Skjemainformasjon

Skjema

SFU

Referanse

1006084

Innsendt

10.05.2013 10:45:17

Host

Information about host institution and center-

Name of centre

Centre of Excellence in Education: Collaborative

Learning in Health and Welfare

Education (CoLEARN)

Host institution

Norwegian University of Science and Technology, Faculty of Medicine

PO Box address

Postbox 8905, Medisinsk teknisk forskningssenter

Postal code / City/place

7491 TRONDHEIM

Telephone

73598859

E-mail address

dmf-post@medisin.ntnu.no

Contact person

Contact person-

Name

Aslak Steinsbekk

Title

Professor

Telephone work / mobile

73597574 41559076

E-mail address

aslak.steinsbekk@ntnu.no

About the centre

About the centre

Is the centre already
established at the time of
application

Nο

Describe briefly the plans for establishing the centre (maximum 1500 characters)

The partners behind this application currently cooperate on some ongoing educational activities, including activities where there is close cooperation between education and practice. However, larger cooperation efforts have been project based. The establishment of the proposed Centre is thus a next step in the ongoing cooperation between education and practice.

The Centre will be established in January 2014 and be fully operative from April 2014. A consortium agreement between the partners will be drawn up during the first six months upon the award of SFU status. The academic director and the leaders of the four work packages will be engaged at the Centre from the start, the Centre manager will be in place from April 2014 and the four PhD students will start in the autumn 2014; all these will be associated with the Centre on a permanent basis. In addition, persons engaged in different workgroups will be associated with the Centre in longer periods.

The reference group will be established by February 2014 and will consist of representatives from the partners. This group together with the management will be the most active in setting up the Centre. The international scientific advisory council will be established by June 2014. The persons in these two groups will also be associated with the Centre.

Describe briefly the aims and current as well as planned activities of the centre (maximum 1500 characters)

The Centre's aim is close cooperation between education and practice in order to develop, test, research and disseminate innovative collaborative educational activities to be used across higher health and welfare educations to improve learning. The work will focus on four areas (examples of current activities are name):

WP1: Expand collaborative learning activities to interprofessional student groups so that students can learn interprofessional problem-solving and be encouraged to and equipped for continuous and self-directed learning throughout their working lives.

- Relevant current activities: Experts in Teamwork, Problem Based Learning, Team Based Learning

WP2: To develop simulation methods further by focusing on participant reflection, simulant skills, and educators' skills and knowledge of how to apply simulation methods in pre- and postgraduate education.

- Relevant current activities: Activities at the medical simulation centre and the skill labs

WP3: Interprofessional practice placement, focusing on improved student learning in primary health care and establishing student-operated placement modules in cooperation with primary and specialist health care services.

- Relevant current activities: Student-active wards, Doctor-patient course

WP4: To develop curriculum models that integrate the educational activities in WP 1 to 3 and implements the shared knowledgebase into these activities.

- Relevant current activities: TverrSam

Application Document

Application Document

Upload application document

profile_CoLEARN Application 10 pages FINAL 080513.pdf

Timeline and budget

Timeline and budget

Upload planned timeline and the activities to be conducted

timeline_CoLEARN Timeline

FINAL 080513.pdf

Upload plan for financial resource acquisition

financial_CoLEARN Finance plan

FINAL 080513.pdf

Upload budget

budget_CoLEARN Budget FINAL

080513.pdf

Attachments

Attachments

- timeline_CoLEARN Timeline FINAL 080513.pdf
- Reference_list.pdf
- CVs_key_personnel.pdf
- budget_CoLEARN Budget FINAL 080513.pdf
- financial_CoLEARN Finance plan FINAL 080513.pdf
- profile_CoLEARN Application 10 pages FINAL 080513.pdf

- 1	1	n	m	٦r	n	ρ	'n	tς

Comments to the application form (maximum 1500 characters)

<u>Centre of Excellence in Education:</u> Collaborative Learning in Health and Welfare Education (CoLEARN)

Profile and vision

The profile of the Centre of Excellence in Education (hereafter, the Centre) is to have close cooperation between education and practice to develop, test, research and disseminate innovative and collaborative educational activities that can be used across higher education in health and welfare to improve learning in student teams (team-based learning), simulation, practice placements and the integration of interprofessional teaching.

The vision of the Centre is to facilitate learning that enables future health and welfare professionals to meet the future needs for coordinated services in society and provide high quality and safe care.

The partners agree that the Centre is to focus on collaborative learning that prepares students for collaborative practice, defined by WHO as "Collaborative practice in health-care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings" (WHO 2010).

It is the strength of the established cooperation and co-location of the partners that are the main reasons why these partners are qualified to form, develop and sustain a Centre of Excellence in Education. Furthermore, the partners are committed to challenge each other through conscious use of the practice-theory relationship and the creation of synergetic interplay between different epistemological paradigms. We see teaching and learning as a driving force in the field, and together the partners will use the activities in the Centre in interplay users/patients, organisations and society.

Motivation

The Faculty of Medicine (DMF) at the Norwegian University of Science Technology is the host and has worked together with the other partners in compiling this application. This builds on the close cooperation over many years between practitioners (specialist and primary care and welfare sector) and higher educational institutions in Trondheim. One example of this is the Trondheim Health Cluster which is formalised cooperation on central issues in health and welfare between eight organisations in higher education, business and government. Together they have 16 000 employees and students in this field. The partners are working on the development of educational activities focusing on interprofessional cooperation, integrated services and innovation. This application builds on these partners' long-term track record in cooperation and the region's excellent reputation

among students with Trondheim as the highest ranked student environment in Norway (e.g. TNS Gallup, 2010).

The strength of this application is the motivation of the partners' to work together and form a centre that will be a substantial asset in promoting learning in health and welfare in higher education. Our cooperation and the process of working on this application have proved the partners' engagement and ability to cooperate in developing a plan for a Centre of Excellence in Education that will provide innovative teaching, research and professional development.

Unique infrastructure for coordination and innovation

All the partners are located at or have activities in connection with the area called Øya in Trondheim, central Norway. The most prominent feature of Øya is the integrated University Hospital, where St. Olavs Hospital, NTNU's Faculty of Medicine and Sør-Trøndelag University College all work closely together. This area is connected by a footbridge (termed the "integrated care bridge") to Øya Helsehus that is owned by the Municipality of Trondheim (responsible for primary care). Øya Helsehus is among other things a nursing home, a health centre with 5 GPs and a health and welfare office. Thus there is especially close connection between academic education and the field of practice and this is formalised in areas including education with separate agreements and formal structures to facilitate further cooperation.

Research and innovation

The Centre will have strong focus on research with emphasis on collaborative learning activities and research-based education. The research work will be closely connected to the development of educational activities to ensure research-driven innovation. The management of the Centre has a research record in educational topics. The partners will fund four PhD candidates who will carry out educational research (75%) and take part in the activities at the Centre (25%) to further the connection between educational activities and research. The emphasis on such a high number of PhD candidates is to build up future research capacity in this field. The candidates will be supervised by professors with different backgrounds to ensure the collaborative aspect of the activities at the Centre.

Special emphasis will be placed on engaging students in research activities. This includes offering students projects (early-stage research) and including students in larger research projects. One example of a combination is to let the student teams contribute with new user-driven solutions by engaging them in dialogue with researchers and stakeholders. This can include PhD candidates who provide guidance to student teams in their own research area and where the PhD candidate can take the emerging ideas further in the research project.

Quality in established educational activities

The established cooperation has forged close bonds between the two educational institutions in this application that cover most of the main types of education in health and welfare:

- Norwegian University of Science and Technology (NTNU) the Faculty of Medicine (DMF, host), Department of Social work and Health Sciences (ISH) at the Faculty of Social Science and Technology Management, Department of Art and Media Studies (IKM) at Faculty of Humanities, Centre for University Pedagogy (UniPed) and Experts in Teamwork (EiT).
- Sør-Trøndelag University College (HiST) the Faculty of Health Education and Social Work (AHS) and the Faculty of Nursing (ASP).

Together they have 3500 students in 9 different types of professional health and welfare education plus 1 in theatre studies. There are also 11 master's and 6 PhD programmes in addition to postgraduate education and cross-disciplinary educational modules.

Education	Organisation	Overview
Medicine	NTNU, DMF	Six year medical school with 700 students, six master's
	(host)	programmes with 300 students, five PhD programmes with 300
p.63		students and postgraduate education with 250 students.
Social work and	NTNU ISH	Three master's programmes with 150 students and two PhD
health sciences		programmes with 50 students.
Theatre studies	NTNU IKM	Bachelor's programme with 40 students and master's
		programme with 15 students
University	NTNU	Centre for teaching of teachers and pedagogical research
Pedagogy		
Experts in	NTNU	A 7.5 credit interdisciplinary course which is compulsory for
Teamwork (EiT)		all students at second-degree level at NTNU (2000 students)
Nursing	HiST ASP	700 students in bachelor's in Nursing, 500 students in 18
	<u> </u>	different postgraduate education programmes and one master's
		programme
Health and Social	HiST AHS	1600 students in 7 bachelor's programmes (Audiology,
Work		Occupational Therapy, Physiotherapy, Social Education and
		Child Welfare Work, Social Work, Social Education), 7
	ļ	postgraduate education programmes with 60 students and two
		master's programmes with 40 students

The partners in higher education are ranked high in surveys of learning environment, student satisfaction and grade point average for admission. Cooperation with the field of practice ensures that the relevance of the education is systematically and continuously improved. The study programmes are well integrated as exemplified by the study model at DMF which is based on three methodical pillars (Lamvik 1975, Midelfart 1990, Molne 1993, Haug 1994, Johannessen 1998, Austgulen 1999, Karlsen 2000, Falck 2003, Hegstad 2004); Problem-Based Learning (PBL), patient contact and practice placement from the onset, and spiral learning in which central topics are taught

at increasingly greater complexity throughout the study. The quality and engagement was a reason for the annual AMEE (Association for Medical Education in Europe) conference being held in Trondheim in 2007 (Jacobsen 2008). Teachers in the different subjects are usually handpicked due to their expertise from active research in the particular disciplines, securing a close link between education and R&D activities. The possibility to take a master's degree based on most of the bachelor's programmes ensures focus on teaching that gives students understanding of research. Furthermore, students in many of the types of education at the Centre write independent research papers, and in some programmes certain students are selected to follow the research track during their studies by additional research semesters. A range of innovative assessment methods are employed, from self-developed analytic programmes for evaluation of the quality of multiple choice questions (MCQ) to assessment in practice.

Team-based group education

In different forms of team-based group education at both NTNU and HiST, students apply their academic competence in interdisciplinary project work to learn cooperative skills. Moreover, the students develop insight in and understanding of group dynamics, how to handle group-related challenges, how to give and take feedback, as well as an increased understanding of the impact of the teamwork on the final result. Relevant issues from society and working life form the basis for the project work. In summary, there is a strong focus on learning cooperative skills that can be transferred to the workplace.

The best known and unique model is "Experts in Teamwork" (EiT), www.ntnu.edu/eit which is a 7.5 credit interdisciplinary module which is compulsory for all master's students at NTNU (Sortland 2006). The work methods in EiT are described in the EiT manual (Eksperter i team 2013). EiT is a result of a targeted development initiative in teaching methods over more than a decade. There is a two-day compulsory seminar for EiT teachers, and 80 % experienced benefits from their EiT experience when teaching other courses. There is no equivalent programme to EiT in Norwegian higher education and several educational institutions in Sweden and Denmark are currently developing programmes similar to EiT in cooperation with NTNU. The Norwegian Ministry of Education and Research awarded NTNU the Study Quality Award (Studiekvalitetsprisen) in 2002 for the implementation of EiT.

The EiT model is also used at HiST-ASH where it is developed into a monodisciplinary course in Social Education called "Interaction in team". The students work with assignments from the public healthcare sector. The teachers are enthusiastic about Interaction in team and take the role of facilitators and supervisors in relation to the students who are expected to work more and more independently. "Teaching Universal Design to Students of Occupational Therapy" is a seminar in cooperation with students of architecture, civil engineering and industrial design. In the group work

the students examine universal design/accessibility in institutions or public services. Students' evaluations as well as grading indicate that the course and the projects lead to sound understanding of Universal Design.

Problem-based learning (PBL)

PBL is used in several types of education in the Centre and there is a high level of competency among the partners in PBL and other types of student centred activities (Holen 2000). The effect has also been assessed and the introduction of PBL at DMF was found to improve practical level of skills (Falck 2003). Courses for PBL facilitators have been developed and advanced students are engaged as PBL group facilitators (Hansen 2004). At DMF a system for continual assessment of each PBL session has resulted in research on PBL performance and achievements in exams (Wigen 2003) and it also provides continuous feedback to the authors of the PBL-scenarios (Lillebo 2004). An in-house developed digital PBL-portal has been in operation since 2003, increasing the use of audio-visual material as part of the PBL-scenarios. HiST has been working with counselling of PBL groups through videoconferencing (Indergaard 2006 and 2009).

Team-based learning (TBL)

The first TBL was carried out as a pilot at the Faculty of Medicine in 2011 (Lillebo 2012). The pilot was shaped through contact with Dean X. Parmelee, one of the founders of TBL in healthcare (Parmelee 2012), and a TBL workshop for teachers in 2012 was led by Thomas Hill & Linda Olson, University of North Dakota, USA. In May 2013, TBL will be used for second-year medical students learning general pathology.

Practice placements

The Faculty of Nursing has in collaboration with the Municipality of Trondheim developed a model based on situated learning to ensure and further enhance the quality of work placement studies (Blekken 2013, Medby 2012, Mohn 2011). Eight student active wards at Øya Helsehus and five other nursing homes in the area have been established with guidance teams each consisting of three trained nurses. At the Faculty of Medicine, the students have integrated learning in clinical practice which allows students to meet real patients already during their first weeks of study (Johannessen 1998). Every second week throughout the two first years the students meet patients under supervision by 22 different general practitioners. Another relevant area is students with working experience taking master's e.g. in health informatics and health science and social work, where they are given the opportunity to translate and negotiate their professional knowledge within the framework of academic processes, thus returning new knowledge to the field. They use real problems and challenges for deeper analysis and research in educational activities, delivering material like pilot products and systematic evaluations.

Simulation

At Øya there are several facilities for simulation training, ranging from the "Medical simulation centre (MSS)" to different forms of skill labs with equipment and solutions in the international forefront, thus allowing students to build clinical and collaborative skills in a controlled environment. Since 2003, the MSS has provided a full-scale simulation laboratory which provides instruction and training of medical students, physicians, nurses and other health professionals. The facilitators have education according to European standards and are skilled in facilitation in communication and cooperation (Non-Technical Skills). Due to the unique integration of localities for teaching and clinic at Øya, the other skill labs are placed and integrated in the clinical areas. This is a guarantee for close everyday cooperation between simulation and clinical work.

Theatre methodology in health care education

At NTNU, collaboration has existed for several years between the Department of Art and Media Studies and the Faculty of Medicine on the Doctor-Patient Course in which students of Drama and Acting are trained and participate as simulated patients in the Medical Students' examination of communication and clinical skills (Dahl 1998, Urnes 2004a, 2004b, Thomassen 2009). There is also a long-term collaboration between the Department of Art and Media Studies and the Department of Social Work and Health Sciences on applying art-based methods in developing insight and knowledge in areas of health science and social work.

Joint teaching activities on shared knowledge base

"Competency in Integrated care across professional disciplines (TverrSam)" is an educational activity where 600 third-year students from medicine, nursing, social work, physiotherapy, occupational therapy and social education (welfare nursing) take part. They are divided into groups of 10 with every profession represented in each group. A self-developed video of a patient experiencing good and bad transitions between care levels and actors is used to bind together lectures, group work and presentations. The students rated this as very successful (Adresseavisen, 2013) and the students gave it an overall score of 7.4 on a balanced scale from 0 to 10 where 5 was "the average level of educational activities". The students scored 8.1 out of 10 on a question of whether they had learned something new about other professions.

Potential for innovation and dissemination

The Centre will organise its activities in work packages (WPs) that will develop educational activities to be integrated in and used cross the different educations. The WPs include both basic methodological development and development of complete educational activities. For all the activities, student involvement, supervision and assessment methods will be emphasised. The overarching theme of the work packages is to create learning situations for interprofessional

interactions within and between the specialised health services and health and welfare institutions at municipal level. Furthermore, it is central to give the student the experience of connectedness with and understanding of other professions and the health and welfare system. The implementation of the educational activities will also foster teacher collaboration in the different educational institutions and programmes.

WP 1 Learning to cooperate and cooperating to learn

Direct interactions between students are an important way to promote inter- and monoprofessional collaboration, with self-directed learning in student groups as a prime example. The goal of this work package is to expand cooperative and collaborative learning activities to interprofessional student groups so that students can learn interprofessional problem-solving and be encouraged to and equipped for continuous and self-directed learning throughout their working lives.

- 1. Expand and adapt cooperative learning activities to interprofessional student groups/teams.
- 2. Design and implement course modules for advanced facilitators of cooperative learning activities.
- 3. Establish an open, peer-reviewed library of high-quality healthcare problems for cooperative learning activities.
- 4. Explore and develop methods of assessment of students' knowledge, skills and attitudes in cooperative learning groups.

WP 2 Learning by simulation

Simulation provides students with opportunities to integrate knowledge, skills and attitudes by exposure to real life situations in a safe environment. The goal of this work package is to develop simulation methods further by focusing on participant reflection, simulant skills, and educators' skills and knowledge of how to apply simulation methods in pre- and postgraduate education.

- 1. Improve simulation scenarios/methodology by focusing on student experience in simulated situations through individual and group debriefing and reflection.
- 2. Develop theatre methodology in simulated real life situations.
- 3. Explore methods of assessment of individual students' micro skills in simulated situations.
- 4. Design and implement course modules for educators on how to apply theatre and simulation methods.

WP 3 New models for supervised practical training during placement

Real life training is one of the most important areas for education of health care providers. There are many challenges during practical placement, ranging from relevance of practice, pedagogical qualities of the supervisors and ensuring the students holistic approach to patient care. The goal is to develop and implement interprofessional practice placement, focusing on improved student learning

in primary health care and establishing student-operated placement modules in cooperation with both primary and specialist health care services.

- 1. Establish interprofessional practice placement in student-operated wards, outpatient clinics and health care stations for teenagers and the elderly.
- 2. Design and implement models for team supervision during practice placement.
- 3. Explore methods of assessment of students' knowledge, skills and attitude in practical settings
- 4. Develop educational activities enabling students to experience the integrated patient pathway and the complexity of total patient health care.

WP 4 Integration and shared knowledge base

There are many common areas of knowledge between professionals in the health and welfare field, pointing to the need to have focus on the shared knowledge base in educational activities. Furthermore, separate educational activities like those in WPs 1 to 3 need to be integrated to give optimal effect. The goal is to develop curriculum models that integrated the educational activities in WPs 1 to 3 and implement the shared knowledge base into these activities.

- 1. Identifying the shared knowledge base in the health and welfare educations.
- 2. Development of curriculum that integrates the educational activities from WPs 1, 2 and 3 into a whole.
- 3. Design a learning package for those already working in the field of practice in developing interprofessional collaboration skills focusing on integrated health care.

Dissemination

The partners have a strong history in dissemination like self-development of courses for teachers and facilitators that are open for others, research on the educational activities and cross fertilisation through joint educational activities, and will continue this strong interest in this type of experienced based dissemination activities both in internal and external dissemination. Other dissemination activities will be:

Engage in the national and international research network in the field. This includes publishing articles in international peer reviewed journals and present results at international conferences. The Centre will also organise conferences and workshops in cooperation with national and international partners and arrange open seminars and workshops in connection with conferences. The Centre will arrange at least one open national seminar per year with topics relevant for development and research on educational activities in health and welfare education.

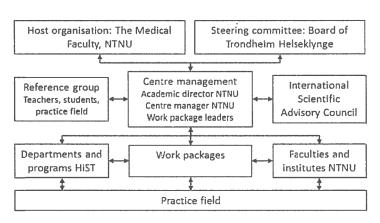
Professional help will be hired to do dissemination work and to educate the staff at the Centre. This will be done to ensure high quality dissemination of results through news media and publications for professionals in forms of news releases (four each year) and writing of chronicles

(2 each year). In addition newsletters will be published at least three times per year and these will be target at stakeholders and the practice field. Translated versions of these newsletters will be published for an international audience. A website will be developed and actively used together with social media.

Dissemination oriented towards teachers both within the Centre and externally will build on the experience from creating and offering self-developed courses e.g. in facilitation of group work like EiT and PBL. Through the establishment of the Centre this 'hands-on' dissemination activity will be expanded both quantitatively (more teachers can participate) and qualitatively (establishing new courses for advanced facilitators; "Experts in student group facilitation"). Another important aspect of our dissemination strategy is to systematically collect evaluation results and group outcomes to improve the scenarios/problems that are used in PBL, TBL, EiT and simulation and that can be shared with other institutions. Through the website teachers and other scenario authors can submit new scenarios/problems for peer review and constructive feedback. Student feedback from each scenario that has been used is re-submitted to the website acting both as a summative and formative evaluation of that scenario; continuously improving its quality.

Organisational plan and Collaborative partners

The Centre will be organised within the university (NTNU) and hosted by the Faculty of Medicine. The board of Trondheim Health Cluster, which consists of the executive managers, will act as a steering committee to ensure continuous and close focus on



cooperation and support from the leadership. In addition a reference group with representatives from the partners will established to act as the main forum for strategic discussions. The academic director (40% position) will be in charge of the Centre. A Centre manager (100% position) will be employed to manage day-to-day operation. In addition the management will consist of the managers of the work packages (20% positions).

The academic director of the Centre, Professor Aslak Steinsbekk has more than 50 publications in international peer reviewed journals. He has built up a research group in patient education and user involvement and has initiated and headed a joint educational activity between HiST and DMF where 600 students from 6 professional educations participate (TverrSam). He has also been in charge of coordinating one of the semesters at the medical programme which includes practice placement in primary care and headed the examination commission for the semester. He

has developed educational modules at master's and PhD levels. Furthermore, he has initiated and headed several processes where a range of partners from different organisations have cooperated in applications and in setting up centres / networks. He thus has a broad experience from research, education and collaborative processes.

The CVs of the those who will manage the work packages, Børge Lillebo (DMF, WP 1 group), Petter Aadahl (DMF, WP 2 simulation), Ann Oddrun Medby (HiST ASP, WP 3 practice), and Turid Midjo (HiST AHS, WP 4 integration), are attached. Together they represent a wealth of experience, both from education and research. Furthermore, they represent the major educational partners and they already cooperate closely with the other partners.

The collaborative partners from the practice field are the Municipality of Trondheim, the Norwegian Association of Local and Regional Authorities in Central Norway (KS), St. Olav's Hospital Trust, Trondheim University Hospital (St. Olav), Central Norway Regional Health Authority (HMN RHF) and the Norwegian Labour and Welfare Organisation (NAV). They will take active part in achieving the Centre's objectives by giving input to strategy and collaborating in educational activities in the field of practice.

The Centre has international collaborative partners that will be on the Scientific Advisory Council: Clinical and Communication Skills, University of Cambridge (Jonathan Silverman), Lehrstuhl für Didaktik und Ausbildungsforschung in der Medizin am Klinikum University of Munich (Claudia Kiessling), Institute for Medical Education, University of Bern (Sissel Guttormsen), Boonshoft School of Medicine Wright State University (Dean X. Parmelee) and Centre of Excellence in University Education at Department of Social Work, Lappland University (Marjaana Seppanen).

Added value of being organised as a Centre of Excellence in Education

Although there is a strong history of cooperation between the partners, most of the cooperative educational activities are or have been project based. Thus to some extent this has made it difficult to build on previous experience and integrate the activities with each other. By establishing a Centre of Excellence these efforts will be better coordinated and the total competency will be collected and distributed. Another aspect is that being organised as a Centre helps put increased focus on education and also makes it easier to focus resources on these activities as exemplified by the will of partners to contribute with funding and PhD positions.

References

- Adresseavisen 19/4-13, side 12. "Helsestudentene fant hverandre".
- Austgulen R, Bovim G, Ellingsen AS, Lindmo T. [Medical technology--a special course in medical undergraduate education]. Tidsskr Nor Laegeforen. 1999 Aug 20;119(19):2875-7.
- Blekken, LE, Medby, AO & Forbord, T.(2013): «Beskrivelse av læringsutbytte i faglig ledelse av sykepleie etter innføring av praksisstudieperiode med avdelingsovertakelse».
 Submitted Sykepleien Forskning mars
- Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M. Developing and evaluating complex interventions: the new Medical Research Council guidance. BMJ 2008;337:a1655.
- Dahl, Unni (1998). Skal legen behandle mennesker eller sykdommer? En kvalitativ analyse av kommunikasjonskurser ved medisinstudiet i Trondheim.
- Eksperter i team 2013, Gjennomføring av landsbyen, Redigert av Bjørn Sortland og Nina Haugland, NTNU, Trondheim, juni 2012, ISBN 978-82-7984-203-3 (3. utgave)
- Falck G. [Self-reported level of practical skills after the revision of a medical school curriculum in Trondheim]. Tidsskr Nor Laegeforen. 2003 Aug 28;123(16):2268-70.
- Hansen, TS and Holen, A (2004): "Senior students as facilitators in PBL groups", Paper presentation at AMEE conference 2004 in Edinburgh.
- Haug ES, Ostbyhaug PO, Pettersen HB, Iversen OJ, Myhre HO, Romslo I, Molne K. [The new medical curriculum in Trondheim. Organization and planning of a new curriculum].

 Tidsskr Nor Laegeforen. 1994 Jan 10;114(1):42-6.
- Hegstad AC, Materstvedt LJ, Kaasa S. [Teaching medical ethics: the Trondheim model]. Tidsskr Nor Laegeforen. 2004 Aug 26;124(16):2104-6.
- Holen, A. (2000): [The PBL group: self-reflections and feedback for improved learning and growth] Medical Teacher, 22(5), 485–488.
- Indergaard T, Stjern B. Television stars--counselling of PBL (Problem Based Learning) groups through videoconferencing in a distance learning based nursing bachelor programme. Stud Health Technol Inform. 2006;122:235-40.
- Indergaard T, Stjern B. Counselling of Problem Based Learning (PBL) groups through videoconferencing. Stud Health Technol Inform. 2009;146:603-7.
- Jacobsen G. [Biggest with medical education] Tidsskr. Nor Laegeforen. 2008 Aug 28;128(16):1850-1
- Johannessen T. [Teaching clinical decision making in Trondheim]. Tidsskr Nor Laegeforen. 1998 Feb 28;118(6):921-4.

- Karlsen KA, Vik T, Westin S. [The problem-based medical curriculum in Trondheim-did it turn out as planned?]. Tidsskr Nor Laegeforen. 2000 Aug 20;120(19):2269-73.
- Lamvik J. [Medical education at the university of Trondheim]. Nord Med. 1975 Sep;90(8-9):205-7, 224.
- Lillebo, B; Vik, T. and Holen A.: "Online evaluations of tutorials in PBL", Paper presentation at AMEE conference 2004 in Edinburgh.
- Lillebo, B., & Grimstad, H. (2012): "Piloting Team-Based Learning in a Problem-Based Curriculum", AMEE 2012: The Continuum of Education in the Healthcare Professions (p. 499). Lyon, France
- Medby, AO & Haugan G (2012): [Student groups in nursing practice: 1st year nursing students' experiences of learning clinical nursing in a group setting.] Nordic Journal of Nursing Research & Clinical Studies / Vård i Norden. 2012;32(2):46-50.
- Midelfart A, Halgunset J. [Students of Trondheim--10 years after. Former students' evaluation of the curriculum in Trondheim]. Tidsskr Nor Laegeforen. 1990 May 30;110(14):1861-4.
- Mohn, Sneve A. et.al (2011): [Aktiv praksis] Sykepleien 2011 99(09):68-7
- Molne K. [Trondheim's new curriculum. A "New Deal" medical study]. Nord Med. 1993;108(3):94-5
- Parmelee, D., Michaelsen, L. K., Cook, S., & Hudes, P. D. (2012): [Team-based learning: a practical guide] AMEE guide no. 65. Medical teacher, 34(5), e275–87.
- Sortland, Bjørn; "EiT Interdisciplinary Teamwork: Preparing Students for Working Life" in Assuring University Learning Quality: Cross-Boundary Collaboration (pp 106-125) Tapir Academic Press 2006, ISBN 82-519-2153-8
- Thomassen G. [The role of role-play: managing activity ambiguities in simulated doctor consultation in medical education.] Commun Med. 2009;6(1):83-93.
- TNS Gallup (2010): Studentenes helse- og trivselsundersøkelse (SHOT)
- Urnes, Jørgen, Grimstad, Hilde og Rasmussen, Bjørn: "Assessing medical students' communication skills by using dramastudents as simulated patients" Abstract: 17th World Conference on Family Doctors WONCA . 2004a (poster)
- Urnes, Jørgen og Rasmussen, Bjørn: "Patient's rights and doctors' duties- training doctors in relational skills by involving patients in other health professions." Association for Medical Education in Europe AMEE Conference 2004b (poster)
- Wesnes SL, Aasland O, Baerheim A. Career choice and place of graduation among physicians in Norway. Scand J Prim Health Care. 2012 Mar;30(1):35-40

- WHO Department of Human Resources for Health. Framework for action on interprofessional education and collaborative practice. Geneva: World Health Organisation; 2010. Report No.: WHO/HRH/HPN/10.3.
- Wigen K, Holen A, Ellingsen Ø. Predicting academic success by group behaviour in PBL. Med Teach. 2003 Jan;25(1):32-7.

Timeline and milestones

Activity/milestones		Year	Year	Year	Year
	1	2	3	4	5
WP1 Learning to cooperate and cooperating to learn					
1. Expand cooperative learning activities	Х	Х	х	Х	х
2. course modules for advanced facilitators	Х	х	х		
3. Establish an open, peer-reviewed library		Х	Х	Х	
4. Methods of assessment of students			х	x	х
WP 2 Learning by simulation					
1. Focus on student experience	х	Х	Х	Х	х
2. Develop theatrical methodology	X	х	X	х	х
3. Assessment of micro skills		X	X		
4. Course modules for educators			х	х	
WP 3 New models for supervised practical training					
during placement					
1. Establish interprofessional practice placement	х	Х	Х	х	х
2. Models for team supervision	X	Х			
3. Methods of assessment of students		Х	Х	Х	
4. Experiences of complexity of total patient health			Х	Х	Х
care					
WP 4 Integration and shared knowledge base					
Identifying the shared knowledge base	Х	Х			
2. Integrating educational activities from WP 1, 2 and		v	.,,	**	37
3		X	X	Х	X
3. Learning package for the practice field				х	х
	1			1	1

Budget (NOK 1000)

	Sum	2014	2015	2016	2017	2018
Payroll and indirect expenses	35 193	5 329	7 567	7 873	8 188	6 236
- Center leader ¹		1 170	1 216	1 265	1 316	1 368
- Phd's ²		1 938	4 040	4 204	4 373	2 269
- In Kind-personell ³		2 222	2 311	2 403	2 500	2 600
Procurement of R&D services	0					
Equipment	0					
Other operating expenses ⁴	12 844	2 656	2 614	2 571	2 525	2 478
TOTAL	48 037	7 985	10 181	10 444	10 713	8 714

- 1 100% for 5 years
- 2 4 PhD's for 4 years (25% teaching, 75% research)
- 3 Include 40% academic leader and FTE in other annual contribution
- 4 For operational activities/tasks described under the WPs and dissemination

Finance plan (NOK 1000)

	Sum	2014	2015	2016	2017	2018
Own funding	26 552	4 018	5 776	5 981	6 193	4 583
- Cash		2 381	4 073	4 211	4 351	2 668
- In Kind		1 637	1 703	1 771	1 842	1 915
Other public funding 1)	6 486	967	1 405	1 462	1 521	1 132
Other private funding	0					
International funding	0					
NOKUT	15 000	3 000	3 000	3 000	3 000	3 000
TOTAL	48 037	7 985	10 181	10 444	10 713	8 714

¹⁾ Sør-Trøndelag University College

Curriculum Vitae

Aslak Steinsbekk

Born:

26. February 1966

Nationality: Norwegian

Address work

Norwegian University of Science and Technology (NTNU)

Department of Public Health and General Practice

MTFS, N-7489 Trondheim, Norway

Tel: +47 73 59 75 74. Fax: +47 73 59 75 77

E-mail: aslak.steinsbekk@ntnu.no

Address private

Øvre Alle 7

N-7030 Trondheim

Norway

Tel +47 73 51 56 83

Mobile +47 41 55 90 76

Education

2011	Project management.	Norwegian University	of Science and	Technology, Trondheim.

- 2005 PhD Clinical medicine. Norwegian University of Science and Technology, Trondheim.
- 2004 Educational development program, Norwegian University of Science and Technology, Trondheim.
- 2000 Sociologist, Norwegian University of Science and Technology, Trondheim.
- 1999 Evidence Based Health Care. Norwegian Institute of Public Health / University of Oslo.
- 1998 Clinical research methodology courses, The Faculty of Medicine, Norwegian University of Science and Technology, Trondheim: Medical research in theory and practice, SPSS, Randomised Clinical Trial, Quality of Life Assessment, introduction and advanced, Epidemiology
- 1992 Homeopath, Norwegian Academy for Natural Medicine
- 1989 Business administration, Trondheim Business School, Sør-Trøndelag University College

Longer courses last 3 years

- 2012 Experiential Communication Skills Teaching in Health Professional Education. T-EACH, St. Andrews
- 2012 Curriculum Development in Communication Skills Teaching. T-EACH, Cambridge
- What to Teach in Communication Skills Teaching: Skills and Structure. T-EACH, Cambridge
- 2012 Research management Master Class. Copenhagen Business School. Copenhagen.
- 2011 Research supervision. Norwegian University of Science and Technology, Trondheim.
- 2011 Research management. Norwegian University of Science and Technology, Trondheim.
- 2009 Research management. Copenhagen Business School. Copenhagen.

Employment record

- 2012- Professor, Department of Community Medicine and General Practice, Norwegian University of Science and Technology
- 2010-12 Project manager Trondheim Helseklynge (Trondheim Health Cluster)
- 2005-12 Researcher. Department of Community Medicine and General Practice, Norwegian University of Science and Technology
- 2006-09 Post. Doc. Department of Community Medicine and General Practice, Norwegian University of Science and Technology
- 2002-04 PhD student, Department of Community Medicine and General Practice, Norwegian University of Science and Technology
- 2000–01 Researcher. The Norwegian Cancer Society.

1999-01	Research co-ordinator (part time). Norwegian Homeopathic Association
1997–98	Researcher (part time). Institute of Community Medicine, University of Tromsø
1991–03	Private homeopathic practice.
1771 05	Tittate nomeopatine practice.
Funding	g for research
2012	Regionalt forskningsfond Midt-Norge. Forprosjekt. Ett telefonnummer for alle uplanlagte helse-
	og omsorgsproblemer med beslutningsstøtte i form av en kjernejournal
20012-15	Research Council of Norway. Researcher project with funding for Post.doc and researcher on the project "Keeping patients out of hospital by improving patient trajectories in primary care methodological development and effect"
2011	Regionalt forskningsfond Midt-Norge. Forprosjekt. Ett telefonnummer for alle uplanlagte helse-
2009	og omsorgsproblemer med beslutningsstøtte i form av en kjernejournal
2009	Kontaktutvalget St.Olav - DMF "Implementering av brukermedvirkning i et distriktspsykiatrisk senter"
2009-10	Central Norway Regional Health Authority. Observational study of content and effect of patient
	education programs at hospitals in Central Norway
2009-12	Research Council of Norway. Researcher project with funding for Post.doc and research
	assistant on the project "Implementation of user participation in a community mental health
	centre – process and effect on staff and users"
2009-11	Helse og Rehabilitering. PhD candidate on the project "Implementation of user participation in a
2009	community mental health centre – process and effect on staff and users"
2008	Nasjonalt Kompetansesenter for læring og mestring ved kronisk sykdom ved Aker Universitetssykehus HF. Funding for arranging a national research conference for patient
	education and organising a national research network.
200708	Central Norway Regional Health Authority. Observational study of patient reported outcome of
2007 00	patient education programs at hospitals in Central Norway
2007-11	Research Council of Norway. Researcher project with funding for two PhD candidates. Patient
	education in patients with chronic obstructive pulmonary disease (COPD) and rheumatic disease
	– effect, experiences and costs.
2006-10	Research Council of Norway. Post. Doc. Kem e CAM - a 20 year longitudinal study of CAM
	use in a total population in Central Norway.
2007-08	Research Council of Norway. Funding for one year stay at University of Arizona, USA.
2006-07	Nasjonalt Kompeansesenter for læring og mestring ved kronisk sykdom ved Aker
	Universitetssykehus HF. Why do patients with chronic obstructive pulmonary disease (COPD)
2005	who have taken part in patient education exercise or not? Samarbeidsorganet Helse Midt-Norge og NTNU. Long term effect of a patient education and
2003	training program for patients with chronic obstructive pulmonary disease (COPD)
2003-04	Research Council of Norway. Funding for six months stay at University of Southampton,
2005 01	England.
2002-04	Research Council of Norway. PhD. Homeopathic treatment for upper respiratory tract infections
	in children – effect, economy and parents view
2000-01	The Norwegian Cancer Society. Cancer patients view of the consultations with practitioners of
	alternative and conventional medicine.
1999	Ekcbos legacy. Patient reported outcome of treatment by homeopaths in Norway. Two year
1006 00	follow up.
1996–98	Research Council of Norway. Patient reported outcome of treatment by homeopaths in Norway. A prospective observational study.
	11 prospective observational study.

Publications

Total	career research publication	65	(53 since 2005 y	ear o	f PhD, 43 since	2007)
-	Peer review journals:	50	(first author:	23	last author:	22)
-	Book chapters:	3				
-	Other:	12				

Since 2010

- Tove Røsstad, Helge Garåsen, Aslak Steinsbekk, Olav Sletvold and Anders Grimsmo. Development of a patientcentred care pathway across healthcare providers: a qualitative study. BMC Health Services Research 2013, 13:121. doi:10.1186/1472-6963-13-121
- Viksveen P, Steinsbekk A, Rise MB. What is a Competent Homeopath and What Do They Need in Their Education? A Qualitative Study of Educators' Views. Educ Health 2012;25:172-9. DOI:10.4103/1357-6283.109798
- Nossum R, Rise MB, Steinsbekk A. Patient education which parts of the content predict impact on coping skills?
 Scandinavian Journal of Public Health 2013 Accepted for publication
- 4. Solbjør, M; Rise, M B; Westerlund, H; Steinsbekk, A. Patient participation in mental health care: when is it difficult? A qualitative study of users and providers in a mental health hospital in Norway. International Journal of Social Psychiatry Volume 59 Issue 2 March 2013.
- Marit B. Rise, Heidi Westerlund, Dagfinn Bjørgen and Aslak Steinsbekk. Safely cared for or empowered in mental health care? Yes, please. Int J Soc Psychiatry. Published online 15 January 2013. DOI: 10.1177/0020764012471278
- 6. Aslak Steinsbekk, Heidi Westerlund, Dagfinn Bjørgen, Marit By Rise. Hvordan beskriver brukere av psykiske helse- og sosialtjenester et godt tjenestetilbud? Tidsskrift for Norsk Psykologforening 2013;50:2–5
- Rise B Marit, Eriksen Lasse, Grimstad Hilde, Steinsbekk Aslak. The short-term effect on alliance and satisfaction of using patient feedback scales in mental health out-patient treatment. A randomised controlled trial. BMC Health Services Research. 2012, 12:348. DOI: 10.1186/1472-6963-12-348 http://www.biomedcentral.com/1472-6963/12/348
- 8. Steinsbekk A, Rygg LO, Lisulo M, Rise MB, Fretheim A. Group based diabetes self-management education compared to routine treatment for people with type 2 diabetes mellitus. A systematic review with meta-analysis. BMC Health Services Research.2012, 12:213. DOI: 10.1186/1472-6963-12-213. http://www.biomedcentral.com/1472-6963/12/213
- Løhre A, Rise MB, Steinsbekk A. Characteristics of visitors to practitioners of homeopathy in a large adult Norwegian population (the HUNT 3 study). Homeopathy. 2012 Jul;101(3):175-81. http://dx.doi.org/10.1016/j.homp.2012.05.004
- 10. Solberg H, Nysether GE, Steinsbekk A. Patients' experiences with metaphors in a solution-focused approach to improve self-management skills: A qualitative study. Scand J Public Health. 2012 Jun;40(4):398-401.
- 11. Rise MB, Langvik E. Steinsbekk A. The personality of homeopaths. A cross-sectional survey of the personality profiles of homeopaths compared to a norm sample. Accepted for publication in Journal of Alternative and Complementary Medicine 2012: 18 (1); pp. 42-47.
- 12. Tycho J. Zuzak, Johanna Bonková, Domenico Careddu, Miklós Garami, Adamos Hadjipanayis, Janez Jazbec, Joav Merrick, Joyce Miller, Candan Ozturk, Ingrid A.L. Persso, Guenka Petrova, Pablo Saz Peiró, Simon Schraub, A. Paula Simões-Wüst, Aslak Steinsbekk, Karin Stockert, Assena Stoimenova, Jan Styczynski, Alexandra Tzenova-Savova, Søren Ventegodt, Arine M. Vlieger, Alfred Länglers. Use of complementary and alternative medicine by children: Published data and expert perspectives. Complement Ther Med (2012), doi:10.1016/j.ctim.2012.01.001
- 13. Lomunedal B, Steinsbekk A. Five-year follow-up of a one-year self-management program for patients with COPD. Accepted for publication in International Journal of COPD. 2012:7 87–93
- 14. Lisbeth Ø. Rygg, Marit By Rise, Kjersti Grønning, Aslak Steinsbekk. Efficacy of ongoing group based diabetes self-management education for patients with type 2 diabetes mellitus. A randomized controlled trial. Patient Educ Couns. 2012 Jan;86(1):98-105. Epub 2011 May 17. doi:10.1016/j.pec.2011.04.008
- 15. Marit By Rise, Hilde Grimstad, Marit Solbjor and Aslak Steinsbekk. Effect of an institutional development plan for user participation on professionals' knowledge, practice, and attitudes. A controlled study. BMC Health Services Research 2011, 11:296
- 16. Petter Viksveen, Aslak Steinsbekk. Undergraduate homeopathy education in Europe and the influence of accreditation Homeopathy (2011) 100, 253-258. doi:10.1016/j.homp.2011.06.006
- 17. Steinsbekk A, Rise MB, Bishop F, Lewith G (2011) Predictors for Adolescent Visits to Practitioners of Complementary and Alternative Medicine in a Total Population (the Young-HUNT Studies). PLoS ONE 6(10): e25719. doi:10.1371/journal.pone.0025719
- 18. Grønning K, Koksvik HS, Lomundal BK, Steinsbekk A. Coping with arthritis is experienced as a dynamic balancing process. A qualitative study. Clinical Rheumatology 2011. DOI: 10.1007/s10067-011-1836-9
- Aslak Steinsbekk, Marit B Rise and Roar Johnsen. Changes among male and female visitors to practitioners of complementary and alternative medicine in a large adult Norwegian population from 1997 to 2008 (The HUNT studies). BMC Complementary and Alternative Medicine 2011, 11:61 (11 august 2011)
- Austvoll-Dahlgren A, Nøstberg AM, Steinsbekk A, Vist GE. Effekt av gruppeundervisning i pasient- og pårørendeopplæring. Rapport fra Kunnskapssenteret nr 09 - 2011. ISBN 978-82-8121-405-7 ISSN 1890-1298

- 21. Marit By Rise, Marit Solbjør, Mariela Lara, Heidi Westerlund, Hilde Grimstad, Aslak Steinsbekk. Same description different values. How service users and providers define patient and public involvement in health care. Health Expectations 2011. DOI: 10.1111/j.1369-7625.2011.00713.x
- 22. Solbjør, Marit; Steinsbekk, Aslak. User involvement in hospital wards: Professionals negotiating user knowledge. A qualitative study. Patient Educ. Couns. 2011 85:2 (e144-e149). DOI 10.1016/j.pec.2011.02.009
- Solbjør, Marit; Steinsbekk, Aslak. Brukermedvirkning i sykehusavdelinger helsepersonellets erfaringer [Patient participation in hospital wards - health personnel's experience]. Tidsskr Nor Laegeforen. 2011 Jan 21;131(2):130-131
- 24. Steinsbekk A. Families' visits to practitioners of complementary and alternative medicine in a total population (the HUNT studies). Scand J Public Health, November 2010; vol. 38, 5 suppl: pp. 96-104. DOI: 10.1177/1403494810382813
- Rygg LØ, Rise MB, Lomundal BK, Solberg HS, Steinsbekk A. Participants' reasons for entering a type 2 diabetes education program: A qualitative study" Scandinavian Journal of Public Health 2010. Published online 10 September 2010. DOI: 10.1177/1403494810382475
- 26. Grønning K, Rødevand E, Steinsbekk E. Paid work is associated with improved Health related Quality of Life in Patients with Rheumatoid arthritis. Clin Rheumatoi (2010) 29:1317–1322. DOI: 10.1007/s10067-010-1534-z

Supervision

Current supervision: 16

Main supervisor PhD	3	Co supervisor PhD	7	Others (mainly	6
candidates:		candidates:		master thesis):	

Completed supervision of candidates who have completed their degree since 2005: 36

Main supervisor PhD	3	Co supervisor / co-author	2	Others (mainly	29	
candidates:		PhD candidates:		master thesis):		

Main supervisor for PhD candidates who have passed their public defence

11200111	Super Hour I .	22 Carretted Willo Have Sasson Hier Sassin activities
2012	Lisbeth Ø.	Group education for patients with type 2 diabetes - needs, experiences and
	Rygg	effects
2012	Kjersti	Patient education and chronic inflammatory polyarthritis – coping and
	Grønning	effect
2012	Marit By Rise	Lifting the veil from user participation in clinical work – what is it and
		does it work?

Committee work since 2000

Commin	tee work since 2000
2012	Section editor, BMC Complementary and Alternative Medicine
2011-	Associate editor, BMC Complementary and Alternative Medicine
2010-	Associate editor, BMC Public Health
2009-	Chairman Advisory council for National Centre for Research in Complementary and Alternative
	Medicine and National Information Centre for Complementary and Alternative Medicine,
	University of Tromsø, Norway
2008-	National network for researchers in patient education and patient participation.
2006-07	Deputy member of the board of Department of Community Medicine and General Practice,
	Norwegian University of Science and Technology
2004-	Member of the board of Helsebygg Midt-Norge, building of a new university hospital in
	Trondheim
2003-	Employee representative Norwegian Association of Research Workers at NTNU - building of a
	new university hospital in Trondheim

CV

Name:

Børge Lillebo

Date of birth:

26 February 1982

E-mail:

borge.lillebo@ntnu.no

Experience

Chief Physician at Værnesregionen Legevakt; November 2010 - Present (2 years 7 months)

Scientist at NTNU (PhD-student in Medical Technology); February 2009 - Present (4 years 4 months)

Coordinator of Problem Based Learning at Faculty of Medicine, NTNU; February 2009 - Present (4 years 4 months)

Physician (registrar) at St. Olavs Hospital, Trondheim University Hospital; September 2009 - November 2010 (1 year 3 months)

Physician (house officer) at Øksfjord Medical Centre; August 2008 - February 2009 (6 months)

Physician (house officer) at Hammerfest Hospital; August 2007 - August 2008 (1 year)

Physician (supervised substitute) at St. Olavs Hospital, Trondheim University Hospital; July 2006 - August 2006 (2 months)

Education

Doctor of Philosophy (PhD), Medical Technology, 2009 – 2013; Norwegian University of Science and Technology (NTNU)

Medical Doctor, Medicine, 2001 – 2007; Norwegian University of Science and Technology (NTNU)

Publications

[Biopsies of the endoscopically normal colon]; Tidsskr Nor Laegeforen March 1, 2007; Authors: Børge Lillebo, Ivar Skjåk Nordrum, Jan Dybdahl

What is optimal timing for trauma team alerts? A retrospective observational study of alert timing effects on the initial management of trauma patients.; J Multidiscip Healthc August 23, 2012; Authors: Børge Lillebo, Oddvar Uleberg, Ole-Petter Vinjevoll, Andreas Seim

Presentation of clinical laboratory results: an experimental comparison of four visualization techniques; J Am Med Inform Assoc October 6, 2012; Authors: Børge Lillebo, Gustav Mikkelsen, Torbjørn Torsvik

Avoidable emergency admissions?; Emerg Med J September 14, 2012; Authors: Børge Lillebo, Bodil Dyrstad, Anders Grimsmo

On-line evaluation of PBL; AMEE 2004; Authors: Børge Lillebo, Are Holen, Torstein Vik

Piloting Team-Based Learning in a Problem-Based Curriculum; AMEE 2012: The Continuum of Education in the Healthcare Professions 2012; Authors: Børge Lillebo, Hilde Grimstad

Information and communication needs of healthcare workers in the perioperative domain; Studies in Health Technology and Informatics 2011; Authors: Børge Lillebo, Andreas Seim, Arild Faxvaag

Honors and Awards

Faculty of Medicine Education Award 2004 Winner; Norwegian University of Science and Technology, Faculty of Medicine, Studies Division

Courses

I participated at the BEST facilitator course in 2011 (learning how to facilitate trauma team simulation).

Skills & Expertise

Problem-based Learning; Medical informatics; Prehospital Care; Cooperative Learning; Medicine

Teaching

I teach students how to get the most out of PBL and educators how to facilitate PBL-groups. I am leading the Faculty of Medicine's pilot on Team-based learning. I am also the faculty representative in a national eLearning group in pre-graduate medical education. At the Varnesregionen urgency care centre I facilitate simulation training for urgent care nurses and physicians.

Petter Aadahl

CV short version

Born:

1955, 11/8

Nationality:

Norwegian

Present position:

Head, Department of Cardiothoracic Anaesthesia and Intensive Care, St.Olav Hospital

Appointed Research Director St.Olav Hospital from 1. June 2013

Professor in Anaesthesiology, ISB, NTNU

Academic degree:

dr.med. (Doctorate in Medicine)

Education

2013	Certificate of Medical Education (Dundee University, Scotland)
1996	Doctorate in Medicine (dr.med.), NTNU, Trondheim, Norway
1988	Board approved Specialist in Anaesthesiology
1980	Medical Doctor, NTNU, Trondheim, Norway

Work experience

2010-	Head, Department of Cardiothoracic Anaesthesia and Intensive Care (70%) and Professor in
	Anaesthesiology (50%)
2007-2010	Consultant Physician in Cardiothoracic Anaesthesia (20%)
1998 - 2010	Associate Professor/Professor in Anaesthesiology (100%)
1998- 2007	Consultant Physician in Anaesthesia and Intensive Care (20%)
1990 -1998	Consultant Physician in Anaesthesia and Intensive Care (100%)
1989-1990	Research fellow Det norske råd for hjerte- og karsykdommer
1982-1989	Residency in Anaesthesia at departments in Sweden and Norway
1980-1982	Internship, Military Service

Other:

2000-2010	Medical	Advisor,	InvivoSense ASA
-----------	---------	----------	-----------------

2003-2009 Director, Medical Simulation Centre, NTNU/St.Olav Hospital

Awards

Abstract rewards (Solligård and Juel intestinal ischemia, Åsheim intraperitoneal administration of fluids)

Medical Technology Prize NTNU 1998 (Endovascular aortic graft)

Medox Prize 1997 (endovascular aortic graft)

Gunnar Bauer Prize 1992 (intravasal ultrasonography)

ESVS Prize 1989 (spinal cord microcirculation)

Scientific supervision (dr.med/PhD)

Frode Manstad-Hulaas PhD 2013 (Navigation in endovascular aortic aneurysm repair)

Nils Kristian Skjærvold PhD 2012 (Artificial pancreas)

Ingebjørg Juel PhD 2007 (Intestinal injury and recovery after ischemia)

Erik Solligård PhD 2007 (Gut luminal microdialysis)

Trine Eide 2006 PhD (Thoracoabdominal aortic aneurysm repair)

Ola Sæther 2000 PhD (Pathophysiology during proximal aortic crossclamping)

Tonje Strømholm 1997 PhD (Cerebral haemodynamics during thoracic aortic cross clamping)

Graduate thesis: 12

On going supervision (PhD/forskerlinje):

Stig Tyvold PhD (Distant organ failure in intestinal ischemia) Disputerer 2013
Birgithe Sandbæk PhD (Operating Room Logistics), Høgskolen i Molde)
Audun Eskeland Rimehaug PhD (Cardiac power)
Hans Henrik Dedichen
Geir Arne Tangen PhD (Enhanced minimally invasive therapy)
Stine Gundrosen PhD (Team communication)
Cecilie Våpenstad PhD (Simulation and Surgical Skills)

Marte Vaage Øie (Language; verbal and non verbal communication) Ingrid Jørgensen (Emergency Medicine Response) Katrine Knai (Acute Respiratory Failure)

Industry collaboration

Medxense as, former Invivosense ASA(biosensors: intravascular glucose-sensor in hyperglycaemic control) Laerdal Medical, Stavanger (Ultrasound Simulation)

Publications 2007 – dd

Skjaervold NK, Aadahl P. Comparison of arterial and mixed venous blood glucose levels in hemodynamically unstable pigs: implications for location of a continuous glucose sensor. Acta Diabetol. 2012

Skjaervold NK, Lyng O, Spigset O, Aadahl P. Intravenous Insulin Administration: Implication for Future Closed-Loop Glycemic Control by the Intravenous/Intravenous Route. Diabetes Technol Ther 2012

Manstad-Hulaas F, Tangen GA, Dahl T, Hernes TA, Aadahl P.
Three-Dimensional Electromagnetic Navigation vs. Fluoroscopy for Endovascular Aneurysm Repair: A Prospective Feasibility Study in Patients. J Endovasc Ther. 2012

Manstad-Hulaas F, Tangen GA, Gruionu LA, Aadahl P, Hernes T: Three-Dimensional Endovascular Navigation with Electromagnetic Tracking –Ex Vivo and In Vivo Accuracy. J Endovasc Ther 2011

Skjaervold NK, Solligård E, Hjelme DR, Aadahl P. Continuous measurement of blood glucose: validation of a new intravascular sensor. Anesthesiology. 2011

Tyvold SS, Solligård E, Gunnes S, Lyng O, Johannisson A, Grønbech JE, Aadahl P. Bronchial microdialysis of cytokines in the epithelial lining fluid in experimental intestinal ischemia and reperfusion before onset of manifest lung injury. Shock. 2010

Bjerkelund CE, Christensen P, Dragsund S, Aadahl P. <u>How to secure free airway?</u>]. Tidsskr Nor Laegeforen. 2010 Mar 11;130(5):507-10. Review. Norwegian.

Per Åsheim, Olav Spigset, Knut Aasarød, Rolf A.Walstad, Per E. Uggen, Kolbjørn Zahlsen, and Petter Aadahl. Pharmacokinetics of peritoneally instilled aminophylline, terbutaline and tobramycin in pigs. Acta Anaesthesiol Scand 2008

Tyvold. SS, Solligard E, Gunnes S, Steinshamn S, Aadahl P. Continuous monitoring of the bronchial epithelial lining fluid by microdialysis. Respiratory Research 2008

Ingebjørg S. Juel, Erik Solligård, Oddveig Lyng, Karin Bakkelund, Kåre Tvedt, Eirik Skogvoll, Petter Aadahl, Jon Erik Grønbech. Postischaemic restituted intestinal mucosa is more resistant to further ischaemia than normal mucosa in the pig. The Scandinavian Journal of Clinical & Laboratory Investigation 2008

Dale, Ola; Nilsen, T; Bjorgaas, T; Borkamo, A; Aadahl, P. The time course of exhaled ethane in six intensive care cases. Acta Anaesthesiologica Scandinavica 2008

Erik Solligård, Ingebjørg S. Juel, Olav Spigset, Pål Romundstad, Jon Erik Grønbech, Petter Aadahl: Gut luminal lactate measured by microdialysis mirrors permeability of the intestinal mucosa after ischemia. Shock 2008

Randi B. Solheim Salvesen, Ulf Mostad, Petter Aadahl. Home care of children with silicone tracheostomy cannulas. In: Yearbook Respiratory Care Clinics and Applied Technology, Ed.: Antonio Esquinas. 2008

Ingebjørg S. Juel, Erik Solligård, Oddveig Lyng, Karin Bakkelund, Kåre Tvedt, Petter Aadahl, Jon Erik Grøndbech. Lactate and glycerol released to the intestinal lumen reflect mucosal injury and permeability changes caused by strangulation obstruction Eur Surg Research 2007

Uleberg O, Vinjevoll OP, Eriksson U, Aadahl P, Skogvoll E. Overtriage in trauma - what are the causes? Acta Anaesthesiol Scand. 2007

Manstad-Hulaas F, Ommedal S, Tangen GA, Aadahl P, Hernes TN. Side-Branched AAA Stent Graft Insertion Using Navigation Technology: A Phantom Study. Eur Surg Res. 2007

Brattli OS, Nystuen K, Sæther OD, Aadahl P, Grønbech JE and Myhre HO: Regional distribution of blood flow during proximal aortic cross-clamping: An Experimental Study using Coloured Microspheres. The Scandinavian Journal of Clinical & Laboratory Investigation. 2007

Solligård E, Wahba A, Skogvoll E, Stenseth R, Grønbech JE, Aadahl P. Endoluminal microdialysis shows increased rectal lactate in routine coronary surgery. Anaesthesia. 2007

Asheim P, Uggen PE, Aasarød K, Aadahl P. A 58.year old woman with short bowel syndrome and nutrition failure. Tidsskr Nor Laegeforen. 2007 (Norwegian)

Dale O, Lund T, Bergum H, Nilsen T, Aadahl P, Stenseth R. Serial samples of breath ethane can also be analyzed by gas-chromatography. Respir Med. 2007 (comment)

CURRICULUM VITAE (excerpt)

Name: Ann Oddrun Medby

Born: 05.02.1958

Address: Midelfarts vei 5A 7022 Trondheim

Workplace: Faculty of Nursing, ASP Sør-Trøndelag University College (HiST)

E-mail: ann.o.medby@hist.no
Education: Master of Health Science
Position: Assistant Professor

Education:

 2011 Doctoral course Science theory 'Interdisciplinary Studies of Culture', Faculty of Humanities, (Norges teknisk-naturvitenskapelige universitet i Trondheim) NTNU

- 2009 Doctoral course 'Qualitative Research Methods', Faculty of Social Sciences and Technology Management, NTNU
- 2006 Master in Health Science, Faculty of Social Sciences and Technology Management, NTNU
- 2000 One year study in Clinical Guidance, Bodø University College (20stp)
- 1995 One year study in Geriatric Nursing, Bodø University College (20stp)
- 1993 One year study in Health Administration, Bodø University College (20stp)
- 1989 Bachelor in Nursing, Vestsjælland Nursing College, Ringsted, Denmark,

Positions held – education- and research institution:

• 2006- 20.08. Assistant professor (100%) Sør-Trøndelag University College (HiST) Faculty of Nursing (ASP)

Positions held – Nursing Practice:

• 05.01.2005 – 31.05.2006 Geriatric Ward, Ullevål University Hospital, Oslo - Geriatric Nurse. Educational Staff Nurse (100%)

• 01.08. 2001– 31.01.2004 Olavsgården Rehabilitation Center, Trondheim – Reg.Nurse (100%)

• 24.03. 1998 – 31.07.2001 Kløveråsen Diagnosis and Competence center for Dementia in Nordland, Bodø – Ward Nurse (100%)

• **12.02. 1997 –16.03.1998** Østmarka Hospital, Psycho-Geriatric ward, Trondheim – Reg.Nurse (100%)

• **01.08.1996** –**10.02.1997** Persaunet Nursing home, Trondheim - Reg.Nurse (100%)

01.12.1993 – 31.07 1996 Bodin Nursing Home, Bodø - Ward Nurse (100%)
 11.12.1989 –10.11.1993 Nordland Central Hospital, Bodø - Reg. Nurse (100%)

• **01.04.1989 –31.10.1989** Roskilde Central Hospital, Roskilde, Denmark - Reg. Nurse (100%)

Experience from development and management of education courses:

- 2000 Supervisor in an educational programme for the clinical staff in dementia care in Fauske Nursing Home Vi er en glemt avdeling- Report: We are a forgotten ward.
- 2006-2007 Supervisor in an educational program for the clinical staff in dementia care in Malvik municipality. AHS Report Dementia- Knowledge – Communication.
- 2006 Participation in an inter-professional clinical placement project involving Physiotherapists and Nursings students. St Olav University Hospital, Faculty of Nursing, Faculty of Health Education and Social Work. (HIST).
- 2009 2013 Responsible for developing and implementing student groups as a clinical learning model in Nursing practice placements. From the fall of 2013, 230 students will be participating. Faculty of Nursing (HIST), Municipalities of Trondheim, Malvik, Orkdal, Skaun and other municipalities in Sør Trøndelag.
- 2008 -2009 Responsible for developing and implementing a clinical learning model for Nursing Students concerning Urine incontinence in Nursing home patients. Faculty of Nursing (HIST), Søbstad Health Centre, Trondheim Municipality.
- 2010-2014 Responsible for developing and implementing a clinical learning model for Nursing Students: Institusjon II Student groups learning leadership and interdisciplinary collaboration during clinical placements. Involves the participation of 200 students in the curriculum year. Faculty of Nursing (HIST), Municipalities of Trondheim, Malvik and Skaun.
- 2010 2012 Responsible for developing and implementing a clinical learning model for special needs educator students (vernepleie) and nursing students. Institution II -Student groups learning interdisciplinary collaboration during clinical placements. Faculty of Nursing, Faculty of Health Education and Social Work, (HiST) and Trondheim Municipality, Øya Health Centre
- 2012-2013 Participation in the development and implementation of an interprofessional education course offered to students from health and welfare programs, Faculty of Nursing, Faculty of Health Education and Social Work, (HiST) and NTNU Medical Faculty.

Curriculum program management

- 2007-2009 Responsible for developing and implementing learning program for Nursing students concerning patients in community care (nursing homes and home based services). Faculty of Nursing HIST.
- 2010-2013 Responsible for developing and implementing clinical studies program for 1 year nursing students. Faculty of Nursing HIST.

Publications

1. Mohn Sneve A. m. fl *Aktiv praksis* (2011), Tidsskriftet Sykepleien, 2011/99 (09) s 68 – 70.

http://www.sykepleien.no/page/sykepleien/fagutvikling/fagartikler/vis?p_document_id=716814

1. Medby A. Haugan G. Studentgruppen i praktiske studier i sykehjem (2012). Student groups in Nursing Practice: 1st year nursing students' experience of learning clinical nursing in a group setting. Vård i Norden, no 2/2012, s. 46 – 50. http://www.rchpr.org/Lists/News/Attachments/75/G%C3%B8rill%20Haugan%20V%C3%A5rd%20i%20Norden.pdf

Ongoing research publications:

Titles are in Norwegian, my translation:

- 1. Blekken L., Medby A. (2013) Description of learning outcome in nursing management after implementation of clinical studies organized as teams run by nursing students. Beskrivelse av læringsutbytte i faglig ledelse av sykepleie etter innføring av praksisstudieperiode med avdelingsovertakelse.
- 2. Medby A., Blekken L. (2013) Evaluation of a clinical learning model: Student groups taking over the responsibility of a Nursing home ward. Erfaringer fra avdelingsovertakelse som modell i praktiske studier for tredje års sykepleiestudenter

CURRICULUM VITAE (excerpt)

Name:

Turid Midjo

Born:

01.11.49.

Adress:

Aspveien 1, 7058 Jakobsli

Workplace:

Faculty of Health Education and Social Work, Sør-Trøndelag University

College (HiST)

Education:

Philosophiae doctor (Phd)

Stilling:

Associated Professor

Education:

- Philosophiae doctor (Phd). Department of Social Work and Health Science, NTNU, 2010
- Master in Social Work. NTNU, 1983
- Bachelor in Social Work Stavanger, 1975
- One year study in pedagogy (60 "studiepoeng") Lillehammer University College, 1972

Positions held: education- and research institutions:

Assistant professor Sør-Trøndelag University College (HiST)

	F			,	()
•	Program of	Social education	(100%)		

06.02.12 -

• Program of Social education (different part-time positions) 01.08.09- 05.02.12

• Postgraduate education in Mental Health (50%)

01.03.10- 30.06.10

• Program of Child Welfare Work Therapy

Assistant professor Nord-Trøndelag University College (HiNT)

• Program of Social education (20%)

01.02.12 - 30.06.12

Program of Social education (50%)

01.08.11 - 31.01.12

Senior Lecture

Hourly teaching assignments NTNU/HiST

2007/2008

Program of Child Welfare Work Therapy, HiST

01.02.01 - 07.02.03

Program of Social Work, Bodø University College

(University of Nordland)

14.08.83 - 31.01.89

Experience of working with research in full time positions:

Phd student,

Department of Social Work and Health Science, NTNU

08.02.03 - 25.09.07

Senior researcher:

Child Protection Research Unit

01.09.00 - 31.01.01

• Norwegian Center of Child Research (NOSEB)

01.02.89 - 31.08.00

Experience from leader positions:

• Leader of Experts in teamwork (EiT) HiST

15.08.08 - 18.04.09

• Norwegian Center of Child Research (NOSEB)

01.01.98 - 15.09.99

Experience from development and management of multidisciplinary and education courses:

- a) **2008 -2009.** Local leader in the interdisciplinary education course "Experts in teamwork" (EiT), conducted as an intensive educational program for three weeks at HIST.
- b) 2009-2013. Responsible for developing and implementing a process-oriented intensive mono-disciplinary education course over 5 weeks at program of Social Education, HiST. The course is based on ideas from Experts in team.
- c) **2011-2012.** Responsibility for a post graduate education program (30 credits) related to the Norwegian reform called "The coordination-reform. Proper treatment at the right place and right time." Social Education, HiST
- d) 2012-2013. Participation in the development and implementation of an inter-professional education course offered to students from health and welfare programs, Faculty of Health Education and Social Work, (HiST) and NTNU Medical Faculty.

Member of research network:

- "The DANASWAC GROUP" (Discourse and Narrative Approaches to Social Work and Councelling). An international group of researchers who share an interest to study the practices of social work and counseling by using discourse, narrative and ethnographic approaches.
- "SUF-Resource Center" and multi-professional network related to families where one or both the parents have an intellectual disability. The network (nordic) is part of the collaboration and knowledge dissemination vision of the center in Uppsala, Sweden.
- «Activity and participation». A multidisciplinary network between HiST and NTNU.

Excerpt publications, conference papers and ongoing research (All publications are in Norwegian: here translated)

Reports and articles:

- 2012: Teaching about sexuality and love. An evaluation of a training course for a group of young adults. St. Olavs Hospital & HiST. (In Norwegian).
- 2010: A study of the interaction between parents and child welfare workers in the child welfare investigation process. Dissertation PhD, NTNU. (The Dissertation is in Norwegian).
- 2005: "Inter-agency cooperation and competence enhancement. Child welfare in transition: tradition or innovation? A pilot study". Co-authors: Løfsnes, B. & Gustafsson, O. Faculty of Health Education and Social Work, Sør-Trøndelag University Collage (HiST) Report no.4. (In Norwegian).
- 1997: "Children, physical activity and physical environment" Norwegian Center of Child Research (NOSEB). Report no. 46.
- 1994: "The new childhood. Individuation and subject status". In Aasen, P. & O.K. Haugaløkken (eds.). Sustainable pedagogy. Gyldendal publishing.

CV Turid Midjo HiST, AHS

Conference papers:

2012: "Disagreement, power and identity in child welfare investigations". DANASWAC meeting. Ljubljana, Slovenia. August 2012.

2007: "Talking mothers to inclusion and otherness". Network seminar: Family-oriented social work in the Nordic countries". Reykjavik, Island, June 2007.

2007: "Backstage child welfare: A categorization and positioning practice." DANASWAC meeting, Jönköping, Sweden, May 2007

2006: "Child Welfare Negotiation Process as a Gendered Practice". DANASWAC meeting. Tampere/Helsinki, Finland, February 2006.

Articles in work:

- Talking about romantic relationships.(Journal)
- Participation and positioning in child welfare investigations. (Book).

Ongoing research:

2013: "Autonomy and coping in everyday life." An evaluation of a training program for young adults with intellectual disabilities and the need for cooperation between the young adult, their family, coordinating unit at the municipality level and specialized health services. (A project cooperation between the Faculty of Health Sciences, Nord-Trøndelag University Collage and the Faculty of Health Education and Social Work, HiST). Funded by The Central Norway Regional Health Authority and The Norwegian Directorate of Health.

"Children of parents with intellectual disabilities." (A project cooperation between the academic unit Diversity and inclusion, NTNU Samfunnsforskning AS and Faculty of Health Education and Social Work, HiST). Funded by Norwegian Directorate for Children, Youth and Family Affairs.