Skjemainformasjon

Skjema	SFU
Referanse	1006445
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Host

Information about host institution and center

Name of centre	Centre for Collaborative Health Education (CoHealth)
Host institution	Hedmark University College, Faculty of Public Health
PO Box address	Pb 400
Postal code / City/place	2418 ELVERUM
Telephone	62430000
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Contact person

Contact person

Name	Ingeborg Hartz
Title	Professor and Vice dean of Research
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About the centre

About the centre

Is the centre already established at the time of application	No

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

The vision of the CoHealth Centre is "Innovative interaction in practice - Health Education for tomorrow's Welfare", and our goal is to contribute to increased quality and relevance in (health) education by founding a centre which develop, test and evaluate an educational model; a three-party (student, teacher, practitioner) interactive model for formation and transfer of knowledge and knowledge-based education. Hedmark University College's (HUC) nursing education, with its public health profile, nursing skills practice arenas and associated collaborators will constitute the centre's core. The Centre will be organised as a separate organisational and economic unit at the Faculty of Public Health, and thus co-located with the host institution in the multi-functional complex at Terningen Arena (TA). TA harbours eight modern practical skills laboratories and a variety of actors from the work field which all share public health as a profile. A reference group with student representatives will be established. The Faculty has strong and contractual links to the clinical- and work field through shared location and joint use of training areas in TA. The synergies this kind of co-localisation across professions, sectors and disciplines could contribute into the development of an arena for learning was recently emphasised by the Norwegian Research Council as an important incitement for innovation in Public Sector.

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

The CoHealth Centre shall promote innovative interaction in practice and Health Education for tomorrow's Welfare. White paper 13 highlights the importance of interprofessional collaborative learning, interaction between education and working life, R&D-based education of health professionals as an incitement for implementation of a knowledge-based working methodology in a multidisciplinary clinical field. Our goal is to contribute to increased quality in (health-)education by developing further, testing and evaluating a three-party interactive model for formation and transfer of knowledge and knowledge-based education. Central is cooperation and joint use of in-campus nursing skills laboratories, where various and updated experiences from the clinical field and theoretical knowledge are integrated. Formation and transfer of knowledge and a knowledge based working methodology occurs reciprocally between students, teachers, and practitioners, as a result of an interaction between the three participants. The CoHealth Centre will function as a resource bank for other educational institutions and the model be developed in order to have transfer value for use in other health care educations. Core activities will be organized in five work packs: 1: Inter-professional interaction for and with working life. 2: Flexible learning solutions. 3: Living laboratories and practical skills arenas. 4: Professionally oriented research. 5: Dissemination and organization.

Application Document

Application Document

Upload application document	profile_Application doc CoHealth.pdf

Timeline and budget

Timeline and budget

Upload planned timeline and the activities to be conducted	timeline_Timeline CoHealth.pdf
Upload plan for financial resource acquisition	financial_Kopi av finansieringsplan Senter for fremragende utdanning 03 05 13xlsx (2)_Engelsk.pdf
Upload budget	budget_Kopi av Budsjett Senter for fremragende utdanning 03 05 13xlsx (2)_Engelsk.pdf

Attachments

Attachments

- CV_Marit_Aralt_Skaug.pdf
- CV__Centre_leader_Ingeborg_Hartz.pdf
- timeline_Timeline CoHealth.pdf
- profile_Application doc CoHealth.pdf
- CV_Tuva_Sandsdalen.pdf

Comments

Comments to the application form (maximum 1500 characters)

Centre for Collaborative Health Education (CoHealth)

Host institution: Hedmark University College, Faculty of Public Health

Profile and vision

Our vision: Innovative interaction in practice – health education for tomorrow's welfare.

In the White Papers *Education for Welfare: Interaction as Key*[1] and *Long-term perspectives – knowledge provides opportunity*,[2] a number of challenges related to education of future nurses and other professionals in the health-care sector are pointed out.

They focus on the importance of interprofessional collaborative learning, interaction of education and working life, closeness to practice, research- and development-based education as an incitement for implementation of knowledge-based working methodology in the clinical field, and changes in health and social care education required by societal change and reforms in the health and welfare sector.

The government also points out that the 'triangle of knowledge' – the interaction of research, higher education and innovation – has become more timely with regard to society's capability of meeting the challenges of tomorrow.

A key challenge in health- and social care education is to achieve a qualitatively good link between theory and practice, and to ensure that newly qualified candidates both have experience with and are prepared for the competence requirements and working methods that they will face in their working lives.

Here, relevant, up-to-date and qualitatively good practical training, together with theoretical lessons, is decisive.

The goal of our work is to contribute to increased quality in (health) education by founding a centre that further develops, tests and evaluates a three-party interactive model for formation and transfer of knowledge, and knowledge-based education. The students' skills practice laboratories represent a key area for communication between education and working life/other parts of society; our nursing education, with its public health profile, nursing skills practice areas and associated collaborators, will constitute the Centre's core.

At the same time cooperation with other education programmes and disciplines at Hedmark University College (HUC) will be central to the activity. Closeness to practice and formation of knowledge in and for practice, and interdisciplinary and internal and external interaction will be fundamental to the Centre's teaching and research and development activities.

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1 White paper NO. 13 (2011-2012)

2 White paper No. 18 (2012-2013)

The model is to be further developed in order to have transfer value for use in other health-related education.

Core visions of the activities: In the traditional model for education there is one-way transfer of knowledge from teacher/practical training supervisor to student.

The basic idea in our model for education is a three-party interactive model where all three parties have learning outcome; teacher, practitioner, student.

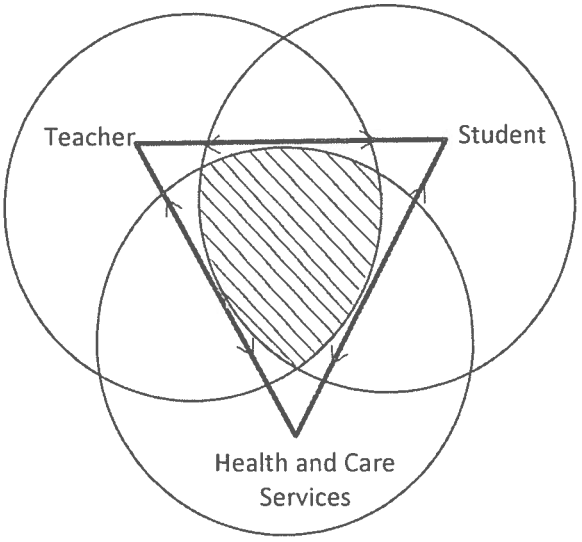

Fig: Three-party interactive model

Central is cooperation and joint use of nursing skills laboratories, where various and updated experiences from the clinical field and theoretical knowledge are integrated. Formation and transfer of knowledge and a knowledge based working methodology occurs reciprocally between students, teachers, and practitioners, as a result of an interaction between the three participants (see figure above). This interaction can take place on two arenas for learning; at the institution and in the clinical field.

The practical skills laboratories at HUC are already used actively in the interaction via tuition/instruction of students by teachers, activities steered by the students themselves, and workers in the clinical field using the skills laboratories to teach their own employees, students and teachers. The practical skills laboratories will be central in the further development, testing and evaluation of the three-party interactive model.

The core activities of the centre will be organized into five work packages: 1. Interprofessional interaction for and with working life, 2. Flexible learning solutions, 3. Living laboratories and practical skills areas, 4. Professionally oriented research, 5. Dissemination and organisation.

Work package 1 (WP1) is a process package, in which methodology and systems linked to the three-party interactive model are further developed and tested. The four remaining work packages support WP1.

Each work package has a portfolio of tasks, which together contribute to 'Innovative interaction in practice – health education for tomorrow's welfare'. To ensure sufficient focus on the importance of dissemination these portfolios have been placed in a separate work package.

Work package 1 (WP1): Interprofessional interaction for and with working life

As described initially, and underlined in government guidance documents, the interaction between education and working life in general, and the clinical field in particular, is crucial to educational quality. At the Terningen Arena, HUC has several modern learning areas adapted for interaction. Today these are used for teaching the HUC's own students, by collaborators for internal training and in courses for external participants. Based on HUC's own training facilities and methods/programmes, the existing model for supervising nursing students, and established collaborations, the CoHealth Centre will develop the interactive model in such a way that it facilitates an interactive learning process, in which all three parties learn from each other:

- Task 1.1 (T1.1): Research project following the work process: establish and run a research project to evaluate the work process linked to the methodology behind developing a three-party interactive model.
- Task 1.2 (T1.2): Structure and organisation for collaboration with external partners: adjust existing and possibly establish new meeting sites, cooperation agreements and combined positions. Structure and coordinate training needs.
- Task 1.3 (T1.3): Develop content of study programme: realise experiences for WP3 and WP4 in the study programme.

Work package 2 (WP2): Flexible learning solutions

HH has several years' experience in the use of flexible education and digital teaching methods. Development of flexible courses, technology-supported learning (E/M learning), learning using mobile game-based and simulation-based platforms, and new pedagogic methods provide new opportunities for connections between theory and practice, and for the interaction in the three-party interactive model.

- Task 2.1 (T2.1): Flexible learning solutions: develop further existing, and new flexible, learning solutions that can be used independent of full- or part-time studies, or on- or off-campus studies and in the clinical field.
- Task 2.2 (T2.2): E-learning solutions: develop further existing, and new animations, short lectures online and case supervision.
- Task 2.3 (T2.3): Establish anatomical and physiological resource collection: will be established for interdisciplinary use in cooperation with the University College library.
- Task 2.4 (T2.4): Training in e-learning: arrange courses and training in extended use of e-learning resources for employees and practical training supervisors, in parallel with the development of e-learning solutions.

Work package 3 (WP3): Living laboratories and practical skills areas

Activity in the nursing skills practice laboratory, with participation from everyone in the three-party interactive model, provides favourable conditions for creativity, innovative solutions, exchange of knowledge and good interactions. The Centre will develop realistic exercises, based on the clinical field's knowledge-based procedures, and develop arrangements for activities steered by the students themselves.

- Task 3.1 (T3.1): The teacher's role: further development of a model with super-users, for internal enhancement of competence and support in facilitating exercises.
- Task 3.2 (T3.2) Students as a resource: continue to develop further student resource groups as contributors to practical skills teaching and increased student activity in the nursing skills practice laboratories.
- Task 3.3 (T3.3) Simulation exercises: develop and conduct simulation exercises that are increasingly similar to real life in collaboration with the clinical field.

Work package 4 (WP4): Professionally oriented research

Systematic testing of educational models including different forms of practice experience, simulation and theory, combined in new ways, will be a way of developing knowledge to ensure the relevance of professional education.[3] HUC's strong research environment in the profession and professional education-oriented research linked, to *PhD in Teaching and Teacher Education* and *Centre for Studies of Educational Practice* (SEPU), will form the basis of similar health profession-oriented research under the direction of CoHealth. The Centre will employ a PhD research fellow. She or he will be linked to these research environments and, together with Faculty of Public Health's research expertise within nursing, will contribute to the evaluation of actions started by CoHealth, especially with regard to quality of learning, learning outcome and interactive relationships with the clinical field:

- Task 4.1 (T4.1): PhD project in close collaboration with the research environment in SEPU and PhD in Teaching and Teacher Education.
- Task 4.2 (T4.2): Research-based evaluation of solutions developed in WP4: by using existing 'Cooperation funds in practice', in collaboration with our researchers, students and the clinical field.
- Task 4.3 (T4.3): Evaluate the effect of learning solutions developed in WP3.

3 The Norwegian Research Council: consultation document concerning a new research program entitled "Good and effective heath-, caring-, and welfare services"

Work package 5 (WP5): Dissemination and organisation

To ensure priority of dissemination and organisation we chose to place these in a separate work package, and relate an administrative resource and working capital to this work package. Together with civic availability, dissemination of news and results is planned to different target groups:

- Task 5.1 (T5.1): Establish and operate CoHealth's website: continuously updated news, results, links, web resources, research reports, etc. relevant to the Centre's internal management and development, as well as communication with external interested parties.
- Task 5.2 (T5.2): Workshops: arrange workshops for university colleges and universities twice a year, with a theme/agenda that accords with the activities at CoHealth.
- Task 5.3 (T5.2): Open house: invite and organise visits from other institutions and the clinical field in general.
- Task 5.4 (T5.4): Conference participation and publishing: use existing national and international sites actively.

Why the academic community qualifies as a unit for sustaining a centre of excellence in education: HUC is a regional university college that has had strong academic progress every year for the last 10 years with respect to research and development (R&D), student appeal, production credits and externally financed activities. HUC has two accredited PhD programmes, numerous master's degree programmes and responsibility for huge professional education programmes. It has run nursing education continuously since 1927, and today is one of the largest providers in Norway. HUC offers numerous add-on and/or master's degree programmes in nursing, including anaesthetic nursing, intensive care nursing, surgical nursing, cancer nursing, rehabilitation, mental health care and public health.

The CoHealth Centre will primarily be a part of the academic environment, connected to the bachelor programme in nursing, supported by the remaining interdisciplinary public health environment in the Faculty and the Terningen Arena. The CoHealth Centre will benefit from the academic environment connected to HUC's PhD programme *PhD in Teaching and Teacher Education* and *Centre for Studies of Educational Practice* (SEPU), with a total of 12 professors.

The academic nursing community at HUC has used e-learning for many years, as well as student participation in research and interdisciplinary interaction with the clinical field. The academic environment at the Faculty of Public Health, as of May 2013, is made up of eight professors and eleven associate professors. About half are directly involved in the bachelor programme in nursing. The number of research publications in nursing sciences increases each year, and in 2012 included a total of 30 scientific publications, mainly in co-authorship with collaborating institutions and the clinical field. For 15 years the Faculty has run the 'Forum for practice-oriented research' as a multi-

disciplinary meeting venue for academia and practice field relevant to nursing and patients, with a focus on mental health care. The forum is well known and has monthly seminars.

Quality in established educational activities

Result factors: The BA programme in nursing at HUC is one of the largest in the country and is offered as a full- and part-time course. In the autumn 2012, 699 students (678.8 full-time equivalents) had been registered. The average study credits production is 52.5 per student per year, which is above the national average for similar programmes. The percentage with grade A or B has increased and the failure rate declined over the past 3 years, and HUC score is higher than the national average. The annual satisfaction survey among students shows that 80–87% of the students doing a BA in nursing are satisfied or very satisfied with the programme and place of study, and 80% are satisfied or very satisfied with the educational outputs of the programme.

The Candidate Survey shows that 84% of graduates are satisfied or very satisfied with the nursing education that they received at HUC; 78% responded that they agree or strongly agree that they received good training in practical skills and 88% felt that education gave them the skills that work required and demanded. Evaluations done after completing the clinical practice show that three-quarters are satisfied with the supervision that they received. HUC conducts regular meetings with the clinical field (primary health care and hospitals) twice a year with regard to implementation and supervision of the clinical training. It is well known for its internships in clinical practice in which students get lots of patient contact and a breadth of patient access, providing good learning outcomes for students.

Process factors: The Faculty has a number of ongoing processes and projects of importance to the link between theoretical learning and practice, all of which will be submitted with resources and/or content as part of CoHealth.

The model of supervision in nursing education – and use of the nurses' skills training laboratory
This pedagogic model includes three participants: a main supervisor with an overall responsibility for supervision in the clinical field, the daily supervisor and a teacher. The model has been in use since 2006. Over the last 2 years the Faculty has to a larger extent moved supervision of students in the clinical field in campus, by moving both students and clinical supervisors; this facilitates improved interaction of teacher, student and clinical supervisor in the learning situation, and thus improved mutual competence and quality assurance between theory and practice.

Three-party projects in the clinical field: HUC uses the 'Cooperation funds in practice' allocated by the Ministry of Education to collaboration on projects in the clinical field, in line with intentions. At the Faculty, only three-party projects are funded; students are active participants, along with aca-

demic staff and practitioners from the clinical field. The projects contribute to the development of knowledge-based work methods for all three parties, better quality in practice for the students and further formal qualification for academic staff. The use of these funds will henceforth be administered by the Centre, and projects directed towards supporting the Centre's activities.

Digitally supported teaching methods: Nursing education programmes at HUC have developed and used digitally supported flexible teaching methods in a variety of topics/subjects since 1995, and over time made them available to all student groups for increased flexibility and learning.

Nursing education with a public health profile – an interdisciplinary approach: The Faculty of Public Health has already incorporated common teaching modules across the various educational programmes provided, such as nursing, dental hygiene, physical education, food and health, and sports. Part of the basis for increased interdisciplinary work and understanding of the value of this has already been included in study programmes. Further development of study programmes will be part of CoHealth's activities.

Internal project – developing a skills training laboratory for nursing education: The project includes, as of May 2013, 2.5 positions. The project's objectives have included training of staff and facilitating greater use of the skills training laboratory in the BA in nursing, better quality in skills training as part of the BA in nursing programme, as well as providing a venue for communication and exercises for, and to some extent in collaboration with, the clinical field. This project will be brought in and adapted in its entirety for the creation of the CoHealth Centre.

Innovation milieu in progress: By moving to the Terningen Arena, the choice of *public health* as a profile with a multidisciplinary approach to health, strong and contractual links to the clinical and work field through shared location and joint use of training areas, within in the Faculty of Public Health, created a strong professional culture open to impulses and new solutions. The Terningen Arena as a creative meeting place has been developed systematically through new positions in partnership with primary health care and the hospital sector, tight daily interaction with relevant partners in the competence and innovation cluster Terningen Network, Development Centre for Nursing and an externally funded educational activity – which are among the national leaders in the higher education sector. In sum, this gives students and staff a rich, varied and development-oriented environment in which dialogue with the multiprofessional work life occurs both formally and informally on a daily basis.

Input factors: *Input factors applied at the Centre*: The CoHealth Centre will be co-located with the host institution in the multifunctional complex, Terningen Arena, a unique knowledge and innovation cluster in academia. All infrastructures for students and staff are, IT-wise, in the top league in the higher education sector. HUC has invested in a total of eight modern and innovative in-campus

learning sites, which are the result of systematic, strategic work, and include the educational sector's best simulation materials for skills training in nursing education. HUC is experiencing strong external interest in the higher education sector about the choice of infrastructure solutions developed in cooperation with clinical work. The interest also includes the practical field that seeks collaboration and professional relationships through training, research and positions in partnership.

Academic and pedagogic competence profiles of the staff involved: Teachers at the BA nursing programme have a largely nursing education background, many with varying specialisations and master's and PhD degrees. The academic staff, in addition, have PhD competence in other relevant areas such as social and pharmaceutical sciences, mental health care and biology. The Faculty has five PhD students in nursing sciences doing educational work in parallel with their research education. The PhD students are admitted to PhD programmes at Karlstad University, which has had close international cooperation with the Faculty in general, and nursing education and research in particular, for almost 20 years.

All faculty staff have teaching qualifications, and many have taught and supervised students in nursing for decades. HUC's pedagogic staff have, along with the IT academic staff, for years had resources available for pedagogic development projects. One result of this is that there are several educational innovators among the Faculty's employees who are at the national frontline for introducing and testing e-learning-based learning solutions, in all areas of education within the BA in nursing.

How existing resources are used in the educational activity: The nursing skills laboratory at the Terningen Arena has a project leader, project assistant and part-time 'super-users' who have overall responsibility for the learning facilities (infrastructure), external collaboration with the practice field, and pedagogic activities/training of internal staff end external users. The remaining members of the resource group are directly involved in pedagogic activities with students and practitioners, including provision of training in supervision and arrangement of seminars. Students are used as facilitators when they train by themselves on campus.

The competence of the Centre's academic leadership: The Centre's leadership consists of three academic individuals, with complementary competences to assure a research- and practice-based anchor. *The Centre's leader, Ingeborg Hartz,* is a professor in social pharmacy. She has a broad background from teaching at bachelor and master's level at the Faculty, as well as at the University in Tromsø. Her pedagogic experiences include digital (e-learning-based) pedagogic development work. Her current position is as a vice-dean of research and member of the leader group at the Faculty of Public Health, with 10% of her time in an additional position as a researcher at the Norwegian Institute of Public Health. *Centre leader group member Marit Aralt Skaug* is an

associate professor in biology. She has previous experience as a dean at the Faculty of Public Health, and was the person responsible for the idea and further development of the Terningen Arena. Skaug is now the leader of the competence and innovation cluster, Terningen Network. She has more than 30 years' experience as a university college teacher, and a special interest and experience in pedagogic development work. *Centre leader group member Tuva Helene Sandsdalen* is a nurse with specialisation in intensive care and has a Master's in clinical nursing. She is an experienced intensive care nurse, and has broad experience as a teacher on the intensive care specialisation education programme at the Faculty, and has experience with the 'supervisor-model' in practice. In addition, she has experience from research projects, 'collaboration projects in practice', including participants from the practice field, teachers and students. She is now a PhD student in nursing sciences at the University of Karlstad. She was central to the development of the pedagogic model for the nurses' practical skills laboratory at the Terningen Arena.

Potential for innovation and dissemination

The clinical field workers and practitioners can be invited and included more directly in students' learning on campus, and simultaneously develop their own competence. This approach should constitute a potential for significant student learning, and will prepare them for later improved learning outcomes in off-campus clinical training. Professional education programmes, nursing and other, which include up to 50% training in the clinical field as part of the curriculum, will achieve an overall better learning outcome than just using today's traditional cooperation between educational institutions and the clinical field. This model provides new and so far unexplored possibilities for achieving interprofessional collaboration in education, as well as in the clinical field, and in their interaction.

The value of the CoHealth Centre lies in its ability to communicate results and research. To ensure that this is done systematically and professionally in a national and international context, CoHealth will establish a separate work package with customised expertise for targeted efforts (WP5). Research will be initiated at the start of CoHealth, to document ongoing development and its effect.

Research and development activities will reveal information on criteria for success and barriers to the three-party interactive model. Such information will constitute the premise for implementation of the model into other education. The clinical field workers and students will be involved in the R&D activities, and thus constitute well-informed disseminators and inspirators. Traditional academic channels of dissemination will be used. We will use resources on dissemination through receiving visitors, the Centre's web pages and conferences, arrange targeted workshops with relevant institutions and collaborators from the clinical field, and provide newsletters (see WP 5).

Organisational plan

The CoHealth Centre will be organised as a separate organisational and economic unit at the Faculty of Public Health, led by a Centre leader. The Centre's five core areas of activities (WPs) will be led by their own employees who report to the Centre leader, who will be a member of the Faculty's leader group. In this way, the Centre will have resources ensured and coordinated with other research and educational activities. The CoHealth Centre will benefit from the combined relevant expertise of the college. It will establish a reference group with representatives from former and current students.

Added value as a result of organisation as a centre of excellence in education (CEE):

Increased focus on the complementary effects of the three-party interactive model on professional learning may arise from an on- and off-campus learning site models.

Increased awareness and broader contact surface with other higher education institutions and to the clinical field.

Increased access to resources for the operation and development of the Centre can be triggered by increased commitment from both institutions and clinical field workers, as well as a potential for external funds through good applications involving the collaborating parties.

Increased research: the research that will be initiated will provide unique and new opportunities to document the progress and effectiveness of the three-party interactive model. The number of positions in partnership allocated to research relevant to the clinical field is expected to increase.

Collaborative partners

The Faculty has written agreements ranging from letters of intent to positions in partnership with a number of institutions and other collaborative partners. The most relevant are Karlstad University, the South-East Region Hospital Trust and Inland Hospital trust, primary health care in Hedmark and Oppland, members and collaboration partners of the innovation cluster, Terningen Network, the Hamar and Elverum municipalities, Norwegian Institute of Public Health, Norwegian Armed Forces, Norwegian Military Academy, Lovisenberg Diaconal University College (Oslo), NAV Centre for Assistive Technology, Nursing Academy Ibnu Sina, Indonesia and University of Namibia, Namibia.

All partners have an interest in the establishment of CoHealth, directly and/or indirectly. All existing agreements on which the cooperation is based can either continue unchanged or be further developed for additional output at CoHealth. Existing collaborative partners will be invited to extended cooperation as part of CoHealth, as described in Work package 1.

Totalbudget Centre for Collaborative Health Education

Financeplan - all years	2014	2015	2016	2017	2018	Totalt
Own financing	-6 097 531,81	-6 397 531,81	-6 697 531,81	-6 697 531,81	-6 697 531,81	-32 587 659,04
Nokut	-3 000 000,00	-3 000 000,00	-3 000 000,00	-3 000 000,00	-3 000 000,00	-15 000 000,00
Total cost	**-9 097 531,81**	**-9 397 531,81**	**-9 697 531,81**	**-9 697 531,81**	**-9 697 531,81**	**-47 587 659,04**

Plan for costs - all years	2014	2015	2016	2017	2018	
Supplementary financing						
Staff and indirect cost	2 427 776	2 427 776	2 427 776	2 427 776	2 427 776	12 138 880
Other operational cost	572 224,00	572 224,00	572 224,00	572 224,00	572 224,00	2 861 120
Own financing						
Staff and indirect cost	4 647 532	4 647 532	4 647 532	4 647 532	4 647 532	23 237 659
Investment lon-term budget	350 000	650 000	950 000	950 000	950 000	3 850 000
"Cooperation funds in practice"	1 000 000,00	1 000 000,00	1 000 000,00	1 000 000,00	1 000 000,00	5 000 000
Operational cost (material in laboratories)	100 000,00	100 000,00	100 000,00	100 000,00	100 000,00	500 000
WP leaders included in x number of manhours per year + investment and operational costs in WP	0	0	0	0	0	0
Total cost	**9 097 531,81**	**9 397 531,81**	**9 697 531,81**	**9 697 531,81**	**9 697 531,81**	**47 587 659,05**

Financeplan - all years	2014	2015	2016	2017	2018	Totalt
Own financing	-6 097 531,81	-6 397 531,81	-6 697 531,81	-6 697 531,81	-6 697 531,81	-32 587 659,04
Nokut	-3 000 000,00	-3 000 000,00	-3 000 000,00	-3 000 000,00	-3 000 000,00	-15 000 000,00
Total cost	**-9 097 531,81**	**-9 397 531,81**	**-9 697 531,81**	**-9 697 531,81**	**-9 697 531,81**	**-47 587 659,04**

Timeline Centre for collaborative health education

	2014	2015	2016	2017	2018
Centre management					
Centre establishing	M1-M6				
Staff organising (including recruitment of PhD student)	M1-M6				
WP 1 Inter-professional interaction for and with working life					
T.1.1 Research project following the work progress	M1				M60
T.1.2 Structure and organisation for collaboration with external partners	M1	M24			
T.1.3 Develop content of study program			M25		M60
WP 2 Flexible learning solutions					
T.2.1 Develop Flexible learning solutions	M1				M60
T.2.2 Develop E-learning solutions	M1				M60
T.2.3 Establish anatomic and physiological resource collection	M1 M12				
T.2.4 Training in e-learning	M1				M60
WP 3 Vital laboratories and practical skills arena					
T.3.1 Teachers role	M1				M60
T.3.2 Students as a resource	M1				M60
T.3.3 Simulation exercises	M1				M60
WP 4 Profession-oriented research					
T.4.1 PhD-project	M6			M42	
T.4.2 Evaluation of solutions developed in WP 3		M13			M60
T.4.3 Evaluation of the effect of learning solutions in WP 2		M13			M60
WP 5 Dissemination and organisation					
T.5.1 Establish and operate CoHealth`website	M1				M60
T.5.2 Workshops	M6 M12	M18 M24	M30 M36	M42 M48	M54 M60
T.5.3 Open house	M6				M60
T.5.4 Conference participation and publishing		M13			M60

Curriculum vitae: Ingeborg Hartz, M.Pharm, PhD
Nationality: Norwegian, born: 04.12.1972
e-mail: ingeborg.hartz@hihm.no

Education

2011-	Course in research supervision, University in Karlstad, Sweden
2002-2006	PhD in socialpharmacy (pharmacoepidemiology), Institute of Pharmacy, Faculty of Medicine, University of Tromsø
1999-2001	Diploma in Clinical Pharmacy, University of Strathclyde, Glasgow, Scotland
1992-1997	Master in Pharmacy, Institute of Pharmacy, University of Oslo

Professional background

2011-	Vice Dean of Research and professor (qualification completed 2012), Faculty of Public health, Hedmark University College
2007-	Researcher (10-20%), Department of Pharmacoepidemiolgy, Norwegian Institute of Public Health
2007-2012	Associate professor, Institute of nursing and mental health, Faculty of Public Health Hedmark University College
2006-2009	Associate Professor (20%), Institute of Pharmacy, University of Tormsø
2002-2006	Research fellow, Institute of Pharmacy, University of Tormsø
1999-2002	Research assistant, Institute of Pharmacy, University of Tormsø
1997-2002	Hospital Pharmacist, Division of Psychiatry, University Hospital of Northern Norway, Tromsø
1996-1997	Leader of a drug (Leponex) monitoring centre, Division of Psychiatry, University Hospital of Norhern Norway,

Supervising experience

PhD level

2008-2012	Project in pharmacoepidemiology concerning aspects of use of analgesic drugs among adolescents (record-linkage study). PhD student at University of Tromsø
2008-	Ongoing project concerning mental health and psychotropic drug use in adolescents, and public health nurses roles. PhD student at Hedmark University College/University of Karlstad.

Master level

2001 -	7 Master dissertations at Master of Mental Health Care/ Master in Public Health/ Master in Pharmacy

Pedagogic experience

2007-	Faculty of Public Health, Hedmark University College Bachelor in nursing: Anatomy, physiology and biochemistry General pathology and pharmacology Drug calulations and administration Master in Mental health care and other postgraduate educations for nurses : quantitative research methods

1999-2009 Institute of Pharmacy, University of Tromsø
Courses at Master and Bachelor level in pharmacoepidemiology and pharmacoeconomy
Pharmacy practice education courses in theory and in hospital practice

Membership in national and international research network

2003- Member of International Society of Pharmacoepidemiology
2003- Member of Norwegian Society of Epidemiology
2002- Member and Board member of the Norwegian Society of Pharmacoepidemiology

Published papers (last five years)

Hartz I, Furu K, Bratlid T, Handal M, Skurtveit S. Hypnotic drug use among children and adolescents during 2004-2011: a nationwide prescription database study. Scandinavian Journal of Public Health 2012:40; 704-711

Steffenak AKM, Larsen BW, Norstrøm G, Skurtveit S, Hartz I. Patterns of psychotropic drug use for mental distress among adolescents between 2004-2010. A prescription database study. Clinical Epidemiology 2012:4; 225 - 231

Log T, Skurtveit S, Selmer R, Hartz I. The association between prescribed opioid use of mother and child – a record-linkage study. European Journal of Clinical Pharmacology. Online First, 9 June 2012

Steffenak AKM, Norstrøm G, Larsen BW, Skurtveit S, Hartz I . Mental distress and subsequent use of psychotropic drugs among adolescents- a prospective register linkage study. Journal of Adolescent Mental Health 2012:50;578-587.

Hartz I, Bramness J, Skurtveit S. Prescription of antidepressants to patients in opioid maintenance therapy- a pharmacoepidemiological study. Norsk Epidemiologi 2011 ;Volum 21(1);77-83

Log T, Furu K, Tverdal AA, Skurtveit S, Hartz I. Dispensing of prescribed analgesics in Norway among young people with foreign- or Norwegian-born parents. Scandinavian Journal of Pain. 2011;1:36-44.

Log T, Skurtveit S, Hartz I, Tverdal Aa, Handal M., Furu K. The effect on adolescent smoking on opioid use- a prospective population based cohort study. Pharmacoepidemiology and Drug Safety. 2011; 20: 90-8.

Hartz I, Tverdal AA, Skurtveit S. Langtidsbruk av benzodiazepiner i kombinasjon med opioider og z-hypnotika blant uføretrygdede i Norge. Norsk Farmaceutisk Tidsskrift. 2011;4 :14-18

Hartz I, Tverdal Aa, Skille E, Skurtveit S. Disability pension as predictor of continued use of benzodiazepines among benzodiazepine users. Social Science and Medicine 2010; 70: 921-925

Hartz, Tverdal Aa, Skurtveit S. A comparison of self-reported data on disability pension status with data from a nationwide administrative register. Norwegian Epidemiology 2009; 19:169-72

Hartz, Tverdal Aa, Skurtveit S.Social inequalities in use of potentially addictive drugs in Norway-use among disability pensioners. Norwegian Epidemiology 2009; 19:209-18

Hartz I, Lundesgaard E, Tverdal Aa, Skurtveit S. Disability pension is associated with the use of benzodiazepines 20 years later- a prospective study. Scandinavian Journal of Public Health 2009; 37: 320-326.

CV

Tuva Sandsdalen
Born: March 14th, 1971

Education and PhD courses

2012-2014	European Academy of Nursing Science Summer School (EANS).
Spring 2013	PhD course: Introduction of statistics, part 1.
Spring 2012	PhD course: Systematic review methods, 7.5 numbers of credits. Karlstad University.
Spring 2012	PhD course: Information search method (KAU).
Spring 2012	PhD course: Philosophy and history of science (KAU)
Autumn 2011	Letter of **admission to doctoral studies** with a PhD examination, Karlstad University.
Autumn 2010	PhD course: Phenomenography (KAU)
Spring 2010	**Master's degree of clinical nursing**. Gjøvik University College.
Spring 2008	Course: Learning in higher education. 15 numbers of credits. Lillehammer University College.
Spring 1999	Further education in intensive care nursing. Ullevål University Hospital and Aker Hospital.
Spring 1995	Registered Nurse/ **Bachelor's degree of nursing**. Diakonissehusets nursing college.

Selected courses before doctoral education

2008	Certified AHLR (advanced life support)-instructor.
2006	Paediatric Life Support (PLS), The Norwegian air ambulance.
2004	Supervision in clinical practice. Oslo University College.
1997	Advanced life support. The Norwegian air ambulance.
1997	Safe and effective postoperative pain management. University of Oslo.
1999, 2000, 2001, 2004, 2007, 2008, 2009, 2010	National conference for intensive care nurses.

Professional experience

2007 -	Teacher at Hedmark University College. Responsible for the further education of intensive care nursing.
1996 – 2006	Intensive care nurse. Postoperative and Intensive care unit. Lovisenberg diakonale hospital. Responsible for student education and professional development of nurses in clinical practise.
1995 – 1996	Registered nurse. General medical unit for patients with lung- and infection diseases, Lovisenberg diakonale hospital.
1992-1995	Nursing assistant. Bestumhjemmet Nursing home.

Projects

2011-2012	Member of team for development of simulation laboratory for nursing education.
2011 – 2012	Project leader for the project: "Working together for quality improvement" Competence development to prevent VAP (ventilator associated pneumonia). A collaborative project between Innlandet Hospital Trust and Hedmark University College.

2008	Project leader for the project: "Fra kontaktsykepleier til daglig veileder" (Hovedveiledermodellen). A project about a model for supervising in clinical practice. A collaborative project between Innlandet Hospital Trust and Hedmark University College.

Publications

2011	Sandsdalen Mytting, T., Espelund, Å., Hagen, E.M., & Høye, S. (2011). "Working together for quality improvement" Competence development to prevent VAP (ventilator associated pneumonia). Hedmark University College. Report 17/2011. Located at http://brage.bibsys.no/hhe/handle/URN:NBN:no-bibsys_brage_26364
2011 – 2012	Poster at a research conference at Hedmark University College, 2011. Title: "Kompetanseheving ved implementering av prosedyren: Forebygging av ventilatorassosiert pneumoni (VAP)." A collaborative project between Innlandet Hospital Trust and Hedmark University College.
2010	Publication of master's thesis. Gjøvik University College. Title: How do experienced anesthesia-, intensive care- and operating room nurses perceive that competence development are promoted - A phenomenographic study. Located at: http://brage.bibsys.no/hig/handle/URN:NBN:no-bibsys_brage_14644 Also published as a poster at a research conference at Hedmark University College.
2008	Berg, M., Klein, A., Myromslien, F.D., Sandsdalen Mytting, T., & Stensvehagen, M.T. (2009). "Nytilsatt ved Høgskolen i Hedmark – hva nå?". Hedmark University College. Informasjonsrapport 01/2009 Lokaliser på http://brage.bibsys.no/hhe/handle/URN:NBN:no-bibsys_brage_11008

Work in progress

Journal article. Systematic mixed studies review. Patients' preferences for quality in palliative care.

Journal article. Instrument development. Modification of QPP (Quality from Patient Perspective Questionnaire) for use in palliative care. Explorative factor analysis.

Journal article. Cross sectional study. Measuring patients' perspective on quality of palliative care in Hospices, nursing homes and home care.

Journal article. Internal and external influencing factors of patients' experiences of quality of palliative care. Regression analysis.

Fellowships

1999 -	Norwegian Nurses Organization of intensive care nurses.
1995 -	Norwegian Nurses Organization (NNO).

Curriculum vitae

Dr. Philos. Marit Aralt Skaug (f. 20.07.53)

Higher education

- Dr. philos. (Medicine), University of Oslo, Faculty of Medicine, 2002
- Cand. scient. (Cell biology), University of Oslo, 1983
- Cand. mag. (Chemistry, Biology), University of Oslo

Professional experience (since 1990)

- Project manager Terningen Nettverk, 2010 –
- Associate professor, Hedmark University College, Faculty of Public Health, 2007 -
- Dean, Hedmark University College, Faculty of Health and Sports, 2003 -
- Associate professor, Hedmark University College, Faculty of Health and Social Science, 1995 – 2003
- Assistant professor, Hedmark University College, Faculty of Agriculture and Natural Science, 1990 – 1995
- Research adviser (20 %) , Feiringklinikken, 2002
- Assistant professor, Hedmark School of Nursing, 1990 - 1994

Selected publications

1. **Skaug MA**: Levels of ochratoxin A and IgG against conidia of Penicillium verrucosum in blood samples from healthy farm workers. Ann Agric Environ Med 2003, 10, 73–77.

2. **Skaug MA**. Presence and sources of ochratoxin A in human milk from Norway. Doctoral thesis. Department of Pediatric Research, University of Oslo. 2001.

3. **Skaug MA, Eduard W, Størmer FC**. Ochratoxin A in airborne dust and fungal conidia. Mycopathologia 2001, 151: 93 – 98.

4. **Skaug MA, Helland I, Solvoll K, Saugstad OD**. Presence of ochratoxin A in human milk in relation to dietary intake of the mother. Food Additives and Contaminants 2001, 18 (4): 321 – 327.

5. **Skaug MA**. Analysis of Norwegian milk and infant formulas for ochratoxin A. Food Additives and Contaminanats 1999, 16 (2): 75 – 78.

6. **Skaug MA, Størmer FC, Saugstad OD.** Ochratoxin A: a naturally occurring mycotoxin found in human milk samples from Norway. Acta Paediatrica 1998, 87: 1275 – 8.

7. **Kolstø AB, Skaug MA**. Gangliosides in human milk. In: Atkinson SA, Hansson LÅ, Chandra RK, eds. Breastfeeding, Nutrition, Infection and Infant Growth in Developed and Emerging Countries. Canada: ARTS Biomedical Publishers and Distributors; 1990. p. 175 – 184.
Skaug MA: Kompetansesenter for helhetlig oppfølging etter kriser. Rapport fra forprosjekt. 28 sider. Terningen Nettverk, Høgskolen i Hedmark. 2011.

8. **Skaug MA**: Ikke vist at miljøgifter i morsmelk skader barnet. Ammehjelpen, januar 2010. http://www.ammehjelpen.no/artikkel/113/Miljogifter-i-morsmelk

9. **Skaug MA**. Mykotoksiners betydning for folkehelsen gjennom historien. Blekksoppen 2002, 30 (86): 14 – 16.

10. **Skaug MA**. Undervisning og forskning i naturvitenskapelige fag. I: Fra søster til sykepleier. Sykepleierutdanningen i Hedmark 75 år. Redaktør Solvang, Berit Bjerkomp. Høgskolen i Hedmark, Avdeling for helse- og sosialfag. 2002, side 160 – 162.

11. **Skaug MA**. Varmebehandling av morsmelk. Ammenytt 2000, 32 (2): 22 – 24.

12. **Nylander G, Skaug MA, Bøhler E.** Amming gir ikke hull i tennene. Ammenytt 1999, 31 (1): 20 – 21.

13. **Skaug MA**. Inhalasjon av soppsporer fra lufta. Våre Nyttevekster 1999, 4: 113 – 116.

14. **Skaug MA, Størmer FC**. Tørking av sopp innendørs kan forurense lufta. Våre Nyttevekster 1998, 93 (4): 102.

Educational materials

1. **Skaug MA**. «Kompendium i patofysiologi for videreutdanning i anestesi-, intensiv- og operasjonssykepleie». 53 sider. Høgskolen i Hedmark 2013.

2. **Skaug MA.** «E-læring: Fysiologi på nett. 14 videoforelesninger med studiehefte (illustrasjoner og arbeidsoppgaver)». 21 sider. Høgskolen i Hedmark 2012.

3. **Skaug MA**. «Forelesningskompendium i medisinsk mikrobiologi». 62 sider. Høgskolen i Hedmark 2008.

4. **Skaug MA**. «Videobasert grunnkurs i medisinsk mikrobiologi. 11 videoforelesninger (á 45 – 50 minutter) med studiehefte». 95 sider. Høgskolen i Hedmark 2001.

5. **Skaug MA**. «Oppgavehefte i mikrobiologi, farmakologi og patofysiologi for sykepleier-utdanningen». 30 sider. Høgskolen i Hedmark 1998.

6. **Skaug MA**. «Laboratoriekurs for 5-vekttals-kurs i biokjemi». 2. utgave. 78 sider. Høgskolen i Hedmark, Avd. for landbruks og naturfag 1994.

7. **Skaug MA, Hermansen W**. «Lysbildeserie i sykehushygiene. 45 dias om mikrobiologi og hygiene». Høgskolen i Hedmark, Avd. for sykepleierutdanning 1994.