# Necker

# Refurbishment of the high-rise Necker Faculty of Medicine research and teaching building.

#### CLIENT

Paris Descartes University

#### TEAM

Patriarche (Architecture, EBQ, Signage) Partners: Henn Architeckten, IGREC Ingénierie, Vanguard Ledigarcher, and VisionLab Architekturexport

#### **KEYPOINTS**

Heavy rehabilitation. Asbestos removal. Legibility and flow organization. Reorganization of spaces. Improved indoor air quality.

### ENVIRONMENTAL PERFORMANCE

HQE approach. Green worksite charter. Energy-efficient rehabilitation. Healthy materials. This project consist in a major refurbishment of the high-rise research and teaching building and a removal of asbestos.

The challenge was to know how to respect the original architectural style of this 1966 building - designed by André Wogenscky in the heart of Paris and likely to be listed as a 20th century heritage building - while at the same time adapting it to contemporary requirements (energy efficiency and thermal compliance standards, technical and functional performance with a greater capacity to adapt to new uses, high-rise regulations, and new design trends).

Targetted architectural interventions have made it possible to reinforce the structure for the reorganisation of the work spaces, such as the research laboratories, amphitheatres, classrooms, and the laboratory animal house.

 
 Typology
 Co

 R&D & Laboratories, Facilities, Education, Heritage
 39

 Surface area
 Lo

 22,500 m²
 Pa

Construction cost 39.3 M€

Location Paris, France Status Delivery 2019

Allocation method Project management (MOE)



## The new entrance

We chose to cut a 24m x 6m hole in the forecourt to create a large glass entrance. This light, transparent volume highlights the entrance to a faculty of international renown. The immaterial volume respects the original layout and does not disrupt the monolithic perception of the whole, but rather sets the scene.

### A user-friendly structure - the base

From the moment they enter the building, visitors can see and understand the functional organisation at a glance. The new entrance on the forecourt makes it possible to reorganise the functions in a clear and legible way.

The plinth houses a range of functions: the reception area, the catering centre, the main vertical walkways in the axis, the lecture theatres and the library. The convivial areas are clearly visible and open out onto the naturally lit patios. The position and size of the new entrance has been resized to match the flow of traffic. The overall effect is brighter.







## The library

Due to the space requirements of the library, it was necessary to reposition and reorientate it. The adjoining area of the former staff restaurant in the northern part of the building, on level -1, offers the best conditions for a new orientation of the library, due to its numerous connections with the outside space. As this space is rather deep, the interior areas are lit by a glass cube, which pierces the ceiling in a formal vocabulary similar to that of the new entrance.

## Intentions

## The restaurant

The restaurant is the building's new communication and exchange centre and is therefore located in the entrance area of the entire building complex. The communal aspect of this layout is conducive to the sharing of expertise within the faculty and to informal exchanges and contacts within and between the various research teams.

## Lecture theatres and classrooms

The teaching areas have been refurbished to meet the latest technical standards (IT and audio-visual equipment) and, above all, adapted to provide access for people with reduced mobility.







## Laboratories: a modular concept / specific solutions

"Offer maximum modularity, while meeting the specific needs of each individual. To meet this requirement, we have taken up the principle of gridded, systematised structures and envelopes, which leave a maximum number of possibilities open. A clear, legible and functional system ensures the longevity, efficiency and modularity of the building.

To matter how practices evolve, the support to respond to them remains stable and reliable. The laboratories are organised in basic modules on a 3.65 m grid. Along the circulation route, a grid system for distributing secondary fluids cleverly gives rhythm to the doors on a laboratory organisation step, taking into account the width of the laboratory benches.

This modular design makes it possible to respond to the majority of installation requirements. André Wogensky was a pioneer in this respect, and his design can still be adapted in many ways today. The organisational principles have been retained. Only the central core has been brought up to standard through extensive structural refurbishment.

## Facades



We simply pierced the original grid in the gable and composed a set of predominantly white glazed panels, varying in opacity from transparent to opaque.



## A redesigned main façade

Previously, the façade was entirely faceless, but its white enamelled panels gave it a striking presence.

In order to respect the basic idea, we simply pierced the gable on the original grid and composed a set of predominantly white glazed panels, more or less opaline, ranging from transparent to opaque. This preserves the solid appearance, but in a much more playful way by randomly arranging the elements.

From the inside, this skin will bring natural light into the workspaces, giving an extraordinary view of the outside.

## Signage

Over and above any functional issues, our approach has been to create signage that conveys an identity specific to the site's issues, in harmony with the architectural choices, both past and present. We therefore set out to design strong institutional signage, so as to form a unit that becomes purely aesthetic, contributing to the enhancement and singular expression of the site.

Our approach took into account the strong presence of users, visitors, students, administrative staff and researchers. Informative, reassuring, friendly and rewarding, the signage for the Necker building is intended more than anything else to express the internal organisation of the site, always acting as a guide and guarantor of its uses. The signage project developed as part of the refurbishment of the Necker site is directly in line with the architectural, heritage and aesthetic heritage of the building designed by André Wogenscky.









## Necker

Typology R&D & Laboratories, Facilities, Education, Heritage Surface area 22,500 m<sup>2</sup>

Construction cost a, 39.3 M€

Location **Paris, France**  Status **Delivery 2019** 

Allocation method
Project management (MOE)