

CURRICULUM VITAE – TORIL A. NAGELHUS HERNES

Name **Toril A. Nagelhus Hernes (female)**
Date of birth **28.06.1967**
Nationality **Norwegian**
Sivil status: **Married, two children, 13, 20 years**
Present pos: **Head of Dept. Circulation and Medical imaging,
Professor in Medical technology,
Norwegian University of Science and Technology, NTNU
Scientific Coordinator, St Olavs University Hospital**
Degrees: **Sivilingeniør (MSc) (1992), NTH
Dr.Ing. (PhD), Biophysics Medical Technology (1997), NTNU**



Education:

- 1992-97: PhD (dr.ing) Medical Technology. Norwegian University of Science and Technology, NTNU (first child born in 1996 during PhD work)
1995: International 2 months research visit during PhD, INSERM, Paris, France
1987-92: MSc (Sivilingeniør) Electronics and Computer Science/ Biophysics and Medical technology NTH (now Norwegian University of Science and Technology, NTNU)
1986-87: Medical studies, Medical Faculty, University of Oslo
1998-today: Various leader and management programs, Champion Leader League, CLL, problem based learning, pedagogical courses, "Good management in SINTEF" among others

Experience in directing/management of research:

- 1997 - 1998: Researcher at SINTEF, Project leader/manager in ultrasound laparoscopic surgery at the National Center of Competence in 3D Ultrasound. A collaboration between SINTEF, NTNU and St Olavs Hospital. Spinn off establishment: MISON (now SONOWAND) in 1998.
1998 - 2013: Research Director (Head of department), SINTEF, Medical Technology. As Director of the Ultrasound department Toril Hernes was the youngest Research Director in SINTEF. Other departments in SINTEF were later fused with the Ultrasound department into Dept of Medical Technology, also headed by Toril Hernes. Administrative and scientific responsible for 30 research scientists (with an annual budget of 27 mill NOK) within image guided surgery/therapy (National Centre for 3D US), administration of clinical trials (Unimed Innovation) and innovation in health care (InnoMed; National Centre of Innovation and Business Develop. in Health Care, <http://www.innomed.no/nb/>).
2006 - 2013: Professor II at Institute of Circulation and medical imaging at Norwegian University of Science and Technology. Supervision of several PhD students (11 fulfilled, 4 ongoing) and participation in and project management of several research project.
2013 - present: Head of Department Circulation and Medical Imaging/Professor, Medical Faculty, NTNU. Heading department of 230 employees. Part of the managing group of the Faculty of Medicine at NTNU. Special innovation responsibility at the faculty of medicine.
2013 - present: Scientific Coordinator/Manager position (20%) at St Olavs University Hospital: One of the initiators of the research infrastructure "Operating Room of the Future" at St Olavs University Hospital/NTNU in 2005. Member of the managing group and the scientific advisory board of *Operating Room of the Future* (St Olavs Hospital/NTNU). Also responsible for the initiative and (PI/Manager) of establishing the national infrastructure NorMIT, *Norwegian Center of Minimally invasive image guided therapy and medical technologies*, <http://normit.no/> (collaboration *Operating Room of the Future* in Trondheim and *The Interventional Centre* at National Hospital in Oslo) see also the Norwegian road map of national infrastructures, Research Council of Norway. Project Director/coordinator of *National Centre of Competence in ultrasound and image guided therapy* (St Olavs Hospital, NTNU, SINTEF, 14,5 mill NOK annual). <http://www.usigt.org/>.

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1998 - present: Principal investigator for several large scale grants and projects funded by the Research Council of Norway (RC) and EU: FIFOS 10 Mill NOK from RC: *Operating room of the future*, FRIMED 13 mill NOK from RC: *Enhanced minimal invasive image guided therapy (e-MIT)*, EU: IIOS (Marie Curie Training Site). Administrative responsible for several large scale funded projects as user driven projects (BIP) funded by industry and RC with industrial partners Sonowand, Simsurgery, Laerdal Medical and EU funded projects: 3 MICRON (EU-NMP), VECTOR (EU- ICT), FUSIMO (EU-ICT). At present also adm responsible for large scale interdisciplinary centre of research based innovation: SFI CIUS, Center for innovative ultrasound solutions, budget 437 mill NOK, collaboration with many industrial (GE, Kongsberg Maritime, Statoil, + and academic partners (University of Oslo, SINTEF, +). WP- leader in SFI CIUS and also scientifically involved within ultrasound and image guided interventions.

Selected relevant membership in academic and professional bodies:

- 2001-present: Steering committee: SMIT (Society for Medical Innovation and Technology), <http://www.ismit.org/>, CoPresident conference in 2002 (Oslo) and 2010 (Trondheim)
- 2016-present: Board of St Olavs Hospital, <https://stolav.no/>
- 2014-present: Co-chair NorMIT, National Infrastructure, <http://normit.no/>
- 1998-present: Chair *National Centre of Competence in ultrasound and image guided therapy*, <http://usigt.org/>
- 2013-present: Board of " *Nansenfondet og de dermed forbundne fond*", <http://www.nansenfondet.no/>
- 2013-present: Member NTVA, Norges Tekniske Vitenskaps Akademi, <http://www.ntva.no/>
- 2013-present: Board of Nor-BioImaging, Norwegian initiative linked to ESFRI EuroBioImaging
- 1998-present: Reviewer for various international scientific journals, awards, grants and positions. Examples: Review for International Journal of Computer Assisted Radiology and Surgery, International evaluator/reviewer board of the IMDI (Innovative Medical Device Initiative) i Nederland, <http://www.imdi.nl/>, International Advisory board of the Northern Research Partnership in UK of Univ of Dundee, Univ of Aberdeen and the Robert Gordon Univ. Evaluation committee 2015/2016 innovation projects /PhD, Helse Midt Norge
- 2007-2015: Board Innovation division, The Research Council of Norway (two periods: 2x4=8 years) <http://www.forskningsradet.no/>
- 2013-2014: Blog/chronicle writer, Dagens Medisin: <http://www.dagensmedisin.no/>
- 2008-2010: Board Invivosense ASA
- 2010-2011: Board in Nansen Neuroscience Network, <http://www.nansenneuro.net/>
- 2011-2013: Steering committee of Strategic project 24 mill NOK Nanotechn/nanomedicine SINTEF
- 2000- 2013: Member of Leader group in Strategic Work Program in Medical Technology at NTNU
- 2005-2010: Member of Advisory board for Int. Master in Medical Techn, NTNU
- 2005-2008: Expert in Norwegian Society for Automatisatation, Medical Cybernetics.
- 2006-2008: European Technology Platform Nanomedicine, Co-Chair Group: Nano Diagnostics

Doctoral students supervised (names and subject of thesis): 11 fulfilled, 4 Ongoing

- 1) Thomas Langø: *Ultrasound guided surgery: Image processing and navigation* (2000)
- 2) FrankLindseth: *Ultrasound guided Surgery:Multimodal Visualization and Navigation Accuracy* (2002)
- 3) Ola Morten Rygh: *3D ultrasound based neuronavigation in neurosurgery* (2008)
- 4) Andreas R Seim: *Process Analysis and Monitoring in Complex Perioperative Environment* (2009),
- 5) Ole Vegard Solberg: *Ultrasound 3D reconstruction for image guided therapy* (2011)
- 6) Sjur Gjerald: *Ultrasound simulation in training of medical personnel.* (2012)
- 7) Reidar Brekken: *Ultrasound for improved diagnosis of vascular diseases.* (18 Dec 2012)
- 8) Tormod Selbekk:*Ultrasound imaging in neurosurgery.* (Februar 2013)
- 9) Frode Manstad Hulaas: *Image guided endovascula procedures.* (February 2013)
- 10) Erik Smistad: *Medical Image Segmentation for Improved Surgical Navigation* (2015)
- 11) Sinara Vijayan: *Image guided laparoscopic surgery.* (2016)
- 12) Geir Arne Tangen: *Enhanced Minimal invasive Therapy.*
- 13) Lars Eirik Bø: *Image guided spine surgery.*
- 14) Páll Jens Reynisson: *Medical Image fusion for improved image guided therapy*
- 15) Cecilie Våpenstad: *Simulation and training*

Academic and professional publications: (total: 57 papers, >100 abstracts)

1. Askeland C, Solberg OV, Bakeng JB, Reinertsen I, Tangen GA, Hofstad EF, Iversen DH, Våpenstad C, Selbekk T, Langø T, **Hernes TA**, Olav Leira H, Unsgård G, Lindseth F. [CustusX: an open-source research platform for image-guided therapy](#). *Int J C Assist Radiol Surg*. 2016 Apr;11(4):505-19. doi: 10.1007/s11548-015-1292-0. Epub 2015 Sep 26
2. Bø LE, Hofstad EF, Lindseth F, **Hernes TA**. Versatile robotic probe calibration for position tracking in ultrasound imaging. *Phys Med Biol*. 2015 Apr 9;60(9):3499-3513
3. Reynisson PJ, Leira HO, **Hernes TN**, Hofstad EF, Scali M, Sorger H, Amundsen T, Lindseth F, Langø T. Navigated bronchoscopy: a technical review. *J Bronchology Interv Pulmonol*. 2014 Jul;21(3):242-64.
4. Vijayan S, Reinertsen I, Hofstad EF, Rethy A, **Hernes TA**, Langø T. Liver deformation in an animal model due to pneumoperitoneum assessed by a vessel-based deformable registration. *Minim Invasive Ther Allied Technol*. 2014 Oct;23(5):279-86. doi: 10.3109/13645706.2014.914955. Epub 2014 May 21.
5. Tangen GA, Manstad-Hulaas F, Brekken R, **Hernes TAN**. Ultrasound in abdominal aortic aneurysm. InTech, Book edited by Cornelia Amalinei, ISBN 978-953-51-1081-1, Published: April 10, 2013. Navigation in endovascular repair.
6. Brekken R, Muller S, Gjerald SU, **Hernes TAN**. Simulation model for assessing quality of ultrasound strain estimation in abdominal aortic aneurysm. *Ultrasound in medicine and biology*, May (38 (5): 889-96, 2012.
7. Sjur U. Gjerald, Reidar Brekken, Lars Eirik Bø, Torbjørn Hergum, **Toril A.N. Hernes**. Interactive development of a CT-based tissue model for ultrasound simulation. In press, *Computers in Biology and Medicine*, 2012
8. Frode Manstad-Hulaas ; Geir Arne Tangen ; Torbjørn Dahl; **Toril A Nagelhus Hernes** ; Petter Aadahl : Three Dimensional Electromagnetic Navigation Versus Fluoroscopy for endovascular aortic repair – A prospective Feasibility Study in Patients, *JEVT* 2012 Feb;19(1):70-8.
9. Langø T, Vijayan S, Rethy A, Våpenstad C, Solberg OV, Mårvik R, Johnsen G, **Hernes TAN**. Navigated laparoscopic ultrasound in abdominal soft tissue surgery - Technological overview and perspectives. *Int J Comput Assist Radiol Surg (IJCARS)*, Online first, September 2011. DOI:10.1007/S11548-011-0656-3.
10. Solberg OV, Lindseth F, Bø LE, Muller S, Bakeng JBL, Tangen GA, **Hernes TAN**. 3D ultrasound reconstruction algorithms from analog and digital data. *Ultrasonics*, 2011, 51(4):405-419
11. Manstad-Hulaas F, Demirci S, Pfister M, Lydersen S, Tangen GA, **TAN Hernes**. Endovascular Image-Guided Navigation - Validation of Two Volume-Volume Registration Algorithms. *Minim Invasive Ther Allied Technol*, 2011 Sep;20(5):282-9. doi: 10.3109/13645706.2010.536244. .
12. Brekken R, Dahl T, **Hernes TAN**. Ultrasound in abdominal aortic aneurysm. In Prof. dr. R.T. Grundmann (Ed.): Book chapter: Diagnosis, screening and treatment of abdominal, thoracoabdominal and thoracic aortic aneurysms. InTech, ISBN 978-953-307-466-5. 2011
13. Langø T, Hernes TAN, Mårvik R. Navigated ultrasound in laparoscopic surgery. Book chapter, InTech, Book title: Laparoscopic surgery, ISBN 978-953-307-766-6, Edited by Arshad M. Malik. September 2011
14. Manstad-Hulaas F, Tangen GA, Gruionu LG, Aadahl P, **Hernes TAN**. Three-Dimensional Endovascular Navigation with Electromagnetic Tracking – Ex Vivo and In Vivo Accuracy. *Journal of Endov. Therapy* 2011; vol. 18(2), pp. 230-240.
15. Bø Lars Eirik, Gjerald Sjur Urdson, Brekken Reidar, Tangen Geir Arne, **Hernes Toril A Nagelhus** (2010). Efficiency of ultrasound training simulators: Method for assessing image realism. *Min. inv. therapy & allied technologies* 19,2,69-74.
16. Selbekk T, Brekken R, Solheim O, Lydersen S, **Hernes TAN**, Unsgård G. Tissue motion and strain in the human brain assessed by intraoperative ultrasound in glioma patients, *Ultrasound in Medicine & Biology*, 2010; 36(1): 2-10.
17. Våpenstad C, Rethy A, Langø T, Selbekk T, Ystgaard B, **Hernes TAN**, Mårvik R. Laparoscopic ultrasound: a survey of its current and future use, requirements, and integration with navigation technology. *Surg Endosc* 24(12):2944-53. 2010
18. Solberg OV, Langø T, Tangen GA, Mårvik R, Ystgaard B, Rethy A, **Hernes TAN**. Navigated ultrasound in laparoscopic surgery. *Minim Invasive Ther Allied Technol (MITAT)*, 2009;18(1):36-53.
19. Rygh OM, Selbekk T, Torp S, Lydersen S, **Hernes TAN**, Unsgaard G. Comparison of ultrasound findings with histopathology in subsequent phases of glioblastoma resection, *Acta Neurochirurgica*. Oct;150(10):1033-41;2008.
20. Langø T, Tangen GA, Mårvik R, Ystgaard B, Yavuz Y, Kaspersen JH, Solberg OV, **Hernes TAN**. Navigation in laparoscopy – Prototype research platform for improved image-guided surgery. *MITAT*, 2008; 17:1:17-33.
21. Brekken R, Dahl T, **Hernes TAN**, Myhre HO. Reduced strain in abdominal aortic aneurysms after endovascular repair. *J Endovasc Ther* 2008;15:453-461.
22. Manstad-Hulaas F, Ommedal S, Tangen GA, Aadahl P, **Hernes TN**: Side-Branch Stent Graft Insertion Using navigation technology: A Phantom Study, *Eur Surg Res*. 2007;39(6):364-71.
23. Rasmussen I, Lindseth F, Rygh O, Berntsen EM, Selbekk T, Xu J, **Hernes TAN**, Harg E, Håberg A, Unsgård G: Functional neuro-navigation combined with intraoperative 3D ultrasound: Initial experiences during surgical resections close to eloquent brain areas and future directions in automatic brain shift compensation of preoperative data. *Acta Neurochirurgica*, 149:365-378, 2007

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24. Solberg OV, Lindseth F, Torp H, Blake RE, **Hernes TAN**. Freehand 3D ultrasound reconstruction algorithms - A review. *Ultrasound Med Biol*, 33:7:991-1009, 2007.
25. Brekken R, Kaspersen J, Tagen G, Dahl T, **Hernes T**, Myhre H. 3D visualization of strain in abdominal aortic aneurysms based on navigated ultrasound imaging. Proceedings of the SPIE Medical Imaging- Physiology, Function and Structure from medical images [6511-52]. San Diego February 2007.
26. Rygh OM, Selbekk T, Lindseth F, Müller TB, **Hernes TAN**, Unsgaard G. Intraoperative navigated 3D ultrasound angiography in surgery. *Surgical Neurology*, 66:581-592, 2006.
27. **Hernes TAN**, Lindseth F, Selbekk T, Rygh OM, Tangen GA, Rasmussen I, Wolf A, Rasmussen I Solberg OV, Harg E, Augdal S, Couweleers F, Unsgaard G. Technical developments for improved 3D ultrasound guided neurosurgery - Computer-assisted 3D ultrasound-guided neurosurgery: technological contributions, including multimodal registration and advanced display, demonstrating future perspectives. *International Journal of Medical Robotics and Computer Assisted Surgery*, 2:1:45-59, 2006.
28. Brekken R, Bang J, Ødegård A, Aasland J, **Hernes TAN**, Myhre HO. Strain estimation in abdominal aortic aneurysms from 2D ultrasound. *J Ultrasound Med Biol*, 32:1:33-42, 2006.
29. Unsgaard G, Rygh OM, Selbekk T, Müller TB, Kolstad F, Lindseth F, **Hernes TAN**. Intra-operative 3D ultrasound in neurosurgery. *Acta Neurochirurgica*, 148:3:235-53, 2006.
30. Rygh OM, Cappelen J, Selbekk T, Lindseth F, **Hernes TANH**, Unsgård G. Endoscopy guided by an intraoperative 3D ultrasound based neuronavigation system. *Minim Invasive Neurosurg*, February, 49:1:1-9, 2006.
31. Unsgaard G, Selbekk T, Müller TB, Ommedal S, Torp HS, Myhr G, Bang J, **Nagelhus Hernes TA**. Ability of navigated 3D ultrasound to delineate gliomas and metastases - comparison of image interpretations with histopathology. *Acta Neurochirurgica*, 147:12:1259-69, 2005.
32. R Mårvik, T Langø, GA Tangen, F Lindseth, Y Yavuz, **TAN Hernes**: Image-guided laparoscopic surgery, Review and current status. 60:5:305-25, *Minerva Chirurgica*, 2005. Mårvik R, Langø T, Tangen GA, Andersen JON, Kaspersen JH, Ystgaard B, Sjølie E, Fougner R, Fjøsne HE, **Hernes TAN**. Laparoscopic navigation pointer for 3-D image guided surgery. *Surg Endos*, 2004; June 23: Online First: DOI: 10.1007/s00464-003-9190-x., 2004; 18: 8: 1242-1248
33. Mårvik R, Langø T, Tangen GA, Andersen JON, Kaspersen JH, Ystgaard B, Fjøsne HE, Fougner R, **Hernes TAN**. 3D navigasjon i laparoskopiske kirurgi. *Tidsskr Nor Lægeforen*, 2004; 124: 5: 617-619.
34. **Toril A. Nagelhus Hernes**, Steinar Ommedal, Torgrim Lie, Frank Lindseth, Thomas Langø, Geirmund Unsgaard. Stereoscopic Navigation-controlled Display of Preoperative MRI and Intraoperative 3D Ultrasound in Planning and Guidance of Neurosurgery, - New technology for minimally invasive image guided surgery approaches. *Minimally Invasive Surgery*, 2003, 46, 129-136.
35. Ela Sjølie, Thomas Langø, Brynjulf Ystgaard, Geir Arne Tangen, **Toril A. Nagelhus Hernes**, Ronald Mårvik. 3D ultrasound-based navigation for radio frequency thermal ablation in treatment of liver malignancies. *Surgical Endoscopy*, 2003:17:6:933-938.
36. J. H. Kaspersen, E. Sjølie, J. Wesche, J. Åsland, J. Lundbom, A. Ødegård, F. Lindseth, and **T. A. N. Hernes**, 3D Ultrasound Based Navigation Combined with Preoperative CT During Abdominal Interventions, A Feasibility Study, *Cardiovascular and Interventional Radiology*, 2003 DOI:0.1007/s00270-003-2690-1.
37. F. Lindseth, J. H. Kaspersen, S. Ommedal, T. Langø, G. Unsgaard, **T. A. N. Hernes**, Multimodal image fusion in ultrasound-based neuronavigation: improving overview and interpretation by integrating preoperative MRI with intraoperative 3D ultrasound, *Comp Aided Surg*, 2003, 8:2:49-69
38. Bang J, Torbjørn Dahl, Annemarieke Bruinsma, Kaspersen J H, **Hernes T A N**, Myhre H O. A new method for analysis of motion of carotid plaques from RF ultrasound images. *J Ultrasound Med Biol*, 2003; 29:7:967-76
39. Unsgaard, G, Ommedal, S. Gronningsaeter, AA and **Hernes, TAN**: Brain operations guided by real-time 2D ultrasound - New possibilities due to improved image quality. *Neurosurgery*, 2002:51:2:402-412.
40. Lindseth F., Bang J., Langø T. **Hernes TAN**: Evaluation of the 3D accuracy of an ultrasound-based neuronavigation system. *Comp Aided Surg*, 2002:7:4:197-122.
41. Unsgaard, G, Ommedal, S. Muller T., Gronningsaeter A., **Hernes TAN**: Neuronavigation by Intraoperative 3D Ultrasound, Initial Experiences during Brain Tumor Resections, *Neurosurgery*, 50, 804-812, april 2001.
42. Otterlei, M., Warbrick, E., Nagelhus, T.A., Haug, T., Slupphaug, G., Akbari, M., Aas, P.A., Steinsbekk, K., Bakke, O., Krokan, H.E.: Post replicative base excision repair in replication foci. *EMBO J.*, vol. 18, no 13, 3834-3844, 1999.
43. Nagelhus, T.A., Haug, T., Skorpen, F., Otterlei, M., Singh, K.K., Keshav, K.F., Bharati, S., Lindmo, T., Benichou, S., Benarous, R. and Krokan, H.E.: A sequence in the N-terminal region of human uracil-DNA glycosylase with homology to XPA interacts with the C-terminal part of the 34 kDa subunit of replication protein A. *The J. Biol. Chem.* Vol. 272, no 10, 6561-6566, 1997
44. Nilsen, H., Otterlei, M., Haug, T., Solum, K., Nagelhus, T.A., Skorpen, F. and Krokan, H.E.: Nuclear and mitochondrial uracil-DNA glycosylase are generated by alternative splicing and transcription from different positions in the UNG gene. *Nucl. Acid. Res*, vol 25, no 4, 1997
45. Nagelhus, T.A., Slupphaug, G., Lindmo, T. and Krokan, H.: Cell Cycle Regulation and Subcellular Localization of the major Human Uracil-DNA Glycosylase. *Exp. Cell. Res.* vol. 220, 1995

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46. Nagelhus, T. A., Slupphaug, G., Krokan, H.E. and Lindmo, T.: Fading Corrections for Fluorescence Quantitation in Confocal Microscopy. Cytometry, vol 3, 1996
47. Nagelhus, T.A. and Rofstad, E.K.: Expression of the chondroitin sulphate proteoglycan molecular complex in six human melanoma xenograft lines studied by flow cytometry and immunohistochemistry. MelanomaRes., 3, pp 187-194, 1993

International conference proceedings (all 6-10 pages articles):

48. Gjerard, S, Brekken R, **Hernes T**: Realtime simulation for low cost training simulators. Proceedings in SPIE Medical Imaging, San Diego, California, February 2010
49. Brekken R, Kaspersen J, Tagen G, Dahl T, **Hernes T**, Myhre H. 3D visualization of strain in abdominal aortic aneurysms based on navigated ultrasound imaging. Proceedings of the SPIE Medical Imaging- Physiology, Function and Structure from medical images [6511-52]. San Diego February 2007.
50. Wolff A, Tangen GA, Solberg OV, Kaspersen JH, Langø T, **Hernes TAN**, Mårvik R. Real-time endoscope and ultrasound integration in computer assisted navigated surgery. In 6 pages Proceeding article of Computer Assisted Radiology and Surgery (CARS), Berlin, Germany, June 22-25, 2005.
51. **Hernes TAN**, Selbekk T, Lindseth F, Rygh OM, Muller T, Unsgaard G: Navigated neurosurgery with intraoperative 3d Ultrasound, Vol5, Indian Clinical Neurosurgery, 2005
52. **T A Nagelhus Hernes** , F Lindseth , T Langø , S Ommedal, G Unsgård. 3D ultrasound, image guided surgery, neuronavigation, stereoscopy, display techniques, multimodal imaging. 6 p article (proc, CARS2002, Paris, June, 2002
53. Thomas Lango, Jon Bang, Frank Lindseth, **Toril A Nagelhus Hernes**, Accuracy evaluation of a 3D ultrasound-based neuronavigation system. 6 p article (proceedings) CARS2002, Paris, June 2002.
54. Tormod Selbekk, Geirmund Unsgård, Steinar Ommedal, Tomm Muller, Sverre Torp, Gunnar Myhr, Jon Bang, **Toril A. Nagelhus Hernes**. Neurosurgical biopsies guided by 3D ultrasound - comparison of image evaluations and histopathological results. . 6 p article (proceedings) ,CARS2002, Paris, June 2002.
55. Lindseth, F., Ommedal, S., Bang, J. Unsgård, G and **Hernes, TAN**: Image fusion of Ultrasound and MRI as an aid for assessing Anatomical shifts and improving Overview and Interpretation in Ultrasound Guided Neurosurgery. 6 p article (proceedings) CARS 2001, Berlin June 2001.
56. Sjølie, E., Kaspersen, JH., Lindseth, F. and **Hernes, TAN**: Minimal invasive abdominal surgery based on ultrasound vision, possible? 6 p article (proceedings), CARS2001, Berlin June 2001.
57. Hernes, TAN, J.H.Kaspersen, R.Mårvik, A.Kleven, T.Lie, A. Gronningsaeter, Stereoscopic reconstruction of hepatic vessels based on 3D ultrasound power Doppler. 6 p article (proceedings) EAES , Roma, Italy, 1998.