How do you make things better for those that are suffering most? For those that are unable to stand up and speak for themselves? For the youngest, the most elderly, for the gravely ill? And for all of us who at some point in our lives are weakened by an unexpected event? The Health Sciences Centre, HSC, deals a lot with the soft values, both in research and in education. Those values that are not so easy to measure but that affect each and every one of us.

The Health Sciences Centre in Lund is a knowledge-intensive, open and stimulating environment, both when it comes to research and education. The focus on learning is clear; students from undergraduate programmes, specialist and master’s programmes meet here and the result is an interesting and fun mixture of ages, backgrounds and specialisations. This is a strong research and learning environment with plenty of opportunities for exchange across professional boundaries.

Proximity to the Skåne University Hospital, to the Biomedical Centre in Lund and to the Clinical Research Centre in Malmö, to the other hospitals in Skåne and the region’s municipalities creates good meeting places for clinical, patient-centred research and education. The Health Sciences Centre also has close contacts with the University of Copenhagen, Rigshospitalet (Copenhagen University Hospital) and other hospitals around Denmark. The Centre’s location at the heart of the changing and expanding Øresund region adds an extra dynamic.

The Health Sciences Centre is part of the Faculty of Medicine at Lund University. The faculty’s task is to increase knowledge for a better life, in close cooperation with players in the areas of healthcare and medicine – above all for Skåne’s just over 1.2 million inhabitants – through education, research and the transmission of knowledge.

It is a lot about soft values, both in research and in education. Those that are not so easy to measure but that affect each and every one of us.
More people should try to get PhDs, the opportunities become so much greater. Getting a PhD here is very exciting. I am working on a project about research into aging – physiotherapists and nurses make preventive home visits to elderly people, slightly more fragile healthcare recipients who often visit the hospital, and I evaluate the effects of this.

The actual process of the doctoral studies goes up and down, sometimes you have flow. Studying for a PhD means being able to give and receive constructive criticism. And it is fun to try and improve the world you work in and to connect research and theory to practice.”

Magnus Sandberg, registered nurse and doctoral student in Health Sciences

A large proportion of our in-house activity is carried out within the framework of the Department of Health Sciences – one of six at Lund University’s Faculty of Medicine. Several professions within the field of health sciences are represented here. Most of the department’s staff members are engaged in both teaching and research.

The main objective of the research is to improve people’s well-being and health – an essential field for people in general but also for society as a whole.

“The department has extensive contacts with the surrounding world, both when it comes to education and research – everything from international exchanges to contacts with municipal services where healthcare work is carried out. A driving force is to increase the cooperation between different research projects.

“The research is complex and requires collaboration between different disciplines to shed light on the subjects in a holistic and complete manner and to gain an overall perspective on the individual human being within society. Researchers at the HSC also have in-depth cooperation with other faculties at Lund University in different fields. This applies for example to the development of technical aids, studies on urban development and social planning, or other interdisciplinary research projects.

At the Department of Health Sciences, there are five research domains: Child and Family Health, Mental Health, Rehabilitation and Physical Activity, Emergency Care and Aging and the Elderly.

For a large part, these domains deal with people who are in a vulnerable situation and the research covers all the phases of life – from the tiniest babies to end of life care. Several of the domains have common areas of interaction.

RESEARCH FOR WELL-BEING

The HSC is not a place where research is carried out in test tubes! Here the goal is to get the research out into the community. In many respects our research amounts to developing care and treatment within nursing and healthcare and to producing research-based knowledge to be converted into practice. To this end, the proximity of the Skåne University Hospital is of great significance, as there is a very strong connection to the hospitals’ clinics. A large part of the research concerns health promotion and preventive measures to protect people from getting ill.
I qualified as a midwife in 2001, writing my doctoral thesis on foetal diagnostics and ethics in 2008. Today I am one of several course directors on the midwifery programme and I lecture part time and work as a midwife for the other half of my working time.

I have experienced such a strong development within the department; it is unbelievable how much is happening here. It is enriching to work in such a knowledge-intensive environment. Another important factor is the atmosphere; the fact that previous graduates can come back and be students again, start research studies or take a master’s degree, creates a very good atmosphere and an enjoyable mix of ages.”

Maria Ekelin, lecturer at the division of nursing and holder of a PhD in midwifery at the Skåne University Hospital in Lund.

CHILD AND FAMILY HEALTH
Research into child and family health is multidisciplinary and based on the needs of children and families. The aim is to develop knowledge that builds on science and proven experience. There are two main streams within the research – children with chronic diseases and their families on the one hand, and pregnancy and childbirth on the other.

MENTAL HEALTH
The research into mental health focuses above all on people with long term mental illness and mental disabilities – their living situation, care and rehabilitation – and it is Sweden’s leading research within these fields. The issues studied follow two main tracks: what is the outlook for the living situation of people with mental illness and how effective are the various types of support that exist?

REHABILITATION AND PHYSICAL ACTIVITY
Within rehabilitation and physical activity, the researchers focus on areas such as health-promoting activity, that is studies of risk factors and preventive factors to avoid injuries and illness, and everyday life, rehabilitation and professional rehabilitation.

AGING AND CARE OF THE ELDERLY
Researchers are studying the life situation, quality of life, care and nursing of the elderly – both with regard to the public health sector and in the home. One of the projects is about the consumption of healthcare services in four municipalities where the functional ability, social situation, housing and particular healthcare issues of the elderly are being studied. The data is coordinated with Region Skåne’s health and medical care register and the result provides a complete picture of the healthcare consumption of the elderly. Studies are also being run on elderly people with a high consumption of healthcare who are still living at home.

EMERGENCY CARE
A few examples of research in emergency care are the care of individuals with hip fractures, research on families of cancer patients and the kind of support efforts they need, pain relief in pre-hospital care, how the individual feels after an operation and low best to improve methods for measuring the effectiveness of various treatments in neurological illnesses.

It is of great significance to the hospital that we reinforce research in healthcare and health. The research being carried out at the HSC is very important for the whole cycle of knowledge at the hospital. The new knowledge is introduced at lightning speed into healthcare. We try to stimulate research by providing patient documentation and making it possible for our activities to dedicate more time to supporting it”.

Bent Christensen, Hospital Manager at Skåne University Hospital.
Several Research Institutes Under One Roof

Physical and mental disabilities and the well-being, health and everyday life of the elderly are central to the research institutes that are present at the HSC.

CASE – Supportive Environments for the Elderly

CASE (Centre for Ageing and Supportive Environments) consists of research groups from different parts of Lund University. Over ten years, the focus is set on the aging individual and population and supportive environments for mobility, activity and health. Elderly people and interest groups are involved in the work and the aim is that the results should have direct significance for the everyday lives of the elderly, on the level of the individual, of groups and of society as a whole.

CEPI – Psychosocial Health

CEPI (Centre for evidence based psychosocial interventions) is a national knowledge centre working with research and the dissemination of knowledge in the area of psychosocial interventions for people with severe mental illness. CEPI is a national research network run from Lund.

Vårdalinstitutet – For Nursing and Care Research

Vårdalinstitutet is a national environment for research and development in the field of nursing and care, focusing on the elderly, chronic illness – physical and mental – and functional disability. The work is carried out in close collaboration between the universities of Lund and Gothenburg and the public health care sector. The institution has three main activities: research, research education and dialogue on relevant knowledge for nursing and care.

Disability Science Focused on Habilitation

The research platform for Disability Science oriented towards habilitation is an interdisciplinary research collaboration which affects the living conditions for those born with a functional impairment and for those disabled early on in life. The platform is a cooperation between Region Skåne, Lund University, Malmö University College and the Centre for Disability and Rehabilitation research (HAREC).

“Within the HSC there are very considerable resources, a lot is going on here and there is always a colleague to turn to if you get stuck – whether in teaching or in research – and need some help and support. Working at the HSC is also a great advantage with all the different competences and specialisations that are gathered under one roof. This provides room for interprofessional learning, something I think is bound to develop further. The preconditions for collaboration are favourable. Also having Vårdalinstitutet within the HSC is a strength in that the atmosphere is characterised by a solid research perspective, based on its competence and varied range of courses.”

Anders Johansson, senior lecturer in nursing, responsible for examinations in prehospital care and operating theatre nursing specialisations. Researcher in anaesthesiology, intensive care nursing and pre-hospital care. Obtained his PhD in 2003, has worked in the building since 2004.
At the HSC, we train the healthcare workforce of the future – occupational therapists, physiotherapists, nurses, midwives and radiology nurses.

There are ten specialisations for nurses – prehospital care, anaesthesia care, pediatrics, public health nursing, intensive care, oncological care and radiology, oncological care and palliative care, operating theatre nursing, psychiatric care and care of the elderly. In addition a common master’s programme in medical science, a master’s programme in sports science and a Nordic master’s programme in gerontology are offered here.

The HSC features a modern educational environment with method rooms, a training apartment and a movement laboratory. The students are constantly present when you wander through the building and one of the most popular gathering places in the HSC is its library. The students have access to quiet reading rooms here as well as rooms for group work and computer stations. They benefit from the opportunity to hold e-meetings and support distance learning, to book a librarian and IT support. The various group rooms are named after medical pioneers like Inga Marie Nilsson, Gustaf Petri and Florence Nightingale.

The library is frequented by students from the building, but also by lecturers and biomedics. On the walls, the students can exhibit artwork of their own production – a very popular feature.

Else-Maj Rosenlöf, Head Nurse at Skåne University Hospital:

“The contact and relations with the lecturers responsible make it very easy to have a good dialogue. I think that there is great responsiveness to the point of view of healthcare when it comes to educational content and the need for new programmes. At the same time, the common research is reinforced, contributing to the development of healthcare science.”
The lecturers make sure to bring the research into teaching; this is important to increase the quality of the education and to raise the status of the profession. The students are all potential healthcare researchers, and I think our lecturers are aware of this. The most important thing is to create a balance where those that are interested in practical work and those that are more interested in theory and in questioning various healthcare constellations both feel that they are understood.”

Malena Chronholm, nursing student
THE HSC IN THE WORLD

Lund has a long history and tradition with regard to knowledge, research and culture, it is easy to enjoy life here and the city has a welcoming atmosphere.

With its 14 universities, 26 hospitals and 3.6 million inhabitants, the Øresund region has a strong focus on the field of medicine, and the exchange between the higher education institutions and the hospitals is extensive. Within the framework of the Medicon Valley Alliance, universities, hospitals, companies and innovation parks cooperate to reinforce medical development.

Skåne has Sweden’s best communication links with the rest of Europe – and it is easy to reach the rest of the world via large international airports. Public transport is well developed – it is possible to commute over practically the whole of Skåne as well as across national airports. Public transport is well developed – it is possible to commute over practically the whole of Skåne as well as across the Øresund strait.

The quality of life in Skåne is high; you find both nature and culture here, opportunities for leisure activities and good housing, country life, academic small town charm and vibrant metropolitan life.

Facts about the HSC

• In 1892, the first nursing programme was started in Lund, it was eight months long.
• Today’s HSC was built as a school of nursing; the building was completed in 1974 and designed by architect Kjell Aage Nilsson.
• In 1998, the school of nursing became part of Lund University’s Faculty of Medicine.
• In 2009, the building was named the Health Sciences Centre (HSC).
• The building covers a total of approx. 1 100 000 m² of which 3 500 m² are teaching premises.
• 1 350 students. Four undergraduate programmes: occupational therapy, physiotherapy, nursing and radiography nursing. Three master’s degree programmes: medi­cal sciences, sports science and gerontology. Ten specialisation programmes for nurses.
• In total, 200 academic teaching staff and doctoral students work at the HSC.
• Within Vårdalstitstut there are 45 researchers and 21 younger nationally recruited researchers.

AT THE HSC WE ARE RESEARCHING

• how to organise and implement the care of chronically ill children with their needs and those of their families to a higher degree.
• the effect of healthcare in the home compared to hospital care in the case of chronically ill children.
• the concept of screening methods to identify children with autism and other forms of developmental retardation as early as possible.
• the treatment with acupuncture of children suffering from colic. Can this become an accepted treatment method within healthcare?
• how parents feel about undergoing an ultrasound scan and what happens if it is negative.
• the risk factors in pregnancy with regard to obesity and excessive weight in the unborn child, and how to improve the child’s state of health in the future through interventions.
• alcohol consumption and addiction in women.
• negative health factors among alcohol and drug abusers, such as smoking, excessive weight, malnourishment, lack of physical activity and chronic medical conditions.
• patients’ experience of intensive care and the development of a quality indicator for how to improve intensive care.
• families of cancer patients and the types of support that they need.
• what it is like for people with chronic mental illness in society and what types of support are most effective. What is the situation like for example for schizophrenia when it comes to quality of life, healthcare needs and social networks?
• How well do residential support, employment and respite care for next of kin work?
• the significance of work, domestic activities, nursing care and leisure activities for health and well-being.
• quality of life in groups that never make it into the labour market. Are there other occupations that can replace satisfying paid employment?
• the care of patients with hip fractures.
• Research has shown that reviewing the chain of care makes it possible to minimise time spent on care, complications, suffering and costs.
• what happens after a knee injury; how this affects quality of life, how rehabilitation works and how the patient regains mobility through exercise.
• physical activity for children with cerebral palsy.
• muscular strength in the legs of stroke patients and patients with neurological injuries.
• physical activity after breast cancer.
• physical exercise in cases of obesity.
• the fear of falling in Parkinson’s patients.
• the consumption of care in the elderly, for example the functional ability, social situation, housing and particular health-care problems of elderly people.
• the situation for elderly people with a high consumption of healthcare who are still living at home.
• documenting the care of patients with dementia to develop the best possible care for them.
• the ethical dilemma in dementia care.
• the outline of screening methods to identify children with autism and other forms of developmental retardation as early as possible.

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