

CV - [Brage Høyem Amundsen](#)

Born 1st Dec 1976

MD, PhD

Married, two children



Main fields of interest

Cardiovascular imaging by ultrasound and MRI

Cardiovascular pathophysiology, cardiac mechanics

Education

2008 PhD Medical Technology, NTNU, Trondheim

2001 MD, NTNU, Trondheim

1997 One clinical term at Universitätsklinikum, RWTH, Aachen, Germany

Work experience

2012- Researcher, [MI lab](#), NTNU

2008- Junior Registrar, Dept. of Cardiology/Internal Medicine, St.Olavs Hospital

2008-2012 Post.doc, MI Lab, NTNU

2006-2007 Junior Registrar, Dept. of Medical Imaging, St.Olavs Hospital, cardiac MRI.

2003-2006 Research fellow, Dept. of Circulation and Medical Imaging, NTNU

2001-2003 Intern, Molde County Hospital and Surnadal Medical Center

Teaching

Course leader *Exercise testing and training of patients with heart disease*, post-qualifying education for medical doctors, 2006-09.

Course leader *Ultrasound imaging*, PhD-course, NTNU, 2010-
Medical students (Lectures & practical skills, exams)

Supervision

Main supervisor PhD-students Lene Anette Rustad, MD, and Joakim Schistad Lund, MD

Co-supervisor PhD-students Anders Thorstensen, MD, Thomas R. Skaug, MD, Lars Christian Nilsen, MD.

Supervisor for 3 medical student theses

Certification

Cardiovascular MR imaging-exam. European Society of Cardiology, 2008

Assignments

Scientific committee, meetings of the Norwegian Society of Cardiology, 2008-

Norsk Hjertesviktforum, leader, 2008-2011

Project board, sonography-education, Sør-Trøndelag University College 2010-

Network leader *Medical imaging and Image-guided therapy*, Strategic area Medical Technology, NTNU 2009-2011

Reviewer

JACC cardiovascular imaging, Journal of the American Society of Echocardiography, European Heart Journal-cardiovascular imaging, Transactions on Biomedical Engineering, Ultrasound in Medicine and Biology, European Journal of Cardiovascular Rehabilitation and Prevention, Cardiology, Scandinavian Cardiovascular Journal, International Journal of Cardiology.

Publications ([link to Pubmed-search](#))

1. Thorstensen A, Dalen H, **Amundsen BH**, Støylen A. Peak systolic velocity indices are more sensitive than end-systolic indices in detecting contraction changes assessed by echocardiography in young healthy humans. **Eur J Echocardiogr.** 2011;12:924-30.
2. Moholdt T, Aamot IL, Granøien I, Gjerde L, Myklebust G, Walderhaug L, Brattbakk L, Hole T, Graven T, Stølen TO, **Amundsen BH**, Mølmen-Hansen HE, Støylen A, Wisløff

U, Slørdahl SA. Aerobic interval training increases peak oxygen uptake more than usual care exercise training in myocardial infarction patients: a randomised, controlled study. **Clin Rehabil.** 2012;26:33-44.

3. Jasaityte R, Heyde B, Ferferieva V, **Amundsen BH**, Barbosa D, Loeckx D, Kiss G, Orderud F, Claus P, Torp H, D'hooge J. Comparison of a new methodology for the assessment of 3D myocardial strain from volumetric ultrasound with 2D speckle tracking. **Int J Cardiovasc Imaging** DOI 10.1007/s10554-011-9934-y. Epub sep 2011.
4. Kemi OJ, Rognmo O, **Amundsen BH**, Slordahl S, Richardson RS, Helgerud J, Hoff J. One-arm maximal strength training improves work economy and endurance capacity but not skeletal muscle blood flow. **J Sports Sci.** 2011; 29:161-70.
5. Aakerøy L, **Amundsen BH**, Skomsvoll JF, Haugen BO, Soma J. A 50-year-old man with eosinophilia and cardiomyopathy: need for endomyocardial biopsy? **Eur J Echocardiogr.** 2011;12:257-9.
6. **Amundsen BH**, Ericsson M, Seland JG, Pavlin T, Ellingsen O, Brekken C. A comparison of retrospectively self-gated magnetic resonance imaging and high-frequency echocardiography for characterization of left ventricular function in mice. **Lab Anim.** 2011;45:31-7.
7. Ingul CB, Malm S, Refsdal E, Hegbom K, **Amundsen BH**, Støylen A. Recovery of function after acute myocardial infarction evaluated by tissue Doppler strain and strain rate. **J Am Soc Echocardiogr.** 2010;23:432-8.
8. Ericsson M, Andersson KB, **Amundsen BH**, Torp SH, Sjaastad I, Christensen G, Sejersted OM, Ellingsen Ø. High-intensity exercise training in mice with cardiomyocyte-specific disruption of Serca2. **J Appl Physiol.** 2010;108:1311-20.
9. Thorstensen A, Dalen H, **Amundsen BH**, Aase SA, Støylen A. Reproducibility in echocardiographic assessment of the left ventricular global and regional function, the HUNT study. **Eur J Echocardiogr.** 2010;11:149-56
10. Aamot IL, Moholdt T, **Amundsen BH**, Solberg HS, Mørkved S, Støylen A. Onset of exercise training 14 days after uncomplicated myocardial infarction: a randomized controlled trial. **Eur J Cardiovasc Prev Rehabil.** 2010;17:387-92.
11. Skaug TR, Hergum T, **Amundsen BH**, Skjærpe T, Torp H, Haugen BO. Quantification of Mitral Regurgitation Using High Pulse Repetition Frequency Three-Dimensional Color Doppler. **J Am Soc Echocardiogr.** 2010;23:1-8.
12. Sandvei MS, **Amundsen BH**, Haugen BO, Støylen A, Slørdahl SA, Vik A. Left ventricular myocardial function during the acute phase of a subarachnoid haemorrhage. **Scand Cardiovasc J.** 2009;3:110-6.
13. Rustad LA, **Amundsen BH**, Slørdahl SA, Støylen A. Upright bicycle exercise echocardiography in patients with myocardial infarction shows lack of diastolic, but not systolic, reserve: a tissue Doppler study. **Eur J Echocardiogr.** 2009;10:503-8.
14. Crosby J, **Amundsen BH**, Hergum T, Remme E, Langeland S, Torp H. 3D speckle tracking for assessment of regional left ventricular function. **Ultrasound Med Biol.** 2009;35:458-71.
15. **Amundsen BH**; Crosby J; Steen PA; Torp H; Slordahl SA; Stoylen A. Regional myocardial long-axis strain and strain rate measured by different tissue Doppler and speckle tracking echocardiography methods: a comparison with tagged magnetic resonance imaging. **Eur J Echocardiogr.** 2009;10:229-37.

16. Crosby J, **Amundsen BH**, Helle-Valle T, Steen PA, Torp H. A New Tissue Doppler Method for Examination of Left Ventricular Rotation. **Ultrasound Med Biol.** 2008;34:1741-51.
17. **Amundsen BH**, Rognmo Ø, Hatlen G, Støylen A, Torp H, Slørdahl SA. Effects of training on myocardial function in patients with coronary artery disease: A strain rate imaging study. **Scand Cardiovasc J** 2008;42:110-7.
18. Skjold A, **Amundsen BH**, Wiseth R, Støylen A, Haraldseth O, Larsson HB, Jynge P. Manganese dipyriddyoxyl-diphosphate (MnDPDP) as a viability marker in patients with myocardial infarction. **J Magn Reson Imaging.** 2007;26:720-7.
19. Soma J, Eriksen M, **Amundsen BH**. A 50-year-old woman with high heart rate. **Tidsskr Nor Laegeforen.** 2007;127:1056-7.
20. **Amundsen BH**, Wisloff U, Slordahl SA. Exercise training in cardiovascular diseases. **Tidsskr Nor Laegeforen.** 2007;127:446-8.
21. **Amundsen BH**, Helle-Valle T, Edvardsen T, Torp H, Crosby J, Lyseggen E, Støylen A, Ihlen H, Lima JAC, Smiseth OA, Slørdahl SA. Non-invasive Myocardial strain measurement by speckle tracking echocardiography – validation against sonomicrometry and tagged magnetic resonance imaging. **J Am Coll Cardiol.** 2006;47:789-93.
22. Helle-Valle T, Crosby T, Edvardsen T, Lyseggen E, **Amundsen BH**, Smith HJ, Rosen BD, Lima JAC, Torp H, Ihlen H, Smiseth OA. New non-invasive method for assessment of left ventricular rotation – speckle tracking echocardiography. **Circulation** 2005;112:3149-56.
23. Slørdahl SA, Wang E, Hoff J, Kemi OJ, **Amundsen BH**, Helgerud J. Effective training for patients with intermittent claudication. **Scand Cardiovasc J.** 2005;39:244-9.
24. Slørdahl SA, Bjærum S, **Amundsen BH**, Støylen A, Heimdal A, Rabben SI, Torp H. High frame rate strain rate imaging of the interventricular septum in healthy subjects. **Eur J Ultrasound** 2001;14:149-55.
25. **Amundsen BH**, Wisløff U, Helgerud J, Hoff J, Slørdahl SA. Ultrasound recorded axillary artery blood flow during elbow-flexion exercise. **Med Sci Sports Exerc.** 2002;34:1288-93.

Book chapters

- Koronarsykdom. I *Aktivitetshåndboken*. Oslo 2009. Helsedirektoratet. IS-1592.