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Advanced cardiac imaging in heart failure : from subclinical myocardial dysfunction to therapy optimization

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CURRICULUM VITÆ

Dominique Auger was born in Sorel, Québec, Canada on March 12th 1979. She completed her MD degree at Université de Montréal, Canada in 2003. She also completed a specialized medicine degree in Internal Medicine (2007) and Cardiology (2009). She is a Member of the Royal College of Physicians and Surgeons of Canada.

In September 2009, she left for the Netherlands to complete a 2-year Research Fellowship at the Leiden University Medical Centre. Training in Cardiac Magnetic Resonance Imaging and echocardiography were also included during her 2-years stay.

In 2011, she completed her training in Cardiac Magnetic Resonance at the Royal Brompton Hospital, in London, United Kingdom.

Since January 2012, she is a full-time member of the Cardiology Department at the Centre Hospitalier de l'Université de Montréal (CHUM), in Montréal, Québec, Canada where her clinical practice primarily focuses on heart failure and echocardiography. She is also a Researcher at the CHUM's Research Centre. She has been collaborating with the Advanced Heart Failure team at the McGill University Health Centre. Her current interests involve the development of a collaborating group in advanced cardiac imaging in Montréal. She is also the Principal Investigator of several research projects at her Centre.

LIST OF PUBLICATIONS

1. **Auger D.**, White M., *La greffe cardiaque en 2007 : L'essentiel pour le clinicien*. La Cardiologie Contemporaine 2007, 5(2), p.2-3.
2. **Auger D.**, Ducharme A. *Les cardiopathies restrictives*. La Cardiologie Contemporaine 2009, 7(3), p.2-3.
3. **Auger D.**, Ducharme A., Harel F., Thibeault B., O'Meara, E. *Patient assessment for cardiac resynchronization therapy: past present and future of imaging techniques*. Can J Cardiol 2010 Jan; 26(1): 27-34.
4. **Auger D.**, Pressacco J, Marcotte F, Tremblay A, Dore A, Ducharme A. *Cardiac Masses: An Integrative Approach Using Echocardiography And Other Imaging Modalities*. Heart 2011 jul; 97(13): 1101-9.
5. **Auger D**, Delgado V, Bax JJ. *The current role of echocardiography in the selection of patients for cardiac resynchronization therapy*. Cardiology International Spring 2010.
6. **Auger D**, van Bommel RJ, Bertini M, et al. *Prevalence and characteristics of patients with clinical improvement but not significant left ventricular reverse remodeling after cardiac resynchronization therapy*. Am Heart J. 2010 Oct; 160(4): 737-43.
7. **Auger D**, Bertini M, Marsan NA, et al. *Prediction of response to cardiac resynchronization therapy combining two different three-dimensional analyses of left ventricular dyssynchrony*. Am J Cardiol. 2011 Sep 1; 108 (5): 711-7.
8. **Auger D**, Schalij MJ, Bax JJ, Delgado V. *Three-dimensional imaging in cardiac resynchronization therapy*. Rev Esp Cardiol. 2011 Nov; 64(11): 1035-44. Epub 2011, Sep 22. Review. Spanish.
9. **Dominique Auger**, Gabe B Bleeker, Matteo Bertini, et al. *Effect of cardiac resynchronization therapy in patients without left intraventricular dyssynchrony*. Eur Heart J. 2012 Apr; 33(7): 913-20. Epub 2012 Jan 24.
10. **Dominique Auger MD**, Ulas Hoke MD, Jeroen J. Bax MD, PhD, Eric Boersma PhD, Victoria Delgado MD, PhD. *Effect of atrioventricular and ventriculoventricular delay optimization on clinical and echocardiographic outcomes of patients treated with cardiac resynchronization therapy: A meta-analysis*. Am Heart J. 2013; 166: 20-29.
11. **Dominique Auger MD**, Ulas Hoke MD, Joep Thijssen MD, et al. *Effect of cardiac resynchronization therapy on the sequence of systolic mechanical activation assessed by 2 dimensional radial strain imaging*. Am J Cardiol. 2014 Mar 15; 113(6): 982-7. doi: 10.1016/j.amjcard.2013.11.059. Epub 2013 Dec 25.
12. Höke U, **Auger D**, Thijssen J, et al. *Significant lead-induced tricuspid regurgitation is associated with poor prognosis at long-term follow-up*. Heart. 2014 Jan 21. doi: 10.1136/heartjnl-2013-304673. [Epub ahead of print].

13. **Dominique Auger MD**, Ulas Hoke MD, Nina Ajmone Marsan MD, et al. *Effect of induced LV dyssynchrony by right ventricular apical pacing on all-cause mortality and heart failure hospitalization rates at long-term follow-up.* J Cardiovasc Electrophysiol. 2014 Feb 27. doi: 10.1111/jce.12397. [Epub ahead of print]
14. Delgado V, Mooyaart EA, CT Ng A, et al. *Echocardiography and non-invasive imaging in cardiac resynchronization therapy.* Minerva Cardioangiol. 2010 Jun; 58(3): 313-32.
15. Witkowski TG, ten Brinke EA, Delgado V, et al. *Surgical ventricular restoration for patients with ischemic heart failure: determinants of two-year survival.* Ann Thorac Surg. 2011 Feb; 91(2): 491-8.
16. Linda D. van Schinkel, **Dominique Auger**, Saskia G. van Elderen, et al. *Association between pulse wave velocity from velocity-encoded MRI and advanced diastolic function indices assessed by speckle tracking strain analysis in Diabetes Mellitus type 1.* Int J Cardiovasc Imaging. 2012 Sep 22. [Epub ahead of print]
17. Arnold CT Ng, Victoria Delgado, Roxana Djaberi, Joanne D Schuijf, Mark J Boogers, **Dominique Auger**, Matteo Bertini, Albert de Roos, Rutger W van der Meer, Hildo J Lamb, Jeroen J Bax. *Multimodality Imaging in Diabetic Heart Disease.* Curr Probl Cardiol 2011 Jan; 36(1): 9-47.
18. Antoni ML, Boden H, Hoogslag GE, Ewe SH, **Auger D**, Holman ER, van der Wall EE, Schalij MJ, Bax JJ, Delgado V. *Prevalence of Dyssynchrony and Relation With Long-Term Outcome in Patients After Acute Myocardial Infarction.* Am J Cardiol. 2011 Sep 8.
19. Shanks M, Antoni ML, Hoke U, Bertini M, Ng AC, **Auger D**, Marsan NA, van Erven L, Holman ER, Schalij MJ, Bax JJ, Delgado V. *The effect of cardiac resynchronization therapy on left ventricular diastolic function assessed with speckle-tracking echocardiography.* Eur J Heart Fail. 2011 Oct; 13(10): 1133-9.
20. Ng AC, Delgado V, Bertini M, Antoni ML, van Bommel RJ, van Rijnsoever EP, van der Kleij F, Ewe SH, Witkowski T, **Auger D**, Nucifora G, Schuijf JD, Poldermans D, Leung DY, Schalij MJ, Bax JJ. *Alterations in multidirectional myocardial functions in patients with aortic stenosis and preserved ejection fraction: a two-dimensional speckle tracking analysis.* Eur Heart J. 2011 Jun; 32 (12): 1542-50.
21. Shanks M, Delgado V, Ng AC, **Auger D**, Mooyaart EA, Bertini M, Marsan NA, van Bommel RJ, Holman ER, Poldermans D, Schalij MJ, Bax JJ. *Clinical and echocardiographic predictors of nonresponse to cardiac resynchronization therapy.* Am Heart J. 2011 Mar; 161 (3): 552-7.
22. Roos CJ, Auger D, Djaberi R, et al. *Relationship between left ventricular diastolic function and arterial stiffness in asymptomatic patients with diabetes mellitus.* Int J Cardiovasc Imaging. 2012 Sep 28. [Epub ahead of print]
23. Yiu KH, Atsma DE, Delgado V, Ng AC, Witkowski TG, Ewe SH, **Auger D**, Holman ER, van Mil AM, Breuning MH, Tse HF, Bax JJ, Schalij MJ, Marsan NA. *Myocardial structural alteration and systolic dysfunction in preclinical hypertrophic cardiomyopathy mutation carriers.* PLoS One. 2012; 7(5): e36115.
24. Bertini M, Ng AC, Antoni ML, Nucifora G, Ewe SH, **Auger D**, Marsan NA, Schalij MJ, Bax JJ, Delgado V. *Global longitudinal strain predicts long-term survival in patients with chronic ischemic cardiomyopathy.* Circ Cardiovasc Imaging. 2012 May 1; 5(3): 383-91.
25. Witkowski TG, Thomas JD, Delgado V, van Rijnsoever E, Ng AC, Hoke U, Ewe SH, **Auger D**, Yiu KH, Holman ER, Klautz RJ, Schalij MJ, Bax JJ, Marsan NA. *Changes in left ventricular function after mitral valve repair for severe organic mitral regurgitation.* Ann Thorac Surg. 2012 Mar; 93(3): 754-60.
26. Leong DP, Höke U, Delgado V, **Auger D**, Thijssen J, van Erven L, Bax JJ, Schalij MJ, Marsan NA. *Predictors of long-term benefit of cardiac resynchronization therapy in patients with right bundle branch block.* Eur Heart J. 2012 Aug; 33(15): 1934-41.
27. Leong DP, Höke U, Delgado V, **Auger D**, Witkowski T, Thijssen J, van Erven L, Bax JJ, Schalij MJ, Marsan NA. *Right ventricular function and survival following cardiac resynchronisation therapy.* Heart. 2013 Jan 12.
28. Bertini M, Höke U, van Bommel RJ, Ng AC, Shanks M, Nucifora G, **Auger D**, Jan Willem Borleffs C, van Rijnsoever EP, van Erven L, Schalij MJ, Marsan NA, Bax JJ, Delgado V. *Impact of clinical and echocardiographic response to cardiac resynchronization therapy on long-term survival.* Eur Heart J Cardiovasc Imaging. 2012 Dec 7.
29. Ewe SH, Delgado V, van der Geest R, Westenberg JJ, Haecck ML, Witkowski TG, **Auger D**, Marsan NA, Holman ER, de Roos A, Schalij MJ, Bax JJ, Sieders A, Siebelink HM. *Accuracy of Three-Dimensional Versus Two-Dimensional Echocardiography for Quantification of Aortic Regurgitation and Validation by Three-Dimensional Three-Directional Velocity-Encoded Magnetic Resonance Imaging.* Am J Cardiol 2013 May 15. [Epub ahead of print].

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