

- 1,600 beds
- 14,500 employees
- 600 physicians in PhD programs
- 2,100 nursing students
- 700 students in biomedical/lab science,
physiotherapy, occupational therapy
- 85 internship positions
- 500 residency positions
- 1.3 million patient visits per year
- 7 surgeries per hour, 365 days/year
- 10.3 billion Swedish
kronor (SEK) budget
- 800,000 m² (7.2 million ft²) of floor space
- 20 million lab tests per year
- 15,000 scientific
articles published/3 years
incl. Karolinska Institutet
- 2 billion SEK in external
R&D grants/3 years

More than a Hospital

Karolinska University Hospital is much more than an acute care hospital – we are one of Scandinavia’s premier medical centers. Together with Karolinska Institutet we represent the leading edge of medical science and patient care in Sweden.

We believe that patient care, research, and education must play equally strong roles in our mission to extend and enhance people’s lives. As a major teaching hospital we educate the medical specialists and healthcare professionals of the future.

Our hospital is not only one of the largest in Scandinavia – we also represent the pinnacle of professional performance. By merging the Huddinge University Hospital, Inc. and Karolinska Hospital, we have forged an integrated organization that drives innovation and preserves our solid academic tradition.

Karolinska University Hospital is recognized for excellence – in Sweden as a teaching hospital and internationally as a center for clinical research – a reputation earned by setting the benchmark high.

We are proud of our vision – future health care based on science and development. A goal in achieving our vision is to be recognized as one of Europe’s top five teaching hospitals by 2011.

Future Health Care Based on Science and Development

Patient Care

Ultimately, everything we do is intended to enhance and extend people's lives. In our region, we are the hospital of choice for advanced and highly specialized care.

Medical services at Karolinska University Hospital are organized under 8 divisions that include 69 departments and units. We have the capacity to treat common diseases and many rare, specialized disorders.

Research

We believe that successful medical research requires direct collaboration with health services. This is why we, in collaboration with Karolinska Institutet, carry out much of our research at the bedside and why our 2,100 researchers often work in close contact with hospital patients.

Rather than researchers working alone, they work side-by-side to benefit from each other's specialized expertise.

Education

Karolinska University Hospital is more than a hospital. We are also part of a medical school. Most of the students at Karolinska Institutet receive their clinical training at the Karolinska University Hospital. Every year we also provide continuing education for thousands of physicians, nurses, and other caregivers to further enhance their professional skills.

Students often work in teams with experienced professionals, thus gaining a sense of responsibility from the start. We enhance the learning environment by investing in new technology, for instance, advanced patient simulators for realistic *hands on* training.



● Löwenströmska Hospital

● Norrtälje Hospital

● Danderyds Hospital

SUNDBYBERG

SOLNA

Karolinska University Hospital
SOLNA

Frescati

Bromma

Huvudsta

Vasastaden

STOCKHOLM

Ängby

Ulvsunda

Östermalm

Kungsholmen

Djurgården

Ålsten

Erstgen

Gamla Stan

Långholmen

Rosenlunds Hospital

Södermalm

Gröndal

● **Söder Hospital**

Johanneshov

Fruängen

Långbro

Älvsjö

Hagsätra

Högdalen

Sköndal

● Karolinska University Hospital
HUDDINGE

Rågsved

Farsta

HUDDINGE

● Södertälje Hospital

Flemingsberg

One Hospital, Several Sites, Full Range of Care

Karolinska University Hospital manages patient care, research, and education at several locations, mainly at our medical centers in Huddinge and Solna. We also manage outpatient clinics, laboratories, and services at other hospitals and primary care centers in Stockholm County, and an emergent care clinic at Arlanda International Airport.

Special Mission

Karolinska University Hospital is responsible for delivering highly specialized care to patients in the Stockholm area. We also serve many patients from other parts of Sweden and from countries around the world. Beyond patient care, we have a special mission as a teaching hospital – to collaborate with Karolinska Institutet in clinical research and the clinical components of education.

Broad Experience

Our focus on research enables us to treat a wide range of disorders – from the common to the complex. The aim of research *at the bedside* is to quickly transform scientific findings into effective clinical treatment. Being a teaching hospital, we offer broad experience in clinical training and an optimum setting for specialized education.

Collaboration

Through our close collaboration with Karolinska Institutet we have access to a unique global research network. Hence, we also have a responsibility to inform other Swedish hospitals about international medical breakthroughs. Our extensive network in Sweden includes Sahlgrenska University Hospital in Göteborg, Sörmland County Council, Västmanland County Council, Uppsala University Hospital, Gotland municipality, the Royal Institute of Technology, Stockholm University, Novum, and Södertörns University College. Through the Karolinska University Laboratory we have continuous contact with over 40,000 clients.

Patient Care

Lifetime of Services

Karolinska University Hospital serves people throughout life, starting from birth. Every year, we deliver nearly 10,000 babies and receive over 1.3 million patient visits.

Approximately 150,000 of these visits are received at the Astrid Lindgren Childrens Hospital in Solna and Childrens Hospital in Huddinge. Combined, they provide 75% of the hospital-based pediatric care in Stockholm. Many of our services are offered at several locations in the Stockholm metropolitan area. Medical services at Karolinska University Hospital are organized under eight divisions:

- Cardiovascular & Respiratory Diseases
- Clinical Neurosciences
- Emergency Medicine
- Karolinska University Laboratory
- Medicine & Surgery 1
- Medicine & Surgery 2
- Oncology & Hematology
- Pediatrics

Specialists in Emergency Medicine

For many of our patients, their contact with Karolinska University Hospital begins at one of our three emergency departments in Huddinge and Solna – including the pediatric emergency department at the Astrid Lindgren Childrens Hospital. Our emergency departments receive around 200,000 patients annually. One patient in five is admitted for further treatment at our emergency and intensive care units. Highly experienced trauma teams treat the most severely injured patients. The core components of our trauma teams include surgery, orthopedics, anesthesiology, and radiology. However, we often call on other specialized resources in the hospital to meet patients' needs.

In Solna, we have created an advanced multitrauma unit – the foremost unit of its type in Scandinavia. By consolidating an emergency room, computed tomography, and surgical suite, the most severely injured patients do not need to be moved within the hospital. Physicians at our emergency departments are generalists, which means we can deliver qualified emergency care without disrupting elective services.

Saving Lives – And Improving Quality of Life

Much of the care delivered at Karolinska University Hospital is based on teamwork. Teams may include physiotherapists, occupational therapists, social workers, dietitians, speech therapists, and psychologists.

Teamwork often plays a decisive role in patient care. For instance, respiratory therapy often saves lives of patients with impaired lung function, and occupational therapy helps stroke patients learn to cook and feed themselves. For some patients, dietary counseling is critical in improving their quality of life. When a patient's life changes, our social workers often play an essential role in recovery.

Accurate Diagnosis – Appropriate Treatment

Helping our patients in the best way requires not only rapid response, but also accurate diagnosis. Recent advancements in imaging technology – magnetic resonance imaging (MRI), computed tomography (CT), positron emission tomography (PET), and ultrasound – have greatly increased our diagnostic capability. In these areas, our medical physicists, radiologists, and clinical specialists are developing advanced image-guided interventions, mainly for cancer and vascular diseases.

Cardiovascular & Respiratory Diseases

Karolinska University Hospital has the largest department of cardiovascular and respiratory diseases in Scandinavia. Annually, we provide over 3,000 surgeries and other interventions involving the heart and vessels. The department of cardiology at



Karolinska University Hospital cares for patients with acute myocardial infarction, angina, dysrhythmias, severe heart failure, and cardiac valve disorders. Our most common thoracic intervention is bypass surgery, or coronary artery bypass grafting (CABG). However, in recent years many of these procedures have been replaced by balloon dilatation, or percutaneous transluminal coronary angioplasty (PTCA). Angioplasty is a milder intervention for patients and does not require general anesthesia.

In addition to bypass surgery, we perform surgery and other procedures to correct congenital heart problems and treat dysrhythmias, heart failure, and problems with cardiac valves and aortic function.

The most common disorders treated at our department of vascular surgery involve hardening of the arteries, or atherosclerosis of the aorta and vessels to the brain, legs, arms, kidneys, and intestines. We also treat severe vascular damage resulting from accidents and other trauma.

At our respiratory medicine and allergy department we treat patients with chronic pulmonary diseases and pulmonary failure, chronic obstructive lung disease (COLD), pleurisy, sleep apnea, cancer in the thoracic cavity, asthma, allergies, and tuberculosis and other mycobacterial diseases.

Gotland Online

To serve Gotland, in the Baltic Sea, we have the option to use advanced telemedicine to receive moving, real-time echocardiography images. While a patient is being examined on the island of Gotland our specialists in Stockholm can view the images and determine the next step in diagnosis, or recommend immediate transport to Karolinska University Hospital for treatment.

Here Come the Pediatricians!

At the Karolinska University Hospital pediatric departments, every child is the center of attention. Each individual child has his or her own *home unit*, regardless of how many specialists are engaged in treatment. Our doctors visit their patients, not vice versa.

“Gold Standard” – A Global Benchmark

Karolinska University Hospital’s effort to fight cancer in children is unique. No other hospital in the world has shown better clinical outcomes in childhood survival. We recently opened a new unit for babies born prematurely. We believe that every child should have an equal opportunity to be close to his or her parents. Therefore, the whole family may stay in a private room. Childrens Hospital in Huddinge, a world leader in transplantation services, gives many children a new chance for a healthy life. We also implant cochlear hearing devices that allow children born deaf to hear, communicate, and develop as other children.

Teamwork

Four of five visits to the division of pediatrics are emergency visits. Crushing injuries, burns, and “stomach ache” are the most common problems. Providing highly specialized care means establishing a diagnosis quickly and accurately. A stomach ache could be anything from a simple digestive problem to a tumor requiring advanced therapy. Pediatrics is extremely *knowledge centered*. At our pediatric departments, a range of specialists work in teams and collaborate as they meet each new patient.

Many children have their first contact with Karolinska University Hospital at the moment they draw their first breath – or perhaps even earlier when their mother visits the department of obstetrics and gynecology to have an ultrasound exam or amniocentesis. We are also among the world leaders in treating involuntary childlessness.

Partnership and Modern Technology

Partnership with other hospitals in Sweden is a key concept at Karolinska University Hospital. An excellent example is our extensive transplantation program for kidneys, liver, pancreas, heart, bone marrow, and islet cells in patients with diabetes. Here it is essential to involve hospitals throughout Sweden, not least as regards the critical issue of donor organs. Many people with diabetes receive treatment at our six dialysis

Foundations Supporting the Astrid Lindgren Childrens Hospital and Childrens Hospital

The exceptional work carried out by our pediatric departments would not be possible without financial support from the foundations that collect donations to improve the lives of sick children and their families.

The Astrid Lindgren Childrens Hospital Foundation

has been actively collecting donations of various types since 1997 – from financial to “in-kind” donations for specific projects and events. Examples include an indoor swimming pool, a library, a family hotel, a garden, technical support to enable home care for sick children, clowns to entertain children several times per week, parties outside of the hospital at Christmas and Easter, and excursions – for instance, to Astrid Lindgren’s World in Vimmerby.

The Childrens Hospital Foundation was formed in 1998 and has contributed to many projects, including a family room at the hospital for children and parents. This room includes an Internet Cafe, daily newspapers, storybooks, playthings, and serves as a contact point for patient associations. Through an IT network for children, the foundation has made it possible for chronically ill children to communicate with friends and attend school from the hospital.

units, which provide most of the dialysis services in the Stockholm region. Our state-of-the-art lithotripter attracts specialists from throughout Sweden and Europe who want to learn more in this field.

Our urology department treats cancer of the prostate, urinary bladder, and kidneys and stones in the urinary tract. The robotic technology we use to operate on prostate cancer is available at only a few medical centers in the world. Our clinical outcomes are excellent, and patients can return home the next day.

We provide extensive endocrinology services for patients with diabetes, cholesterol disorders, hypertension, overweight, osteoporosis, and diseases involving the thyroid, pituitary, and adrenal glands.

Sweden’s largest department for infectious diseases is located at Karolinska University Hospital. Around-the-clock, we treat patients for HIV, jaundice, and tropical diseases such as malaria. The department for infectious diseases also manages the treatment of nosocomial (hospital-acquired) infections at all four of the major acute care hospitals in Stockholm. To minimize the spread of infection, specially trained staff are assigned to these units exclusively for several consecutive months.

Our hospital also offers an extensive diagnostic and treatment center for medical and surgical care of gastrointestinal problems. Highly specialized surgery for diseases of the liver, pancreas, esophagus, and colon have been consolidated at Karolinska University Hospital for patients from throughout Stockholm County. The hospital also leads in the diagnosis and treatment of liver disorders in adults and children.

Highly Specialized Care – Rapid Access

Accessibility is a keyword at Karolinska University Hospital – access to our emergency departments and access to burn treatment, cancer surgery, transplantation, and other services. Since waiting lists are unacceptable, we place great demands on logistics and modern technology. We recently opened a new burn unit with the capacity to manage burn patients from all of Stockholm County.

For burn patients and patients with congenital malformations, tumors, and facial injuries we provide reconstructive plastic surgery.

Karolinska University Hospital has a large department of rheumatology where we treat patients with inflammatory diseases in joints, muscles, and connective tissue. Our department of orthopedics specializes in several fields, including back surgery. We admit adults and children from throughout Sweden for advanced back operations.

One of Europe's Leading Cancer Centers

Karolinska University Hospital provides extensive health services for patients with tumors, leukemia, and other blood diseases. We are one of Europe's leading cancer centers.

Since cancer can affect almost any part of the body, cancer patients might receive treatment at several departments, for example, the department of orthopedics. Our oncology department provides services in radiation therapy, medical cancer therapy, and prevention.

The hospital also provides extensive services in treating hemophilia and diseases affecting the blood and the blood-forming organs – for example, leukemia, lymphoma, myeloma, anemia, and thrombosis. Since 1975, our Center for Allogenic Stem-cell Transplantation (CAST) has transplanted healthy blood-forming cells in more than 1000 patients, most with leukemia.

Karolinska University Hospital performs half of all stem cell transplantations in Sweden. If space is available, we treat patients from other countries, mainly Norway and Iceland. Our goal in cancer services is to become a full-fledged Comprehensive Cancer Center*, integrating prevention, patient care, research, development, and education. By creating a unified university hospital in Stockholm we have been able to consolidate and combine different areas of medical science. One example is our

* Comprehensive Cancer Center at Karolinska University Hospital

The hospital provides the full range of services needed to offer comprehensive cancer care to patients – from preventive services to advanced diagnostic imaging, pathology/cytology, surgery, radiotherapy, and palliative oncology. Many of our departments are involved in cancer-related patient care and research.

We have more than 30 professors conducting cancer-related research of a high international standard. Through close collaboration between patient care and research resources, not least *intellectual capital*, we aim to be recognized as one of Europe's top five cancer centers.

new Breast Cancer Center where specialists in oncology, breast surgery, and plastic surgery work together under the same organization. This promotes the sharing of expertise across disciplines and provides a full range of services – from screening to radiation – at the same location.

Advanced Treatment of the Nervous System and Sensory Organs

Karolinska University Hospital offers extensive services in clinical neuroscience, including treatment for head injuries, brain tumors, and functional disorders in the brain and spinal cord.

Patients from throughout Sweden and other countries visit our Alzheimer's Center and our outpatient clinics for back injury. Our hearing clinic investigates balance disorders and tinnitus and offers rehabilitation services, including courses in sign language and special preschools for hearing impaired children.

Our speech clinic treats patients with voice, speech, and language problems and swallowing disorders, while the department of oral surgery deals with malformations, wisdom teeth, tooth implants, jaw alignment, and joint problems. At our neurological and neurophysiological departments we diagnose and treat patients affected by cerebral hemorrhage, thrombosis, Parkinson's disease, multiple sclerosis (MS), and amyotrophic lateral sclerosis (ALS). We also monitor epilepsy and nerve problems that cause numbness or paralysis in part of the body.

Physicians at our ear, nose, and throat (ENT) department treat all types of ENT disorders. On evenings, weekends, and holidays we provide the Stockholm metropolitan area with on-call ENT services. At Karolinska University Hospital, the clinical neuroscience departments receive the greatest number of patients from other countries, depending on available capacity. For example, we treat many victims of motorcycle or

diving accidents who cannot receive equally qualified services in their own country.

Throughout our organization you will find many professionals who have worked for many years in the same department. Members of staff are often organized in teams and have many years of experience in their specialties and in working together.

A World Leader in Clinical Laboratories

The Karolinska University Laboratory is one of the world's largest and most complete clinical laboratories. Annually, 1,700 employees perform 20 million analyses for 40,000 clients.

Laboratory services are available not only at our Huddinge and Solna locations, but also at four other acute care hospitals and more than 70 outpatient sites. We provide around-the-clock service to large areas of Stockholm County. For many specialized lab tests, the entire country is our catchment area.

Our laboratory is an independent entity in a highly competitive environment and an important element in the continuum of care. The clinical laboratory services we offer are essential for achieving excellence in patient care.

Broad Services – Leading-Edge Technology

Most services at Karolinska University Laboratory focus on analysis, interpretation, and advice to serve clinicians who are in direct contact with the patients.

Our laboratory is closely linked to the research community. The laboratory's services are referenced in over half the dissertations written at Karolinska Institutet.

We continually face a growing demand for rapid and accurate communication of high-quality information for our clients. To help meet this challenge we electronically manage referrals and test results. Not least, this applies to advancements in clinical chemistry where we use laboratory robotics in analytical systems at several hospitals.



Advanced microscopy is used in our pathological labs to diagnose many cell and tissue samples. In microbiology, more traditional methods – such as cultures of bacteria or virus – are often used to diagnose infections.

Wide Network

In addition to offering our services to various healthcare entities, we also have extensive contact with other organizations and direct contact with patients, for instance, regarding tests and blood samples.

We have responsibilities to harvest stem cells from patients and donors, to perform immunological analysis prior to transplantations, and to assure that Stockholm is self-sufficient in blood products. In collaboration with the infectious diseases unit, we monitor infection-related problems throughout Stockholm County.

We also carry out drug trials in patients and healthy subjects, conduct studies of drug side effects, and perform drug analyses, for instance, employee drug testing in the transportation sector.

In Huddinge, we operate Sweden's only doping laboratory, collaborating with the Olympic Committee and other organizations. We also provide a doping hotline to answer questions from the public on the health risks of doping agents. In clinical genetics we can analyze the medical history of families and provide valuable guidance about potential risks for disease. We also carry out extensive, and successful, research on the origins of genetic diseases.

The Center for Inherited Metabolic Diseases diagnoses congenital metabolic diseases, including PKU screening of all newborns in Sweden. We are also closely associated with the Karolinska University Hospital *Biobank*, an important resource for research, not least research involving the major public health diseases.

Research

Regional Contract

On March 10, 2004, Karolinska Institutet and the Stockholm County Council signed a regional contract aimed at further developing their collaboration.

To support a shared vision of improving human health, Karolinska Institutet and the Stockholm County Council agreed to work together toward the following goals:

- Clinical research shall be closely linked to needs in health care.
- The scientific approach shall be an integral part of health care at all levels.
- The time it takes to implement scientific findings in clinical practice shall be shortened substantially.
- Research shall maintain a leading position internationally and comply with the standards of Good Clinical Practice.
- The advancement of expertise in health care shall be strengthened by jointly taking responsibility for education.

Sweden's Leading Medical Science Center

Karolinska Institutet and Karolinska University Hospital share a long history of close collaboration. Karolinska Institutet is Sweden's only university dedicated exclusively to medical science. Most of the clinical research at Karolinska Institutet is carried out at, and in direct collaboration with, the Karolinska University Hospital. Together, our two organizations form the foundation for a rapidly expanding center for medical science.

By joining forces in extensive regional collaboration – for example, through shared investments in Stockholm BioRegion, Science City, and research foundations at Novum – area organizations are becoming more united. The medical research carried out at Karolinska University Hospital and affiliated teaching sites in the Stockholm region led to the publication of more than 15,000 scientific articles between 2001 and 2004.

Our Research Concept

The goal of all research at Karolinska University Hospital is to prevent ill health and develop methods to alleviate and cure disease. This is a goal that we share with Karolinska Institutet, whose mission it is to improve human health through research, education, and information.

On the Leading Edge

Currently, we have one or more research groups in each of our 69 departments/units – in most cases conducting research directly on the front line. We are on the leading edge in several fields, such as pediatric diseases, aging, cancer, transplantation/immunology, inflammatory diseases, trauma, and metabolism/diabetes.

One in Eight Swedish Crowns Goes to Research

The Karolinska University Hospital budget totals just over 10 billion Swedish crowns, or *kronor* (SEK). In addition, nearly 1.6 billion SEK are dedicated to research, development, and education. Nearly half of these research funds, which we use together with Karolinska Institutet, come from external sources.

Priority Areas in Medicine

Research is an integral part of patient care at Karolinska University Hospital. Analyzing clinical research profiles was the starting point in selecting the ten priority areas that form the foundation for our strategy to become one of Europe's top five teaching hospitals by 2011.

Our aim in these areas is not limited to achieving excellence in clinical care or in research, development, and education. We also want our clinicians and researchers to work together so that each prioritized area reaches the top internationally.

- Cancer and Hematology
- Cardiovascular and Pulmonary Diseases
- Endocrinology and Metabolic Diseases
- Infectious Diseases
- Inflammatory Diseases
- Neurologic Diseases and Psychiatric Disorders
- Public Health
- Reparative Medicine
- Reproduction, Development, and Aging

*** Novum Research Park**

The close proximity of Södertörns University College, Karolinska University Hospital, Huddinge, Karolinska Institutet, and the Royal Institute of Technology creates a strong academic center in southern Stockholm. An area called Bio City is in a phase of strong expansion.

Novum's research and corporate park is internationally competitive and a primary strength.

**** Science City**

For over 80 years an area in northern Stockholm has been known as Science City. Today this area is home to around 6,000 researchers and over 50,000 students at the Karolinska University Hospital, Solna, Karolinska Institutet, the Royal Institute of Technology, Stockholm University, the Stockholm School of Economics, and other institutions – all within a relatively small geographic area in the northern part of the city.

Major Responsibility

As a large university hospital in a knowledge-rich region, we have a major responsibility to develop and maintain relationships with biomedical industry and the business community at large.

Karolinska University Hospital is one of the largest employers in the region, giving us an influential position. We aim to be a strong, positive force in collaborating with other biomedical entities to develop Stockholm into a leading international *BioRegion*. Our two main centers are focal points for different clusters of scientific knowledge.

Karolinska Huddinge is a cornerstone in the Novum Research Park *, and Karolinska Solna has long been part of an area referred to as Science City **.

Examples of Close Strategic Partnership – Twinning

“Twinning” exemplifies the strategic partnership between our strong departments and other equally strong entities. Twinning promotes the sharing of knowledge and experience between clinicians and researchers. The activity focused on rheumatism represents one of many examples of twinning. A research group at Karolinska University Hospital has collaborated with English researchers to develop a European registry of pharmaceuticals used in treating rheumatic diseases. The same research group also collaborates with geneticists at Harvard University to enable the exchange of researchers and students in this field. This group has initiated collaboration with a university hospital in Hanoi Vietnam to introduce an exchange program for doctoral students.



Lars Klareskog
Professor, Karolinska Institutet
Senior Specialist,
Department of Rheumatology with
Karin Lundberg, MD

Success in Rheumatology Research

In rheumatology research we are investigating the fundamental mechanisms underlying rheumatoid arthritis and muscle inflammation. We are also working on new therapies to treat rheumatic diseases. We aim to use our globally unique situation to monitor and understand the progression of a disorder – starting from its first symptoms and then as a chronic disease – throughout the patient’s life. To get the most from international findings in bioscience, we link research at the bedside to advanced molecular research at our Center for Molecular Medicine (CMM). Recently, we have shown that physical exercise – despite what current textbooks say – is not harmful, but helpful in treating muscle inflammation.

We have helped introduce a new group of therapies for treating rheumatoid arthritis and Bechterew’s disease. Here, we have found the potential to restore deteriorated joints in rheumatic patients. Another successful area of research involves the serious condition of congenital heart block in children born to mothers affected by a type of rheumatic disease.

A new method allows clinicians to identify an attack by the immune system on a child’s heart, already at the fetal stage. We are testing prenatal medical treatment that could prevent infant death or the life-long need of a pacemaker.



Bengt Winblad, MD
Professor, Karolinska Institutet
Senior Specialist,
Department of Geriatrics
with Bitti Wiehager, Lab Assistant

Swedish Brain Power – Focusing on Dementia

In collaboration with Karolinska Institutet, we are researching diseases related to aging. Our research in this field is recognized as extremely successful in Sweden and abroad.

This research focuses mainly on Alzheimer’s disease, Parkinson’s disease, ALS, and similar neurodegenerative diseases that break down the nervous system.

Recently, the *Swedish Brain Power* project was initiated to promote Swedish research and business in the fields of elder care and gerontology. The aim is to develop a new multidisciplinary approach involving several areas of research and development. Our goal is to build a strong center for early diagnosis and therapeutic research.

To achieve this goal we are bringing together several specialized areas to join in more advanced collaboration – genome research, cognition, occupational therapy, and treatment methods in patient care and social services.

One ambition in all of our geriatric research is to collaborate closely with the pharmaceutical and medical device industries. Our close working relationship with the business community has played an important role in the development of new medical technology, imaging diagnostics, and telemedicine.

Education

Hospital *and* Medical School

We are a hospital, but also part of the medical school at Karolinska Institutet. Nine of ten students at Karolinska Institutet receive their clinical training at Karolinska University Hospital, mainly at our Huddinge campus.

We work closely with several colleges and universities, including Södertörns University College, Stockholm University, and the Royal Institute of Technology.

Another example is our social work clinic, which contracts with the Department of Social Work at Stockholm University and with Ersta & Sköndal University College regarding trainee posts for undergraduates in social work. We also collaborate closely with the Red Cross University College regarding trainee placement for several hundred nursing students at our hospital.

Students who receive their clinical training at Karolinska University Hospital participate in several areas of patient care and receive supervision from pedagogically qualified, involved, and professionally active instructors. The trainee experience includes studies case, auscultations, seminars, and lectures.

Karolinska University Hospital is also a training ground for occupational therapists, audiologists, midwives, biomedical engineers and technicians, dietitians, speech therapists, physicians, radiology nurses, physiotherapists, nurses, and social workers.

**Joint Positions/
Combined Positions**

Sweden has a long tradition of integrating clinical practice into medical education and research. Since the founding of Karolinska Institutet in 1810, its clinical professors have held joint positions as Senior Specialists at healthcare facilities in the Stockholm area. Today, this applies to both professors and associate professors.

Strong Partnership

Each year we provide continuing education for thousands of physicians, nurses, and other professional groups. To support the educational process, Karolinska University Hospital has several different facilities for instruction and interprofessional training.

Our Center for Advanced Medical Simulation offers unique training and education for critical care and image-guided interventions. The Center for Advanced Medical Simulation also promotes research on human factors and human interaction with machines in health care. Karolinska Institutet grants academic degrees (MD, PhD) in medicine, is responsible for researcher education, and manages successful clinical research in collaboration with Karolinska University Hospital.

At Karolinska Institutet and Karolinska University Hospital we create added value for each other. As a whole, we are greater than the sum of our parts.

Our Organization

Board of Directors and Management Team

The annual budget of Karolinska University Hospital exceeds 10 billion Swedish kronor (SEK). Our hospital is fully owned by the Stockholm County Council and managed under a corporate structure.

Responsibility for hospital organization and management lies with the Board of Directors. Members of our Board bring a range of professional backgrounds and skills to the boardroom. They support the management team to assure that our hospital fulfills the care contracts established with the County Council. We have formulated a strategy for the future based on our current position, our assessment of future trends, our corporate vision, and the framework established by political decisions. We work continuously to communicate an accurate image of our activities and aspirations for the future. As a major player in the medical arena, we have an obligation to encourage debate about the healthcare system.

Our management team is backed up by a sound financial strategy. We use the *balanced scorecard* approach in strategic management. This serves as a unified system for leadership, management, and quality improvement. It can be applied at all levels within the hospital – from the executive level, to divisions and departments, to individuals.

In April 2004, our hospital adopted a new environmental policy and three main strategic goals related to the environment. Environmental efforts during 2005 focused on informing and educating hospital leaders, administrators, and staff about the new environmental management system, the chemical registry, and the environmental auditing system. We achieved environmental certification for all of Karolinska University Hospital in July 2005.

Eight Leadership Teams

- Administration
- Chief Medical Office
- Communication
- Finance
- Human Resources
- Logistics, Infrastructure, Care Contracts
- Management for Research and Education
- Nursing Development

***Core Values at Karolinska University Hospital**

*These core values guide our
path toward the future*

Expertise

We continuously strive to advance in the special skills, knowledge, and judgment needed to assure excellence in patient care.

International Veiv

We view patient care and research as an international responsibility. By 2011, we aim to be recognized as one of the top five teaching hospitals in Europe.

Innovation

We aim to stay on the leading edge of medical science and healthcare services. Innovation at all levels is a key component of our corporate culture.

Participation

We strive to provide optimal patient care through teamwork and meaningful involvement of patients and staff at all levels.

Care Organization

The Karolinska University Hospital Board of Directors appoints the Chief Executive Officer (CEO) who is responsible for operational management. Our health services are organized into eight divisions that consist of 69 departments or units. Research and education are under a separate organization, but closely linked to patient care.

Our hospital delivers services efficiently thanks to extensive, qualified administrative support, and a sophisticated medical information system. A modern logistics and materials management system enables us to use the same purchasing model throughout the hospital. Our strategic information technology will allow the entire hospital to use a unified patient record system by 2006, saving resources and enhancing patient security.

Human Resource Policy

To recruit and retain qualified staff, Karolinska University Hospital aspires to be an attractive, equal-opportunity workplace that offers professional and personal development.

Karolinska University Hospital annually recruits around 1,400 new employees and participates actively in research on organizational issues and equality. We thoughtfully promote a modern management and leadership culture and offer special programs for our younger staff members.

We rely on four *core values** in working toward our goal to be recognized as one of Europe's most attractive healthcare employers by 2011. These core values describe the characteristics that we aim to be known for – values that each employee and manager must exhibit. We regularly survey patients and staff, and the results help guide our continuing efforts to improve patient care, research, and education.

Active monitoring of current trends, regular analysis of future staffing needs, conscious planning to enhance employee expertise, and continuous improvement in the working environment are all fundamental in our aim to strengthen professional competence throughout our organization. We intend to achieve work-environment certification for all of our divisions.

Chief Executive Officer



(2) - Figures in parentheses indicate the number of units **AHC** - Advanced Home Care **CAST** - Center for Allogeneic Stem-cell Transplantation **CMMS** - Center for Inherited Metabolic Diseases **ENT** - Ear, Nose, and Throat **(H)** - Huddinge Campus only **ICU** - Intensive Care Unit **ITM** - Immunology, Transfusion Medicine **LIFC** - Logistics, Infrastructure, Facilities, Care Contracts **MRE** - Management for Research & Education **OPL** - Outpatient Laboratory Services **(S)** - Solna Campus only

Our Story

Karolinska University Hospital was formally established on January 1, 2004 through the merger of Huddinge University Hospital, Inc. and Karolinska Hospital. Prior to the merger, both hospitals had been leading institutions in their own right. Today, the best of both hospitals is found within a single organization located at two major centers – Karolinska Huddinge and Karolinska Solna.

Karolinska University Hospital represents a proud tradition of academic excellence and the dynamic advancement of modern medicine, not least in the development of new medical technology. All we do – whether preserving traditions or pressing forward in medical science – we do in collaboration with Karolinska Institutet.

- 1937 Radiumhemmet opens, the first facility for Karolinska Hospital.
- 1940 Karolinska Hospital opens, meeting Karolinska Institutet's need for a new teaching hospital.
- 1950s Karolinska Hospital builds a pediatric facility, known today as the Astrid Lindgren Childrens Hospital.
- 1958 World's first pacemaker implant is performed at the Department of Thoracic Surgery, Karolinska Hospital.
- 1972 Huddinge Hospital opens to meet the needs of a rapidly growing population in the southern Stockholm region.
- 1975 Huddinge Hospital team performs Sweden's first bone marrow transplant.
- 1982 Karolinska Hospital changes from state to regional ownership, and has since served as a university and regional hospital.
- 1984 Huddinge Hospital team performs Sweden's first liver transplant.
- 2000 Huddinge Hospital is incorporated as Huddinge University Hospital, Inc.
- 2001 Huddinge University Hospital, Inc. becomes the first hospital in the world to receive environmental certification (ISO 14001). In 2005, environmental certification is granted to all of Karolinska University Hospital.
- 2004 Huddinge University Hospital, Inc. and Karolinska Hospital merge on January 1st to form the Karolinska University Hospital. Today, Karolinska University Hospital is managed under the Stockholm County Council.



Production: Communication Dept. in collaboration with Plan 4 Marknadskommunikation AB. Photography: Johan Garsten, Staffan Larsson, Harald Marx, Bildhuset, The Imagebank. English text: Ron Gustafson. Printing: Avika Grafiska AB. November 2005

