

CV - Brage Høyem Amundsen, cand.med., phd.

Født 1.12.1976.

Gift, to barn.

Hovedinteresser

Kardiovaskulær avbildning med ultralyd og MR

Sirkulasjonsfysiologi

Utdanning

2008	Phd medisinsk teknologi, NTNU. Link til avhandling.
2001	Cand.med., NTNU
1997	Et semester utveksling ved Universitätsklinikum, RWTH, Aachen, Tyskland

Arbeidserfaring

Hovedstillinger:

2011-nå	Lege i spesialisering, Medisinsk klinikk/Klinikk for hjertemedisin, St. Olavs
2008-2010	Post.doc, Medical Imaging Lab (MI Lab), NTNU
2006-2007	Siviltjeneste, Klinikk for bildediagnostikk, St. Olavs Hospital
2003-2006	Stipendiat, Inst. for sirkulasjon og bildediagnostikk, NTNU
2001-2003	Turnustjeneste, Molde sykehus og Surnadal kommune.

Deltidsstillinger:

2011-2014	Forsker, 20%, MI lab, NTNU
2008-2010	Lege, 20%, hjertemedisinsk avdeling, St. Olavs Hospital
2009-2010	Koordinator, satsningsområdet Medisinsk teknologi, NTNU
2003-2005	Lege 20%, Karfysiologisk lab, Det medisinske fakultet, NTNU

Veiledning

Hovedveileder phd Lene Anette Rustad, lege (fullført) (forskerlinjestudent DMF)

Hovedveileder phd-student Joakim Schistad Lund, lege, planlagt levering sommer 2015.

Medveileder phd-studentene Anders Thorstensen, lege (fullført 20XX), Thomas R. Skaug, lege (leverer sommer 2015) og Lars Christian Nilsen, lege, planlagt levering sommer 2015.

Veileder for 2 fullførte hovedoppgaver for medisinstudenter, protokoll for en ny student levert Det medisinske fakultet januar -15.

Undervisning

Leder for kurskomiteen "Testing og trening av pasienter med hjertesykdom", kurs i legers videre- og etterutdanning, 2006-09. Medlem av kurskomiteen 2014-.

Emneansvarlig for phd-kurset *Ultrasound imaging*, NTNU, 2010-2012. Ansvar for flere forelesning og gjennomføring av øvinger.

Undervisning av medisinstudenter: PBL-veileder i flere semestre. Forelesninger, uketjeneste, F-lab. Sensor ved muntlig og skriftlig eksamen DMF, NTNU.

Sertifisering/Kurs

Kurs hjerte-MR, CMR-academy, Berlin 2010

Eksamen kardiovaskulær MR. European Society of Cardiology, 2008

Kurs Prosjektarbeid, NTNU Videre, 2008

Forsøksdyr-kurs, sertifisering, NTNU/Veterinærhøgskolen 2006

Administrative oppdrag

Leder utdanningsutvalget Medisinsk Klinikk, St.Olavs Hospital 2015 –

Ansvarlig for forskningssesjonen for Norsk Cardiologisk Selskap sitt Høstmøte. Medlem/leder av komiteen for forskningssesjonen fra 2008 og fremover.

Prosjektstyret for ekkoteknikker-utdanningen Høyskolen i Sør-Trøndelag, 2010 - nå.

Nettverksleder *Medisinsk avbildning og bildeveiledet behandling*, i det strategiske satsningsområdet medisinsk teknologi, NTNU 2009-2011.

Norsk Hjertesviktforum, leder, 2008-2010

Inviterte foredrag ved internasjonale og nasjonale kongresser/møter

Euroecho 2011 & 2012

NCS høstmøte 2013

Medlem av evalueringskomite for phd-graden

Einar Hopp, cand.med. Universitetet i Oslo. 2014.

Vidar Reddix, cand.med, Universitetet i Oslo. 2015 (avholdes sommer 2015).

Fagfelle-vurderer

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

Publikasjoner i tidsskrifter med fagfelle-vurdering

1. It is all about timing! **Amundsen BH**. JACC Cardiovasc Imaging. 2015;8:158-60. doi: 10.1016/j.jcmg.2014.11.005. Editorial comment.
2. Cardiac function assessed by exercise echocardiography on the first morning after coronary artery bypass grafting. Dedichen HH, Kirkeby-Garstad I, Aadahl P, Hisdal J, **Amundsen BH**. Clin Physiol Funct Imaging. 2014. doi: 10.1111/cpf.12224. [Epub ahead of print].
3. En mann i 60-årene med brystmerter og funksjonsdyspne. Slørdahl TS, **Amundsen BH**, Størkersen O, Stensæth KH, Slette MK, Wiseth R, Grenne B. Tidsskr Nor Lægeforen. 2014;25;134(22):2167-71. doi: 10.4045/tidsskr.14.0538.
4. Skaug TR, **Amundsen BH**, Hergum T, Urheim S, Torp H, Haugen BO. Quantification of aortic regurgitation using high-pulse repetition frequency three-dimensional colour Doppler. **Eur Heart J Cardiovasc Imaging**. 2014;15:615-22.
5. Brekke B, Nilsen LC, Lund J, Torp H, Bjastad T, **Amundsen BH**, Stoylen A, Aase SA. Ultra-high frame rate tissue Doppler imaging. **Ultrasound Med Biol**. 2014;40:222-31.
6. Doltra A, **Amundsen BH**, Gebker R, Fleck E, Kelle S. Emerging concepts for myocardial late gadolinium enhancement MRI. **Curr Cardiol Rev**. 2013;9:185-90.

7. Rustad LA, Nytrøen K, Andreassen A, Geiran O, Endresen K, Gullestad L, Aakhus S, **Amundsen BH**. Heart transplant systolic and diastolic function is impaired by prolonged pretransplant graft ischaemic time and high donor age: an echocardiographic study. **Eur J Cardiothorac Surg**. 2013;44:e97-e104.
8. Thorstensen A, Dalen H, Hala P, Kiss G, D'hooge J, Torp H, Støylen A, **Amundsen BH**. Three-dimensional echocardiography in the evaluation of global and regional function in patients with recent myocardial infarction: a comparison with magnetic resonance imaging. **Echocardiography**. 2013;3:682-92.
9. Rustad LA, Nytrøen K, **Amundsen BH**, Gullestad L, Aakhus S. One year of high-intensity interval training improves exercise capacity, but not left ventricular function in stable heart transplant recipients: A randomised controlled trial. **Eur J Prev Cardiol**. 2014;21:181-91. Epub 2012 Nov 26
10. Thorstensen A, **Amundsen BH**, Dalen H, Hala P, Kiss G, Aase SA, Torp H, Støylen A. Strain rate imaging combined with wall motion analysis gives incremental value in direct quantification of myocardial infarct size. **Eur Heart J Cardiovasc Imaging**. 2012;13:914-21..
11. 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.
12. 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.
13. 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** 2012;28:1049-60.
14. 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.
15. 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.
16. **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.
17. 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.

18. 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.
19. 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
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. **Amundsen BH**; Crosby J; Steen PA; Torp H; Slordahl SA; Støylen 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.
26. 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.
27. **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.
28. Skjold A, **Amundsen BH**, Wiseth R, Støylen A, Haraldseth O, Larsson HB, Jynge P. Manganese dipyrdoxyl-diphosphate (MnDPDP) as a viability marker in patients with myocardial infarction. **J Magn Reson Imaging**. 2007;26:720-7.
29. Soma J, Eriksen M, **Amundsen BH**. A 50-year-old woman with high heart rate. **Tidsskr Nor Laegeforen**. 2007;127:1056-7.
30. **Amundsen BH**, Wisloff U, Slordahl SA. Exercise training in cardiovascular diseases. **Tidsskr Nor Laegeforen**. 2007;127:446-8.

31. **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.
32. 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.
33. 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.
34. 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.
35. **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.

Manus som er innsendt eller har kort tid igjen til innsending:

1. Malmo V, B Nes BM, **Amundsen BH**, Tjonna AE, Støylen A, Rossvoll O, Wisløff U, Loennechen JP. Aerobic interval exercise reduces the burden of atrial fibrillation: A randomized trial. Innsendt.
2. Lund J, Aamot IL, Dalen H, **Amundsen BH**, Støylen A. Left ventricular diastolic function during exercise: Effects of a 12-week high-intensity exercise program in patients with a recent myocardial infarction.
3. Lund J, Nilsen LCL, Brekke B, Aase SA, Lønnebakken MT, Stensvåg D, Torp H, Thorstensen A, Støylen A, **Amundsen BH**. Determinants of left ventricular diastolic strain rate: myocardial infarct size and other risk-factors for diastolic dysfunction
4. Nilsen LCL, Brekke B, Aase SA, Lønnebakken MT, Stensvåg D, **Amundsen BH**, Torp H, Støylen A. Anatomic Doppler spectrum: Retrospective spectral tissue Doppler from Ultra High Frame Rate Tissue Doppler Imaging in diagnosis of myocardial dysfunction, a feasibility study.

Bok-kapitler

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