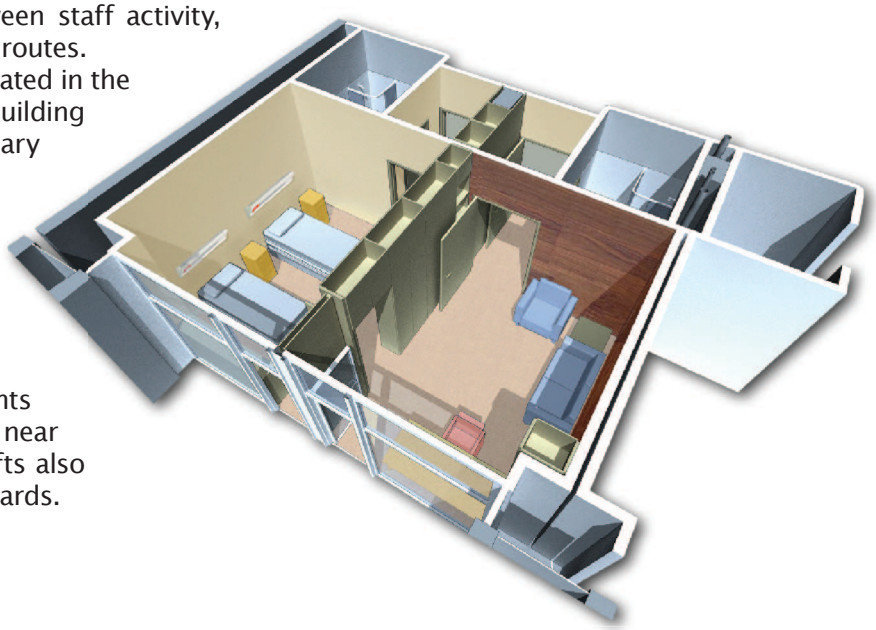
REORGANIZATION AND COMPLETION OF REFERENCE CANCER CENTER IN AVIANO (ITALY)

Activity: Project Management, Design, Safety and Works Management
Client: C.R.O. (Centro di Riferimento Oncologico), Aviano
Date: 2004 / in progress
Works value: EUR 11,061,473

The renovation of the CRO (Centro di Riferimento Oncologico, National Cancer Institute), in Aviano, Italy, involves the access system. The new volume of the project is the most clearly visible when one crosses the entrance to the hospital, and it is also the first located along the pedestrian access way to the CRO. It is therefore the new main entrance. This sole entrance is utilised by institute users and scientific staff (researchers, students, etc.) alike.

The project assigns the ground floor two macro-functions, the first of which is the reception. Next are the public relations office, appointments centre, cafes, offices and outpatient clinics.
The extension features a building designated for reception and preliminary non-invasive evaluations and follow-up activities.The aim of the project is a clear separation of internal walkways, so there is no interference between staff activity, patient and visitor walkways, and clean/dirty routes.
The reception and information offices are located in the foyer, so visitors are not required to enter the building itself. The outpatient clinics and preliminary evaluation facilities, nuclear medicine and future endoscopy area are all located on the ground floor, just after the reception.



The first floor houses the specialist outpatient clinics, the day hospital, and the diagnostic imaging department.
The area providing access to healthy patients contains a dedicated group of lifts, located near the extension entrance hall. This group of lifts also allows visitors to access the hospitalisation wards.

FIORENZUOLA HOSPITAL

Activity: Project Management, Design, Safety and Works Management
Client: A.U.S.L. Piacenza
Date: 2003 / 2009
Work value: EUR 16.601.710

The new hospital in Fiorenzuola has been created to group together the hospital services which were previously scattered in the Val d'Arda territory. The new building is the intersection of two different buildings both in functional and morphologic terms. A square plan very compact central structure and two aligned structures, one on each side, on pilotis, which go to the central nucleus. The formal and structural differences correspond to different functions and activities; in particular the two aligned structures house the in-patients and outpatients departments while the central structure houses the reception services, offices and laboratories. This dichotomy is also expressed in the choice of the external covering materials. The structure is on four levels above the ground and an underground level. The shape and position of the building on the lot derive from the geometric characteristics of the area and from the relation between the old and new structures which are connected by a tunnel under the road and a walkway at first floor level.

HEADQUARTER OF CIVIDALE DISTRICTS AND REALIZATION OF PALLIATIVE CURE CENTER

Activity: Project Management, Design, Safety and Works Management
Client: A.U.S.L. of Udine
Date: 2004 / in progress
Works value: EUR 6.387.724

The St. Maria dei Battuti Hospital spreads over an area located in the north-east of the town of Cividale del Friuli, on the left bank of the Natisone river. The area is served by three entrances: the main one, the one on Via Santa Chiara, and the Via Capraia one.
The project is located in a category 2 seismic area, as defined by the Italian classification of seismic areas.
It aims to concentrate all the health district's outpatient and administrative functions (currently spread throughout the Cividale district) in the east wing.
The project envisages a revision of internal spaces in response to new uses.
It also includes the construction of a new staircase and lift, which will be located in the centre of the building and separated from existing facilities via a seismic joint.
The staircase plan resembles a portion of a circle with an opening angle of approx. 40°, an internal radius of approx. 27 m and an external radius of 33 m.
This allows both the creation of an alternative escape route and a new entrance to the access system to the hospital, directly accessible from the car park near Via Capraia.

PROJECT OF ASSISTANCE HEALTH RESIDENCE AND CENTER IN PEGOGNAGA (ITALY)

Activity: Project Management and Detail Design
Client: Municipality of Pegognaga, Province of Mantova
Date: 2004 / in progress

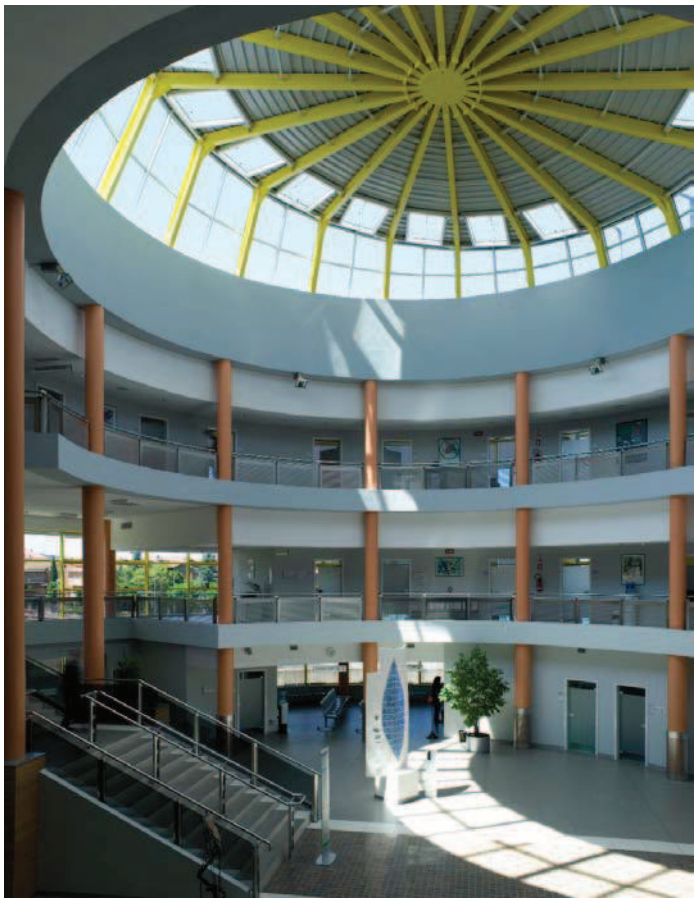
The building is divided into two C-shaped parts, each with two and three storeys, slightly different in size, arranged along the same axis and connected at the sides along the wings and in centre with a staircase and lifts.
In the central unit, there are two different-sized connecting courtyards. The main building, containing the welfare, health and social services offices, is located in the eastern section of the lot, parallel to the main boundaries, with the southern section left free for user parking and the western section largely reserved for future possible expansion.
Both C-shaped units have a single roof and a compluvium positioned towards the interior and are located around large courtyards. The first, which faces onto the parking area to the south and is surrounded by two-storey arcades, acts as a public square and provides access to the welfare, health, and social services offices.
While the second, which is surrounded by terraces distributed over different levels, overlapping at the edges and working downwards to the bottom, has a more private nature and is dedicated to the health, welfare and social services facilities.
To the west of the aforesaid facilities, there is a separate building containing the day centre and the rehabilitation department. The body of the building is connected to the health, welfare and social services facilities by a wide corridor and features overhead space for the installation of technical equipment and systems.

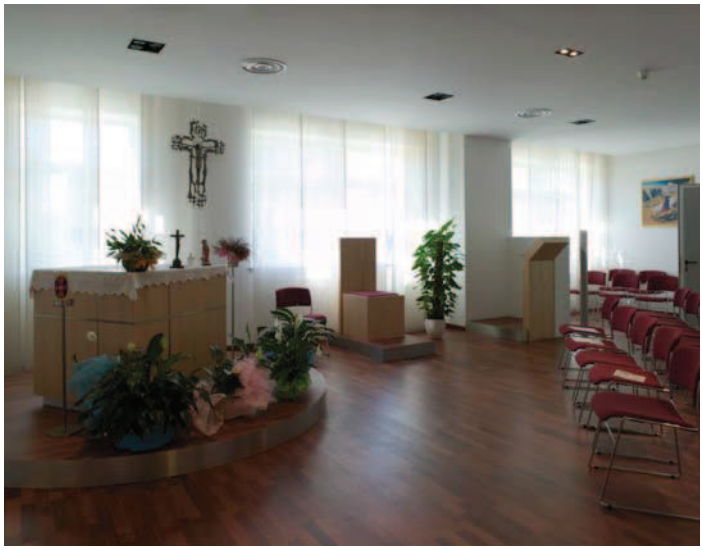
NEW HOSPITAL IN SASSUOLO (ITALY)

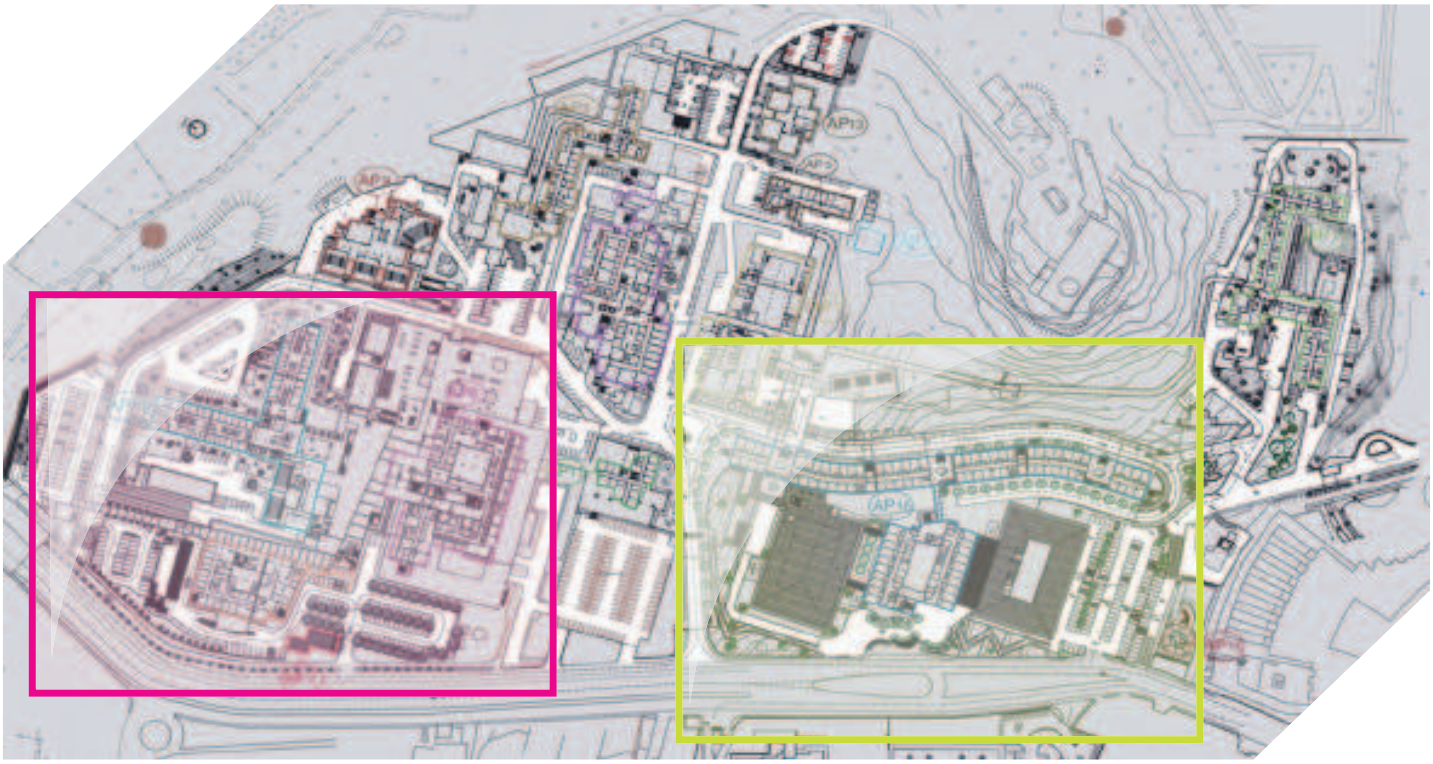
Activity: Project Management, Design, Safety and Works Management
Client: Consorzio Cooperative Costruzioni (CCC), Bologna
Date: 1991/2006
Works value: EUR 28.709.839

The project is planned for an impressive 62,000 m2 lot bordering the city of Sassuolo, on ground with an average incline of 6%.
To optimize the hospital's functions, we have opted for a monoblock, laid out primarily on horizontal planes.
At level 1, there is underground parking for visitors and rooms for technical facilities.
Level 2 provides an entrance to the hospital from the public car park overlooking the circular space (body A) that houses the reception, information, and appointments facilities and connects with the building dedicated to the specialised clinic.
On this level, the monoblock houses the changing rooms and the goods transit and storage facilities, as well as general staff amenities, such as the library, meeting room, canteen, and the X-ray plate storage area.
Level 3 is home to the doctors' offices and teaching rooms. This level features the hospital's group practices, along with general visitors' amenities, such as newsagent's, flower shop, cafe, chapel, and toilets.
Further along are the radiology and ultrasound centre, which are connected to the emergency room by a staff-access only corridor. There are five radiology rooms with different specialisations: one for tomography, three for ultrasound equipment, and a mammography room.

At the back of the monoblock is the emergency room, with its access area and car park reserved for ambulances and passengers.
This position allows maximum efficiency of the structure due to the geographical and functional proximity of the outpatient clinics and radiology rooms. The fourth level of Body A houses the management and administrative offices.
Levels 4, 5, and 6 of the monoblock are mainly occupied by wards, where most rooms have two beds and en-suite toilets. On each level, however, Body "C" contains specialised facilities related to the rooms.
Level 4 houses the delivery unit with three labour and delivery rooms, a Caesarean delivery room, and a nursery with capacity for four cots or incubators.
Level 5 is home to the endoscopy centre, which features four rooms, the instrumental treatment facilities for outpatients and the day hospital centre.
At level 6 is the central surgical unit, with an operating room, an emergency operating room, an orthopaedic surgery room, and a room for urology and gynaecology, and a plaster, sterilisation and services room.
Level 7 contains technical rooms not accessible to users.
Body "E" houses the morgue, which is laid out over two levels and contains a room for autopsies and corpse preparation.



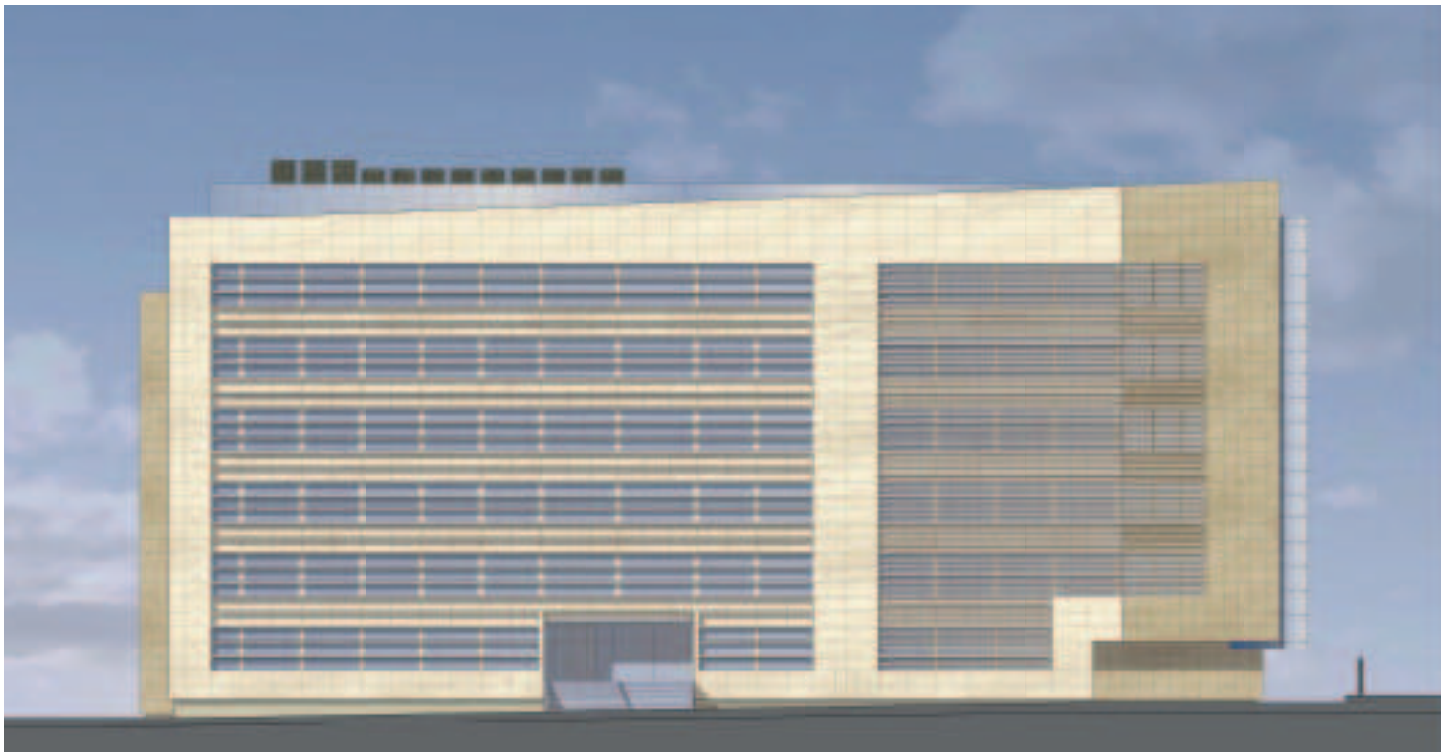




BUILDING FOR SPECIALIST ACTIVITIES IN THE UNIVERSITY COMPLEX OF S.SOFIA IN CATANIA

Activity: Project Management, Design, Safety and Works Management
Client: University of Catania, General Hospital
Date: 2002/ in progress
Works value: EUR 42.099.825

The design of a new building for specialist activities in the University Complex of Santa Sofia that is located inside the university area of the General Hospital of Catania, a part of the city made up of different buildings, in the hinterland with a thick urban fabric, with complex characteristics of coexistence between the university and health organisations. The aim was to design a large complex made up of five buildings each one clearly identifiable both formally and in terms of function. The first building is a two-storey block that houses the day hospital and specialist surgeries: cardiology, orthopedy, oncology, plastic and maxillofacial surgery, urology and vascular surgery. The second building is a high and compact double tower building which houses the in-patients department with 210 beds and the horizontal and vertical connections between all the activities and buildings. The third building is also a two-storey block for the operating unit with ten theatres and related services, sterile in-patients department with nine beds in the intensive care unit plus an isolated bed and four beds in the burns unit. The fourth building is curved and linear, staggered on different levels and is intended for research and study activities with consequent plans for studies and rooms for seminars, offices and space for the general services of the complex such as the large technological units (water system, UPS, electric boxes, generators, heating subsystem and refrigerator system), warehouses, laundrettes and staff changing rooms.



NATIONAL INSTITUTE OF MOLECULAR GENETICS, MILAN (ITALY)

Activity: Project Management and Design
Client: IRCCS Foundation of Milan
Date: 2005/2006
Works value: EUR 12.448.622

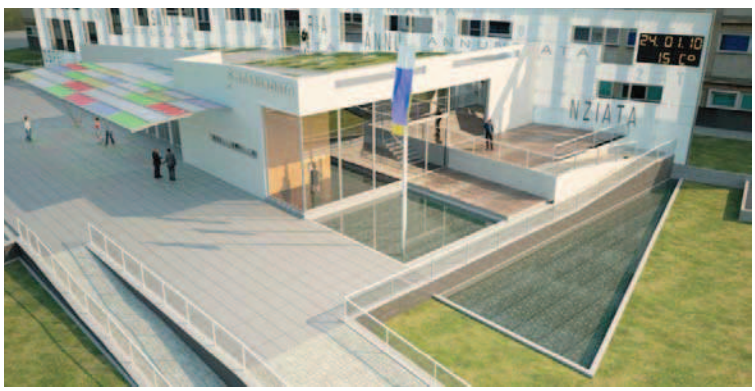
INGM is a non-profit research foundation whose purpose is the discovery and initial development of new therapies and new diagnostics in the fields of tumours and autoimmune diseases. INGM will be located on the campus of the IRCCS (Istituto di Ricovero e Cura a Carattere Scientifico, Scientific Institute of Admission and Care), at Milan's Ospedale Maggiore, a new dedicated building whose construction should be completed by late 2010. The building, designed in part for the laboratories and offices, features a steel framework with a larger mesh to allow maximum flexibility. The facades are different depending on their exposure to the sun, which has been calculated by means of an extensive climate study. More specifically:

• the south-western façade has continuous glass and external metal blades with adjustable, swivel functions and is linked to the surveillance system;
• the northern front has fixed outer edges made of stone-clad aluminium

EXTENSION AND RENOVATION OF THE S.M. ANNUNZIATA HOSPITAL CENTRE

Activity: Project Management, Design, Safety and Works Management
Client: A.U.S.L. of Florence
Date: 2009/2010
Project Surface: 21.890 m²
Realized Surface: 9.570 m²

The project interventions pursue the objectives briefly described below: functional reorganisation of the Access System to the entire Hospital Centre through the construction of a new building to extend the current space available, complete with additional information, commercial and reception activities; transfer of the activities of the current A&E department to a new building and connection with the X-Ray department on the first floor of the existing building, extending the space available; renovation of the current X-Ray department to create the direct connection with the A&E Department through a reorganisation of the functions; demolition and reconstruction of the current Technical Rooms and Warehouses to create the staff canteen foreseen on the roofing level and add additional systems; transfer of the Orthopaedic consulting rooms from the current premises to a new position near the entrance, and adjustment of the spaces to provide a larger surface area for the renovated X-Ray department; transfer of the Blood Sample Taking area from current premises to the ground floor of the Office Building to allow the transfer of the Orthopaedic consulting rooms as described above; improvement of relevant external areas and modification of the road system due to the construction of the new buildings. These interventions have been designed in respect of the communication and inter-relationship requirements of all the activities to be reorganised, taking also into account the architectural, structural and system relationship of existing buildings; the project does not foresee any interruption of the activities during the work and is based on high technological and construction standards and high quality materials aimed at improving environmental comfort and energy saving.



NEW HOSPITAL IN MODENA - LOC. BAGGIOVARA (ITALY)

Activity: Project Management, Deatil Design of Structural and Technological works
Client: ICC
Date: 1991 / 2002
Works value: EUR 43.441.772

The new St. Agostino-Este hospital, located in Modena, was opened on 2nd June 2005. The new hospital houses the emergency facilities for the province of Modena, and its functions are integrated with the University Hospital of the University of Modena and Reggio Emilia and other hospitals in the province.
The entire building is fully air conditioned. Rooms are single or double, with en-suite toilets.
In terms of health issues, all technology and structures are at the forefront of the field. This significant investment was shared and implemented so that its positive effects for health could be extended to users throughout the province. The new hospital has 454 beds, including 33 for the day hospital and day surgery units.

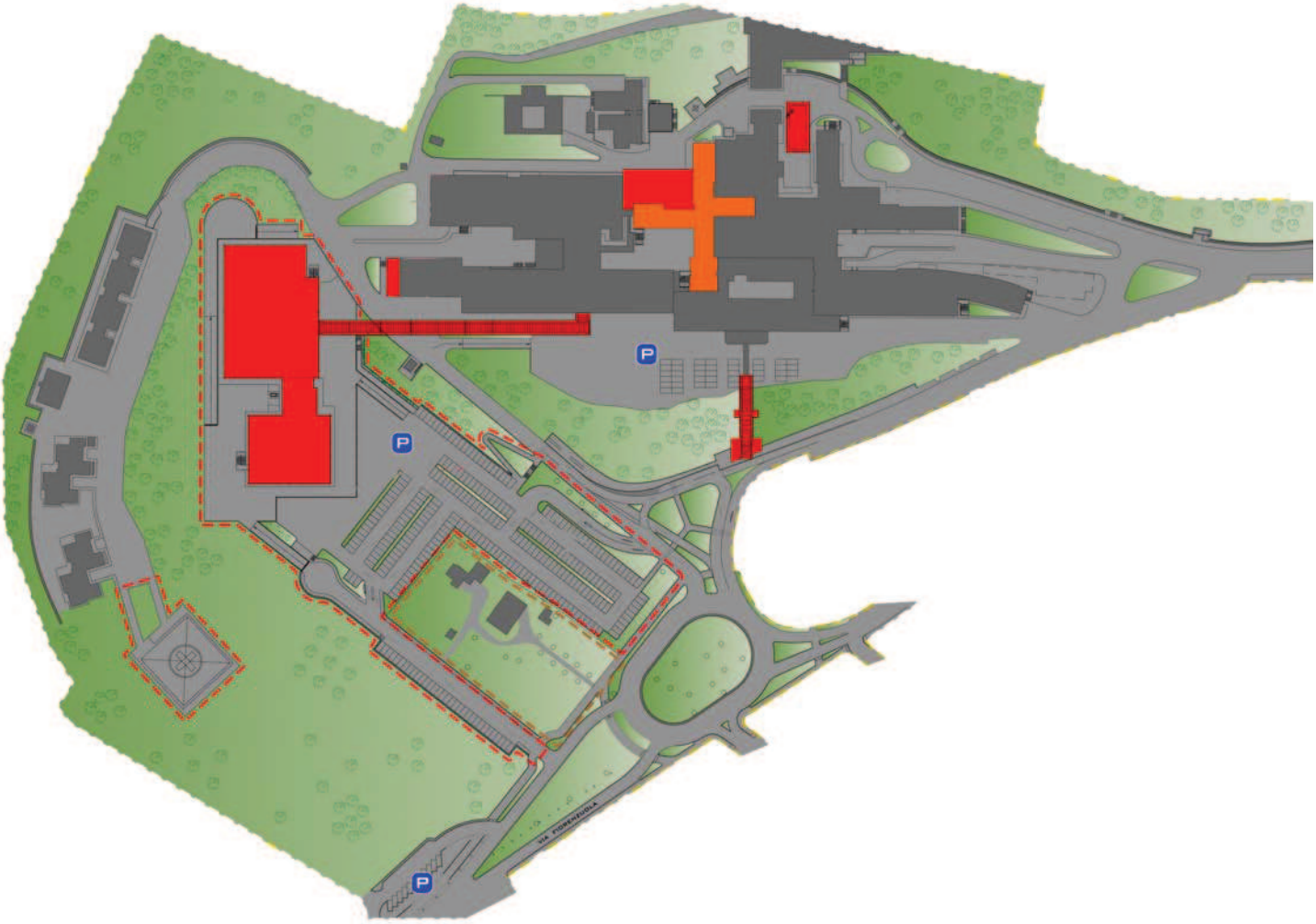
NEW HOSPITAL COMPLEX IN FIDENZA (ITALY)

Activity: Project Management, Deatil Design
Client: CMB of Carpi (Italy)
Date: 1999 / 2000
Works value: EUR 21.173.441

The new Fidenza Salsomaggiore Terme hospital is an example of effective interagency cooperation between the various councils of the city of Fidenza, the town of Salsomaggiore, the province of Parma, and the Emilia-Romagna region, confirmed by the fact that it was completed in less than four years, earlier than expected, including the administrative, development and construction phases.
The project is based on a macro division of the two core units: the admissions system and the hospital system.

The first section is planned to house all the activities related to access to and back-up for health functions, managed directly by private practices, while the second will be home to the hospital's public health activities. The hospital is therefore effectively linked with its district through its admissions system.
Furthermore, the architectural elements of this filter, i.e. squares, public walkways located at different levels, shops and leisure facilities, and an area for teaching and health staff, offer substantial support for users' social relationships.
With regards to the core hospital, the building was divided into three macro areas which split it into units for specific uses, with different functions as far as both intensive care and support facilities are concerned.
These three areas can be summed up as follows:

1. Emergency hospital (anaesthesia, resuscitation, Origène hyperbaric therapy, radiology);
2. Hospital for outpatient and hospitalisation activities (internal medicine, oncology and immunohaematology, neurology, general surgery, obstetric urology, gynaecology and paediatrics, orthopaedics and traumatology, endoscopy);
3. Rehabilitation hospital



ENLARGEMENT OF THE "BUFALINI" HOSPITAL, CESENA (ITALY)

Activity: Project Management, Design and Safety
Client: A.U.S.L. of Cesena, Italy
Works value: EUR 26.137.751

The Bufalini hospital is the "Trauma Centre" for the Romagna region. A leading centre for burn patients, it is also the regional referral centre for many rare diseases. To encourage as integrated a response as possible to meet citizens' health needs and to optimise resource utilisation, the hospital is split into seven departments, as listed below:

1. Department of surgery
2. Emergency department
3. Department of Radiology
4. Department of Internal Medicine
5. Department of Specialized Medicine
6. Department of Neuroscience
7. Department of Clinical Pathology

SAINT JAMES HOSPITAL, TARXIEN (MALTA)

Activity: Detail Design
Client: St. James Group, Malta
Date: 2007 / 2008
Works value: EUR 11,000,000

The building is arranged in an L-shaped structure with two separate internal courtyards split into three square areas. It has four floors (basement, semi basement, ground and first) covering a total area of 9,000 m2, 49 patient beds, and 12 beds for admission to the day hospital. On the ground floor and in front of the main hall, there is a dedicated car park. Upon entering the building, users have immediate access to the following amenities: reception, administration, café/restaurant, pharmacy, shop. In the north-eastern body, there are 26 outpatient group practices with support facilities. Surgery: two kinds of beds (medium or high-care) are standard in the hospital. This area is also used for post-operative treatment. Capacity: 24 beds for continuous hospitalisation, with 14 single rooms, plus two rooms dedicated to gynaecology and a labour room (with water birth facilities). The technology hub is divided over five operating rooms, including a room dedicated to endoscopy surgery and another for the day surgery activities. There are three major surgery rooms, including one dedicated to orthopaedics. The day hospital area has 12 beds, located next to the surgery area, each one with private access. The building features all single rooms with associated support facilities.
Hospitalisation area: on the first floor, there are 21 beds for continuous hospitalisation and paediatrics. It should be noted that this area is reserved for the admission of patients with acute illnesses which cannot be treated in the day hospital or in the outpatient facilities.
Radiology: The high-technology diagnostic and treatment area is located in the basement. The department is divided into functional areas for radiology, functional diagnostics, ultrasound, MRI, CAT, ultrasound, and mammography.
General facilities: the new building offers ample space in the basement for support facilities: general stores, handling routes for clean/dirty materials etc. located near walkways and lifts. The rest of the area contains technological resources such as medical gases, water tanks and other systems. The basement also houses the staff changing rooms, morgue, laboratories and sterilisation facilities and the kitchen. Some of these functions will be managed by outside companies.

POLITECNICA
INGEGNERIA E ARCHITETTURA

HOSPITAL FEASABILITY STUDY

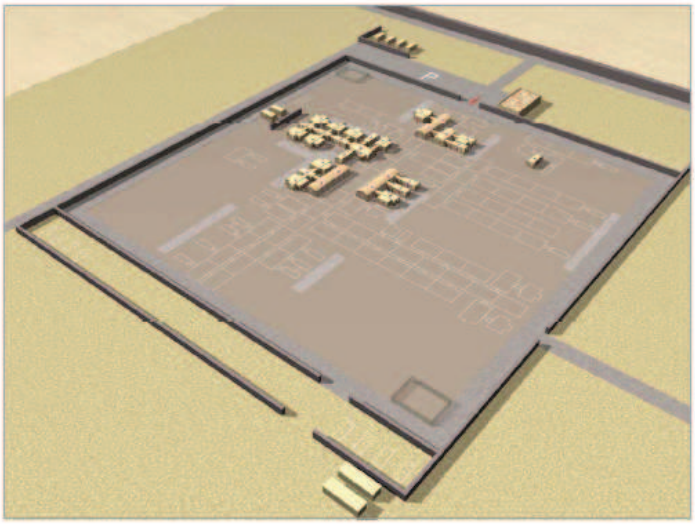
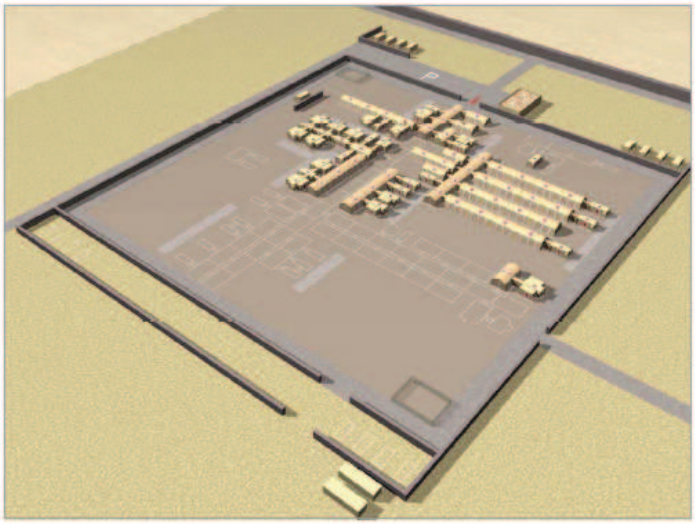
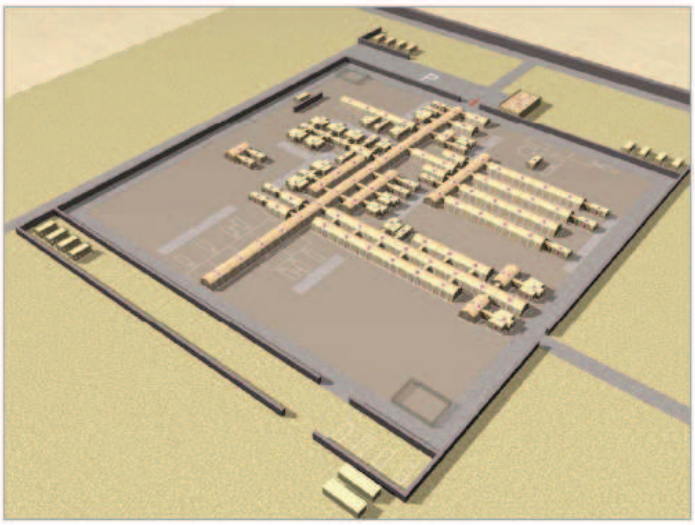
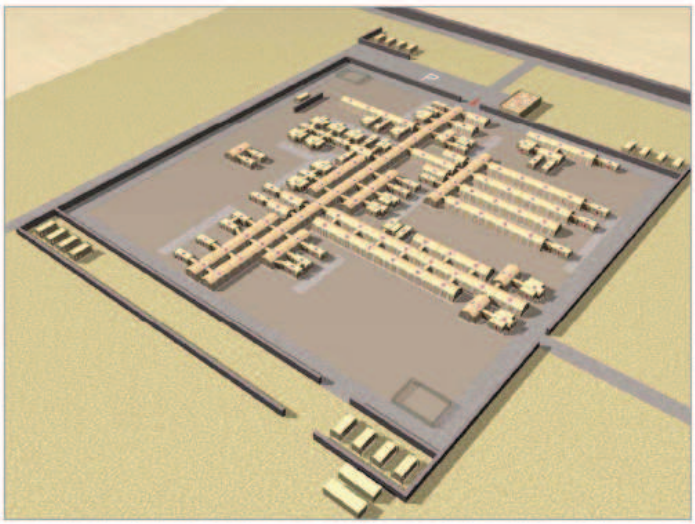
"DESIGN FOR BETTER LIVING"
We are committed to designing and building a better world in which to live, work and move.

ENLARGEMENT OF THE CAREGGI HOSPITAL, FLORENCE (ITALY)

Activity: Feasability Study
Client: A.U.S.L. of Florence, Italy
Date: 2009

The proposed new wing for the Mother and Child department is part of an overall renovation project concerning Florence's Careggi University Hospital. The entire project consists of:
1. Completion of the demolition of the old east wing;
2. Creation of the new building includes:
- diagnostic radiology rooms and technology rooms;
- admissions, obstetrics and individual practitioners' quarters – the labour and delivery unit, with neonatal care and its intensive care units;
- operating rooms and gynaecology.
3. The partial renovation of the existing building, to gain space for outpatient treatment, the clinic and for minor surgery.

The modernisation project focuses mainly on the seismic/structural review and the seismic joints. The project also includes completion of all the plans and all the areas of the new building, such as the basement, with the new radiology department, the labour and delivery unit, and the operating rooms

FIELD HOSPITAL (SPAIN)

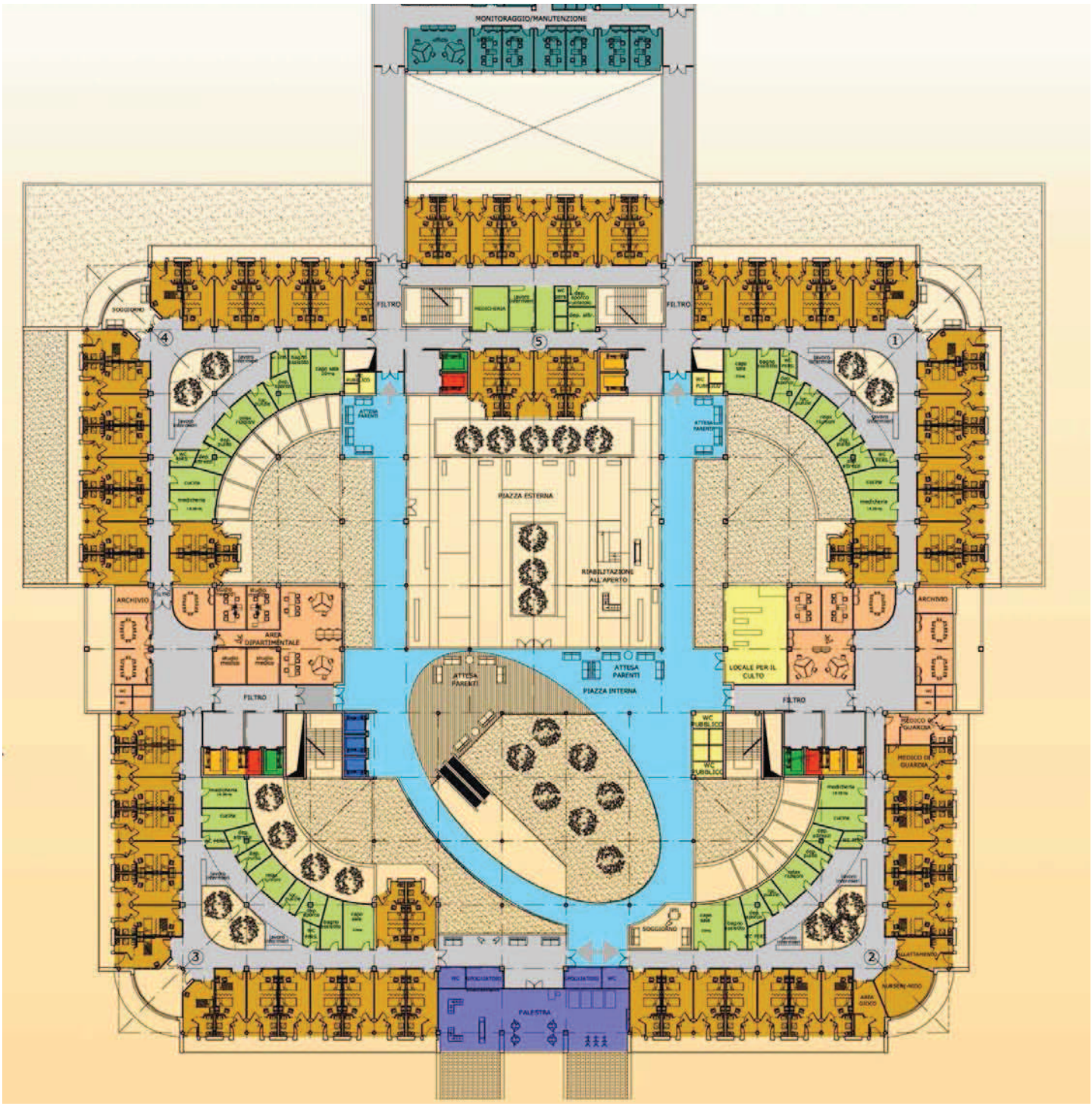
Activity: Feasability Study
Functions: all functions

From a structural standpoint, the feasibility study has pursued the following objectives:

1. Maximum flexibility (already given in part by the modules), with the possibility of adapting quickly to new and ever changing health needs;
2. Dimensions suited to the type and estimated volume of activities;
3. Attention to humanisation, comfort, and safety.
4. Attention to all facilities and interference between technological modules, tents and sanitation amenities.

The architectural structure of the hospital features the following areas:

- Emergency
- Critically ill patients
- Anaesthesiology
- Hospitalisation
- Diagnostic Imaging
- Support facilities
- Blood Banking
- Laboratories
- Pathology and morgue



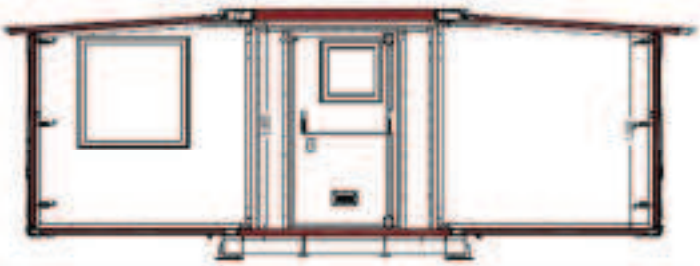
GENERAL HOSPITAL (VENEZUELA)

Activity: Feasability Study
Client: Ministry of Sanity, Venezuela
Functions: all functions

The research is based on an architectural project totalling 27,000 m2 over two floors and consists of four basic specialties:

1. Medical: internal medicine, cardiology, pulmonology, nephrology, neurology, gastroenterology, medical oncology, haematology, geriatrics.
2. Surgery: ophthalmology, urology, traumatology, orthopaedics, reconstructive facial plastic surgery and general surgery, neurosurgery, thoracic surgery, cardiovascular surgery and oncological surgery.
3. Paediatrics: medical paediatrics, paediatric surgery, neonatology, paediatric neurology, cardiology, paediatrics, paediatric urology, paediatric ophthalmology, paediatric oncology and haematology, orthopaedics, paediatric plastic surgery, paediatric gastroenterology and paediatric nephrology.
4. Obstetrics and gynaecology: gynaecology, perinatology, infertility and genetics.

The guidelines for the realisation of the general hospital system envisage the use of new technology that delivers simple solutions, a long working life, low maintenance, and adaptability to change.
The building structure is designed with a mixed system, consisting of prefabricated concrete elements and prefabricated ribs. All to allow quick completion, finished off with concrete walls for the vertical circulation systems.



FIELD HOSPITAL (EGYPTE)

Activity: Feasability Study
Date: 2010
Functions: all functions

A modular field hospital could be used by the Egyptian government to tackle national and international emergencies, as outlined below. Preparation for emergencies is a key factor for effective relief operations.
These modular containers stored in warehouses near the airport in Cairo or other domestic airports will allow Egypt to provide a quick recovery in the event of a catastrophe, or should a natural or humanitarian disaster occur: all this will strengthen Egypt's contribution within the world of medical cooperation.
The Gaza Strip: for this area a modular field hospital could respond to all humanitarian emergencies where border crossings are opened to help the wounded, especially children who need immediate medical attention. These medical facilities could also provide in-situ rehabilitation for injured children to keep them in their homeland and with their parents.

HOSPITAL IN IVORY COAST

Activity: Feasability Study
Client:. Ministry of Sanity – Ivory Coast
Functions: all functions

The proposed configuration for the hospital (418 beds) is also based, like hospitals of excellence, on the development plan for diagnostic and therapeutic technologies available in the coming years. The arrangement detailed here refers to a model of the general hospital for adults and children, of average complexity.
The list of proposed equipment refers to major appliances that are deemed necessary to fulfil the new hospital's main functions.
To ensure full functionality of the new hospital, the feasibility study included the supply, installation and testing of equipment, furniture and computer technology and the implementation of the medical gas system.
The hospital is divided into two main units: medicine and surgery. The following specialties are envisaged:

- General Medicine
- Paediatrics
- General Surgery
- Obstetrics and Gynaecology
- Orthopaedics
- Infectious diseases
- Gastroenterology
- Intensive Care

The following diagnostic and specialty care facilities are also included:

- Operating unit (8 operating rooms)
- Neighbourhood parties (1 dedicated room)
- Laboratory
- Radiology
- Cardiology, Angiology
- Dermatology
- Otolaryngology
- Ophthalmology
- Dentist
- Endoscopy
- Dialysis

CENTRE OF EXCELLENCE IN CARDIAC SURGERY, BAGHDAD (IRAQ)

Activity: Feasability Study
Client: Ministry of Sanity – Iraq
Date: 2009
Functions: Cardiology, Surgery

The main elements of the feasibility study are outlined below:

- Day hospital: 20 beds
- Vascular surgery: 40 beds
- Cardiac surgery: 60 beds
- Heart failure and transplantation: 10 beds
- Paediatric cardiology: 40 beds
- Intensive care and anaesthesia: 30 beds

The main support facilities are listed below:

- Four operating rooms for cardiac and thoracic-pulmonary surgery
- Catheterisation laboratory
- Electrophysiology laboratory
- Echocardiography laboratory
- Haemodynamics/electrophysiology
- Clinical physiology

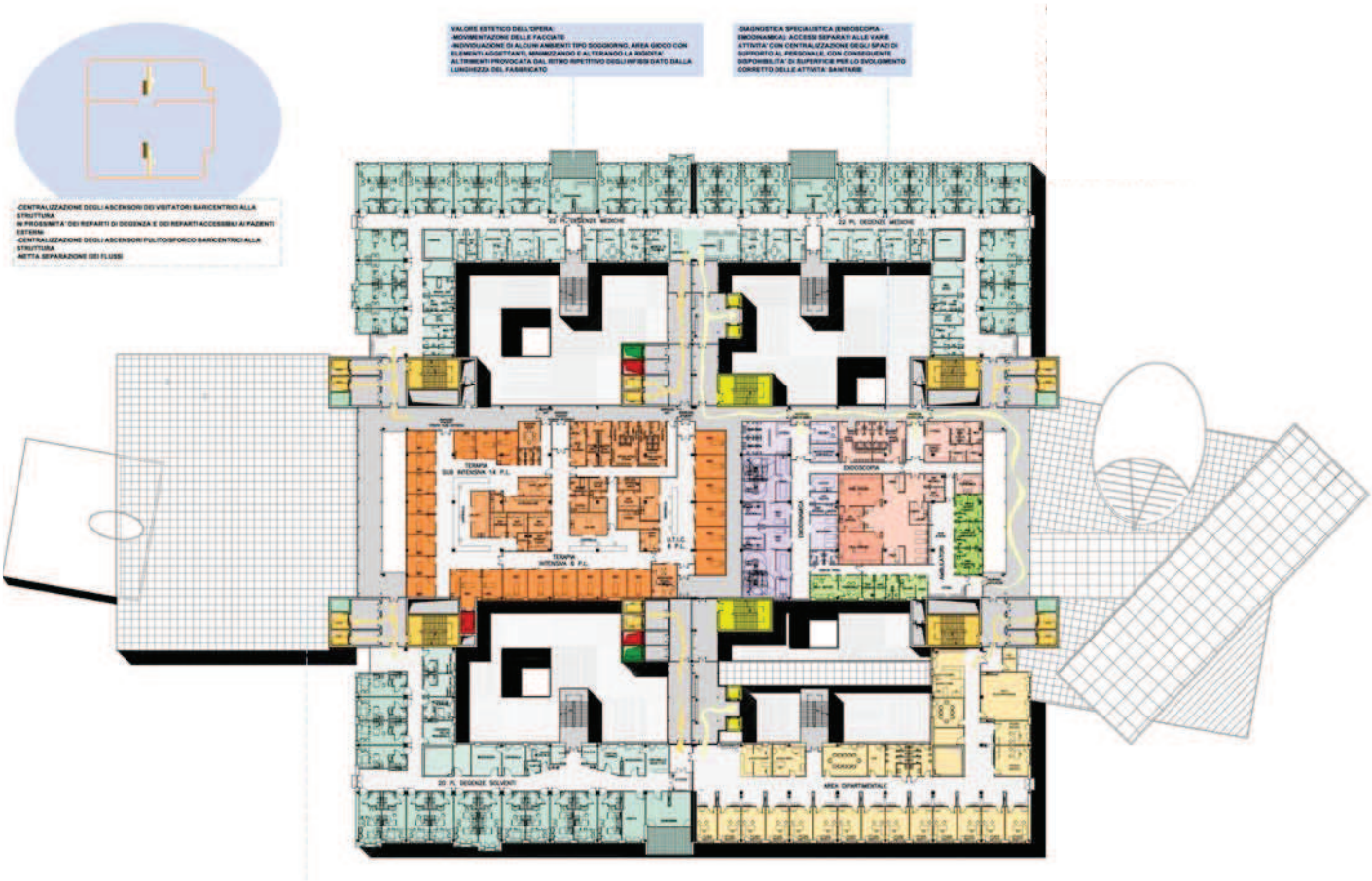
HOSPITAL «SACCO» (ITALY)

Activity: Feasability Study

The Luigi Sacco Hospital was founded as a tuberculosis treatment centre. Its purpose is to provide outpatient and diagnostic services and treatment of acute diseases and those requiring emergency assistance.
More specifically, its services include:

- All diagnostic, treatment, and rehabilitation procedures compatible with the level of technological equipment necessary to solve the problems of patient health.
- First aid medicine, surgery, cardiology, infectious diseases and psychiatry.
- Outpatient services, diagnostic and instrumental examinations.
- Psychiatric care

The hospital participates in national and regional programs in the emergency cardiology, infectious disease prevention, and research fields. Since it is a university hospital, it is a place of teaching offering full courses for medical students and specialised courses for nurses.



HOSPITAL OF ARICCIA, CASTELLI ROMANI, ITALY

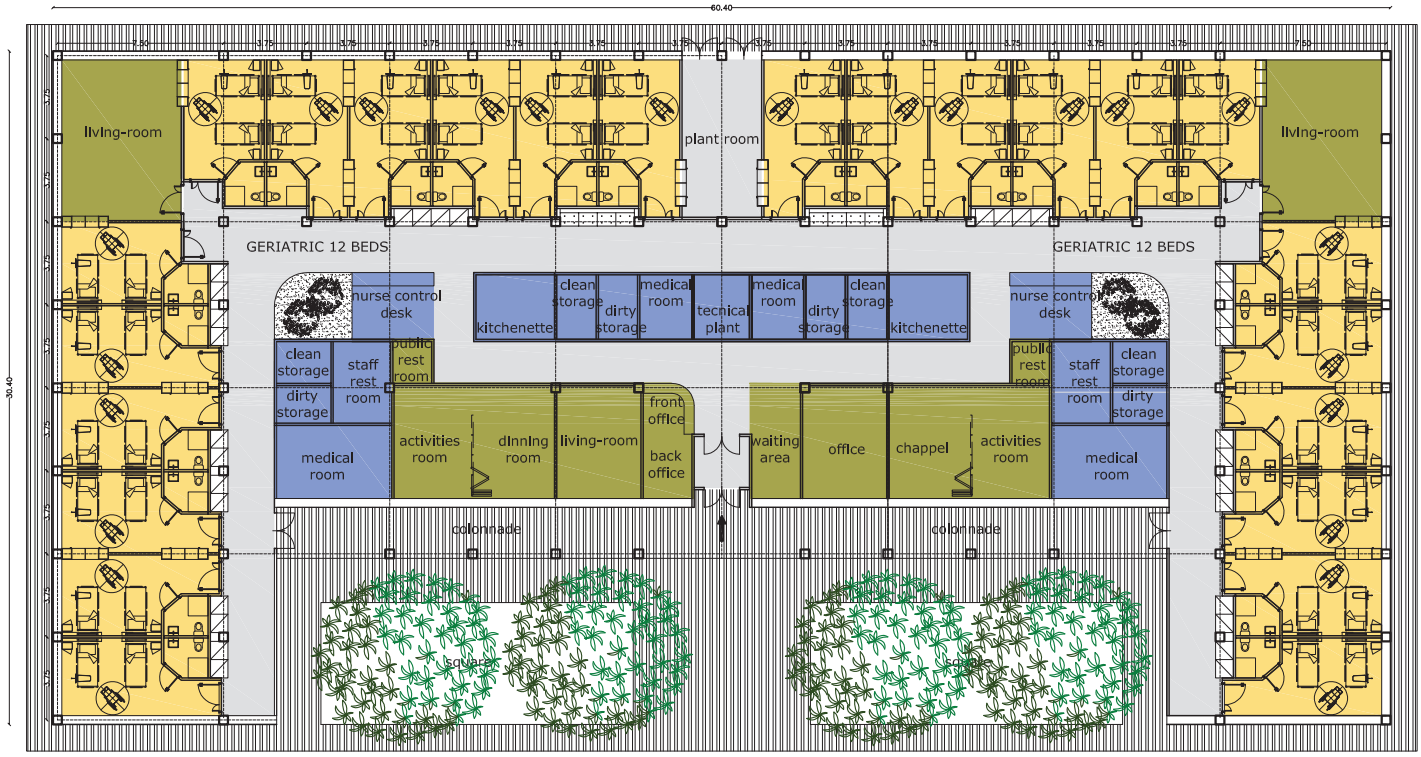
Activity: Feasability Study
Client: Regione Lazio

The new hospital will be built in the “Castelli Romani” area in the city of Ariccia, at kilometre 11.5 of the road called Strada Nettunense. The new hospital is designed to replace the hospitals currently operational in Albano, Genzano and Ariccia, which will be converted for use for other activities linked to both administration and the district.
Summing up, the new hospital will offer the following:

- 300 beds for the hospital, while awaiting the development of a new regional network of hospitals.
- An estimated 250 beds for standard hospitalisation, of which 70 for the medical area, 70 for surgery, 40 for obstetrics and paediatrics and 30 for intensive care.
- 50 beds will be assigned to the Day Hospital.

The research also highlights the following advantages of the new hospital:

- the availability of high-level diagnostic facilities
- the global response to emergencies
- the departmental structure

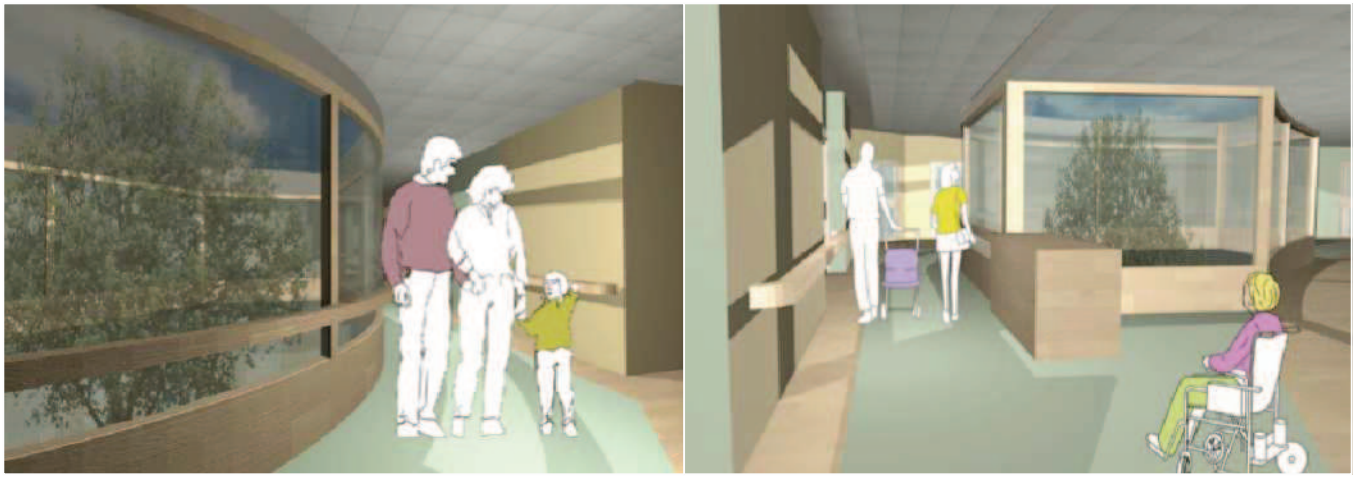


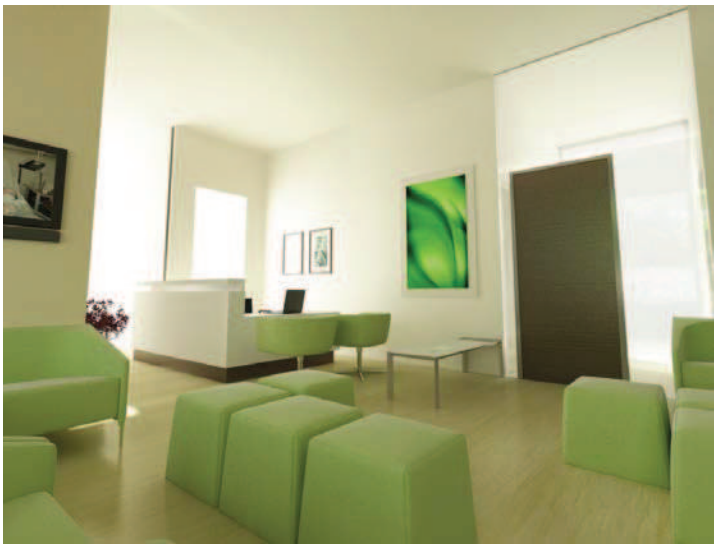
CARE HOME FOR THE ELDERLY (ROMANIA)

Activity: Feasability Study
Client: Ministry of Sanity – Romania
Functions: maison de soins

The research concerns two buildings:
1. A main building with five storeys and 600m ² floor space at ground level. It includes:
    - Basement: eight parking spaces, technical area, warehouse
    - Ground floor: Reception, medical clinic, radiology centre, outpatient clinic
    - First floor: Care centre for cancer treatment, surgery unit, intensive care unit
    - Second floor: Maternity, obstetrics and gynaecology, delivery room, neonatology department
    - Third floor: administration,
2. A secondary structure, dedicated exclusively to geriatrics, spreads over three levels covering a total of 300 m2 at ground level:
    - Ground floor: services, recreational facilities, medical clinic
    - First floor: 12 rooms (each with two beds) – men

Second floor: 12 rooms (each with two beds) – women



HOSPITAL SERRISTORI IN FIGLINE VAL D'ARNO, (ITALY)

Activity: Feasability Study
Client: Region of Tuscany
Functions: Radiology and Surgery Block

New radiology department: the project took into account the need to optimise flows and walkways. The space for waiting areas with outdoor access was adjusted to meet the estimated volumes of the activities. These areas are equipped with separate bathrooms for men and women and bathroom facilities for disabled people. Access from outside has been facilitated and comfortable waiting areas have been provided with extremely functional, modern furnishings. The admissions offices and back office have been positioned in adjacent spaces, quite separate from the area designated for health activities;
New operating rooms department: this consists mainly of two dedicated operating rooms (surgery and orthopaedics) and a plaster room. Operating rooms: these offer dedicated internal access, large rooms and staff filter areas (doctors and nurses).