130(2): 469-76.

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28. Hall D, Laplante C, Manku S, **Nagendran J**. Mild Oxidative Cleavage of Borane-Amine Adducts from Amide Reductions: Efficient Solution and Solid-Phase Synthesis of N-Alkylamino Acids and Chiral Oligoamine. *Journal of Organic Chemistry*, 1999; 64: 698-699.

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Other:

BOOK CHAPTERS

Pulinilkunnil T*, **Nagendran J***, Dyck JRB. AMPK and metabolic remodeling in cardiac disease.

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*Contributed equally to this work.
