We are building the University Hospital of tomorrow

New Karolinska Solna
New Karolinska Solna
– tailored to the patient

New Karolinska Solna (NKS) is a unique project and achievement. The new hospital building will set a new standard for hospitals and act as a landmark invested with international impetus. Expectations are high in all areas – a modern building is being created where innovation flourishes, giving millions of patients a better life.

New Karolinska Solna will lead the development of future medical care with an emphasis on advanced highly specialized care.

The new university hospital also encompasses research and teaching facilities of the highest quality and is a natural center for investment in life science.

New Karolinska Solna will open for the first patient in 2016 and be fully completed in the autumn 2017. Please feel welcome to take a look around!
Patient always first!

*Patient always first* is the New Karolinska Solna’s motto. This means that anything that is created, built and organized within the framework of the project always puts the patient first, and is based on the patient’s perspective. The goal is to provide the right care for the right patient at the right time. Patient safety, privacy and comfort are essential – for example by introducing single rooms as standard for all inpatients. In addition, greater intimacy, better logistics and minimal transfers will further enhance efficiency and safety.

In order to contribute to the development of the health services, it is important to strengthen collaboration between healthcare, clinical research, basic research and education (mainly at Karolinska Institutet), so that new knowledge and research results can more rapidly be used in healthcare. Healthcare, as well as research and education at the NKS are to achieve world-class.
Room for development

The New Karolinska Solna will fit well into the environment of the new city district Hagastaden. By virtue of its size up to 12 floors and approximately 320,000 sq.m. total gross area, the new hospital will constitute a new landmark. Five buildings with care activities in the south run alongside a large square. North of the healthcare district, there is a new research building and the existing Thoracic Building, a new radiotherapy building, the existing lab quarter, a new technology building and a parking garage.

Between the healthcare district and research district, there is a green “Academic Mall” that links the hospital to the hospital park in the east and Karolinska Institutet in the west. Care activities and laboratory activities are connected via glass-enclosed skyways running across the Academic Mall.

Directly south of the healthcare buildings, there is a patient hotel with 100 beds that will be used by the hospital.

Compact and patient-focused

The new hospital will have a clearly defined and functional main entrance with an entrance hall being the heart of the facility. The hall will have a ceiling height of three storeys with a light and airy interior courtyard leading to the reception, cafes, restaurants, lounges, pharmacies, etc. From the main entrance you can easily access all the major routes of the facilities.

Departments and functions that are closely related, for example, ICU and surgery, will be located next to each other to create an efficient patient flow. The facilities will be of a similar design that is consistent among all floors. The layout and extent will be based on the principle of universality, which means that the rooms must meet a wide variety of functional requirements, whereby ceilings are of uniform height and floors capable of sustaining equal weight.

All rooms for inpatients are single rooms with large windows that allow daylight to enter and provide an outlook onto courtyards. Single rooms will enhance the integrity, security, comfort and safety aspects for patients.
### Timeline for the NKS construction project

<table>
<thead>
<tr>
<th>Building</th>
<th>Completed</th>
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<tbody>
<tr>
<td>1. Parking Garage</td>
<td>December 2012</td>
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<tr>
<td>2. Technology Building</td>
<td>May 2014</td>
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<tr>
<td>3. Hospital Part 1</td>
<td>Start of operation 2016</td>
</tr>
<tr>
<td>4. Patient Hotel and Garage</td>
<td>July 2016</td>
</tr>
<tr>
<td>5. Research Building</td>
<td>September 2016</td>
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<tr>
<td>6. Hospital Part 2</td>
<td>October 2017</td>
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Five buildings with healthcare activities in the south are connected by a transparent glass mantle structure. The “Academic Mall” runs between the healthcare district and the research quarter, linking the Karolinska hospital area with the campus at Karolinska Institutet, via a bridge over Solnavägen.

### PPP Agreement that breaks new ground

The agreement on Public-Private Partnership (PPP) means that the project company Swedish Hospital Partners (SHP) has been commissioned by the Stockholm County Council to design, build, finance, maintain and provide services for the new hospital. SHP is equally owned by Skanska and Innisfree. The collaborative partners of SHP are Skanska and Coor Service Management. The construction will continue until 2017 and the PPP contract for operation, maintenance and service runs to 2040.
A world-leading region

The Stockholm region will be a world-class life science cluster (biotech, pharmaceutical and medical technology) in 2025. This long-term vision is jointly sustained by the health services, universities and life science industries. The NKS is a prerequisite for the realization of that vision. The mission of a university hospital incorporates advanced research and development and training, which will provide greater patient benefit.

Proximity that inspires

New Karolinska Solna is located right next to Karolinska Institutet (KI) with a close relationship between medical care, research and education. To build the hospital next to Karolinska Institutet on the other side of Solnavägen is a central idea, jointly supported by the County Council and KI. Proximity will allow basic research and education at KI to be better connected with clinical research and teaching in the new hospital. The aim is that the new research findings will lead to a swifter introduction of new clinical methods and treatments within healthcare.

Research carried out in close proximity to the patient should be integrated with medical care, thus patient-oriented research facilities are being created within the healthcare environments.

Advanced lab environments

The clinical research facilities in the NKS will hold a high standard with a number of specialized laboratories gathered in a Clinical Research Building including labs for Advanced Imaging, GMP lab (Good Manufacturing Practice) and Cyclotron. The teaching facilities are being created for modern teaching methods with both formal and informal teaching environments. A new auditorium for 300 people will be part of a student and conference center that will be located adjacent to the Academic Mall.
World-class standards

New Karolinska Solna will have to meet very high standards in terms of sustainability and the goal is to create one of the world’s most environmentally friendly university hospitals. The facility will be classified according to the Swedish environmental classification system, “Environmental Building” and the best class “gold” will be achieved for the entire facility. The NKS is being similarly certified under the international environmental classification system, LEED, with the ambition of being classified at level “gold”.

Renewable energy

Energy supply will come through a combination of energy recovery, internally generated energy and district heating/cooling. The energy recovery is taken from heat generated by equipment and occupancy, whilst the self-produced energy comes mainly from a geothermal plant, which includes 140 bore holes that are 220 meters deep. This facility stores the heat from summer to winter and cold from winter to summer. Additional heating and cooling energy, which cannot be obtained from energy recovery and the geothermal plant, will come from district heating and cooling where current suppliers offer renewable energy.

All the electricity used in the new hospital will be renewable. This means that the entire energy use (electricity, heating and cooling) will consist of 100 percent renewable energy with low carbon release.

Sustainability at all stages

Within the entire facility there are extensive requirements for a good indoor environment. The requirements apply to everything from the thermal environment to air quality and environmental noise.

The construction work is carried out according to Skanska’s own environmental classification “Green Workplace”. This entails well-tried solutions to minimize environmental impacts during the construction - such as best practices for the management of transport and prevention of construction waste.