

AKADEMISKA HUS THE SKANDION CLINIC

# A unique building and a unique collaboration project

The Skandion Clinic is the first clinic in Scandinavia to offer advanced radiotherapy using protons. The facility is being built by Akademiska Hus in collaboration with NCC on a commission from the seven Swedish county councils with university hospitals.

### PATIENTS FROM ALL OVER THE COUNTRY

The Skandion Clinic is a joint project supported by the seven county councils in Sweden which have university hospitals. Instead of traditional radiotherapy using x-ray or electron irradiation, the treatment offered at the Skandion Clinic involves proton therapy.

Initially, it is envisaged that approximately 1,000 patients will be treated here each year, but in the long term the clinic aims to take on approximately 2,500 patients per year. All children in Sweden who require radiotherapy to combat their cancer will receive treatment here.

The treatment will be carried out in a purpose-built unit at the clinic. The facility also includes a patient hotel where patients can stay and rest while they are undergoing treatment.

## A FIRST FOR SCANDINAVIA

The Skandion Clinic is a unique facility, the first of its kind in Scandinavia. "Good architecture is a vital element in building this clinic", says Tomas Nilsson, project manager at Akademiska Hus, the organisation which, together with NCC,

has been tasked with constructing the clinic. The specific treatment method which will be used at the Skandion Clinic places high demands on the building's construction and the choice of materials used in the treatment areas of the clinic. "Building a secure and functional facility to accommodate the kind of advanced treatment methods offered at the Skandion Clinic is a challenge", says Lars-Erik Einerman, Business Manager at NCC.

NATIONAL CENTRE FOR PROTON THERAPY Zahra Taheri works as a consultant in the oncology department of Sahlgrenska University Hospital in Gothenburg, and is a member of the Skandion Clinic's medical advisory committee. She, along with her fellow oncologists across the country, will be able to offer her patients treatment at the clinic

"The Skandion Clinic is a national centre, and it is good to know that we will have the opportunity to offer cancer patients from all over Sweden the best radiotherapy. The major advantage of this treatment method is that it enables greater accuracy and has less of an impact on the surrounding heal-

thy tissue since the radiation dose from the protons is given directly within the tumour. This method is therefore a good alternative in cases where the tumour is located in particularly sensitive areas of the body. The other great advantage of proton therapy is that it causes fewer side effects and gives doctors a chance to maintain better control over tumours in that they can administer a higher dose of radiation. This is important for all patients, but it is particularly essential when it comes to treating children, who are generally more sensitive than adults and are at greater risk of developing radiation-induced side effects.

The duration of the treatment at the Skandion Clinic varies, lasting between two and seven weeks depending on whether the patients will be receiving all of their radiotherapy in the form of proton therapy or not. The treatment will be administered on a daily basis during the week, with a break at the weekends. The oncologists at the patients' respective university hospitals will assess which patients are eligible for treatment at the Skandion Clinic. The treatment is also planned in detail at the patients' home institutions", says Zahra Taheri.





A building that will spring up and stand out. The Skandion Clinic gives cancer sufferers an opportunity to receive a new kind of advanced treatment. It is also a facility which will become a home from home for patients, offering them a chance to rest and relax in comfortable surroundings while they are undergoing treatment.





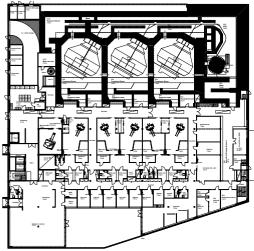
# ABOUT THE SKANDION CLINIC

The Skandion Clinic, the first clinic for proton therapy in Scandinavia. Proton therapy makes it possible to treat cancer more effectively and with fewer side effects than with conventional radiotherapy.

The Skandion Clinic, a national project that is run jointly by the councils of the seven Swedish counties with university hospitals. In 2006, the county councils formed Kommunalförbundet Avancerad Strålbehandling.

The purpose of the authority is to build and run the clinic, create the right conditions for optimal treatment and develop the clinic's activities. The partners supporting the project are the county councils of Uppsala, Östergötland, Skåne, Stockholm, Västerbotten, Västra Götaland and Örebro.





The treatment unit is a self-contained part of the building. The patient hotel includes a lounge, a reading room, approximately 90 guest rooms and a restaurant.

The Skandion Clinic is due to open its doors to patients from all over the country in 2015.

Proton therapy reduces the risk of damage to healthy organs. This method can be used to combat the most common types of cancer and offers particular advantages when treating tumours located close to radiosensitive tissue.

Protons are positively charged hydrogen ions that are accelerated to a high level of energy. This energy is directed at the area to be treated at the required depth. The patient receives a dose of radiation in precisely the right place.

Source: skandionkliniken.se



### FOCUS ON PATIENTS

A focus on patients was the key criterion of the architect's brief. Roger Larsson from LINK arkitektur AB is very much aware that this is an important task, the key objective being to create a carefully designed environment which will serve as a support base for patients. "The Skandion Clinic is a major financial undertaking and a national symbol of cooperation between healthcare services. The central location is also essential", says Roger Larsson.

### TREATMENT UNIT AND PATIENT HOTEL

The facility is divided into two areas – the treatment unit and the patient hotel. The treatment unit is located on the ground floor in a self-contained part of the building, with concrete walls up to 3.7 metres thick. This area is designed entirely according to the requirements stipulated by the technology which is to be housed here. The first floor contains offices, staff rooms and conference rooms.

The patient hotel extends from the second floor upwards, while at the very top of the building there is a restaurant, as well as a roof terrace with extensive views. The long, narrow structure of the patient hotel is raised up above the treatment unit. Since the treatment carried out at the Skandion Clinic can last for several weeks, the hotel rooms are designed to feel more like a home. The hotel contains a lounge, a room where guests can relax and read and approximately 90 guest rooms.

"The hotel is of exactly the same standard as any normal hotel. The reception is located at the top of the building, next to the restaurant. All of the guest rooms are double rooms, which are flexible and can be linked to form suites. All of them have large French windows that open inwards and let in sunlight and fresh air. The aluminium sliding doors, which are decorated with a lace-style pattern, provide both privacy and protection from the sun and can be adjusted from inside the room", says Roger Larsson.

### A COLLABORATION PROJECT

The construction of the Skandion Clinic is a collaboration project, with Akademiska Hus and NCC working alongside the seven county councils which, via Kommunalförbundet Avancerad Strålbehandling, will be responsible for the clinic's operations.

"It seems natural to us to foster a close working relationship in order to find the best possible solution for creating a building that will support the clinic's activities. The Skandion Clinic is a large project with precise schedules, and this calls for active and intensive cooperation. Involving everyone right from the start of the process improves our understanding of each other's work and makes the project easier to manage", says Tomas Nilsson from Akademiska Hus.

The groundbreaking ceremony for the building will take place in June 2011, with the clinic due to open its doors to patients from all over the country in 2015.

The external walls are thick and feature a distinctive patterned design that is reflected in the glass panels and sealed sections of the building's facade. The interior is characterised by natural materials such as wood, stone, textiles and other tactile materials. The waiting room is next to a green courtyard garden containing plants, a pond, attractive stonework and trees.

### FOR FURTHER INFORMATION, PLEASE CONTACT:

The Skandion Clinic Leif Lyttkens Tel: +46 (0) 18 14 14 10 E-mail: leif.lyttkens@skandion.se

Tomas Nilsson

Akademiska Hus

Tel: +46 (0) 18 68 31 17 E-mail: tomas.nilsson@akademiskahus.se

NCC Johan Wiberg Tel: +46 (0) 18 16 15 83 E-mail: johan.wiberg@ncc.se





