

Gemelli



Fondazione Policlinico Universitario Agostino Gemelli IRCCS
Università Cattolica del Sacro Cuore

MISSION STATEMENT

2019

Gemelli



Fondazione Policlinico Universitario Agostino Gemelli IRCCS
Università Cattolica del Sacro Cuore

MISSION STATEMENT

2019



	PANDEMIC COVID-19	4
	• Pandemic COVID-19	4
1	ABOUT US	8
	• Governance	9
	• Asset	10
	• Value production	11
2	KEY PROJECTS	12
	• Digital Health Dossier and Electronic Medical Record	13
3	THE NETWORK	14
	• Gemelli Molise	15
	• Mater Olbia Hospital	16
4	RESEARCH	18
	• The Gemelli's recognition path as "IRCCS"	19
	• Research in numbers, Governance IRCCS	20
	• Gemelli Science And Technology Park (G-Step)	22
5	THE CLINIC	24
	• Clinical activity highlights	25
	• Emergency Department	26
	• Departments	28
	• Digestive Disease Center (CEMAD)	36
	• The Diabetes Center	37
	• Oncology at Gemelli: Comprehensive Cancer Center	38
	• Gemelli ART, Interventional Oncology Center - IOC	39
	• Transplants	40
	• Intensive therapies	41
	• Innovation in Surgery	42
	• Innovation in Infrastructure	43
6	PRIVATE PRACTICE	44
	• Private Practice	45
	• Punto Gemelli	46
	• Gemelli Dental Center, Gemelli A Casa (GAC)	47
7	PARTICIPATIONS	48
	• Clinical Trial Center (CTC)	49
	• Gemelli Health System (GHS)	50
	• XBiogem	51
8	THE COMMUNITY	52

SUMMARY

In the previous page:

*"Madonna Litta" (Leonardo Da Vinci), Murales by Andrea Ravo Mattoni (2019),
Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma*

PANDEMIC COVID-19

The emergency

The end of 2019 and the beginning of 2020 were marked by a major health emergency that took on global dimensions: **the Coronavirus COVID-19 emergency**. A highly infectious respiratory disease caused by the virus called SARS-CoV-2 belonging to the Coronavirus family and identified for the first time by the health authorities of the city of Wuhan, capital of the province of Hubei in China, among the patients who had developed pneumonia without a clear cause.

In mid-February in Italy, the first case of COVID-19 was identified in a patient living in Lombardy, the so-called 'Zero patient'. Since then, there has been an escalation in the spread of the infection and, in parallel, the measures taken by the Government to curb its race have followed.

On 11 March 2020, the World Health Organization (WHO) declared the **Pandemic Coronavirus** epidemic due to the rapid and massive spread of the virus outside the containment measures implemented in several countries of the world.

After a month, Italy has overtaken China as the number of deaths for COVID-19, with one of the first levels of infection in the world.

The Gemelli response

In this particular historical contingency, the Fondazione Policlinico Universitario Agostino Gemelli IRCCS, together with many other hospitals in the country, has taken action to respond to the health emergency, fielding doctors, nurses and all the hospital staff with great sense of responsibility and without saving resources.

In order to respond promptly to COVID-19, within a few weeks Gemelli has strengthened specialist assistance to ensure maximum support for the health system of our country and to give a concrete response to the health needs of all citizens.

In particular they were intended some important departments such as gastroenterology, internal medicine, infectious diseases, and enhanced intensive care adding to the offer of the Foundation for the emergency COVID-19 more ordinary beds of Infectious Diseases and Intensive Care in the structure of Columbus Presidium; at the peak, the Foundation has managed to allocate over 800 beds for positive and suspect patients with an enormous effort to reconvert its activities.

Important changes have been made to the emergency room area in order to reduce the risk of spreading the virus and optimize its assistance capabilities. In particular, a dedicated path was started within the DEA with a temporary observation and hospitalization area in support of the Emergency Department and the operational units of infectious diseases and resuscitation.

In addition, a project to strengthen the Microbiology and Virology Laboratory was launched, dedicated to predictive diagnostics, the provision of integrated diagnostic and therapeutic approaches and research on viral and bacterial pathogens, based on the use of innovative technologies and the use of artificial intelligence tools. All this to significantly increase the productivity and speed of execution of tests for COVID-19 on patients with the virus.

Columbus COVID 2 Hospital

The main pillar of the Foundation's response was the reconversion of the Columbus Presidium, in agreement with the Lazio Region, in order to strengthen the activities of the Regional Health System. The transformation of the Columbus Presidium, a facility managed by the Policlinico Gemelli, into



a regional COVID Hospital, to take care of affected patients, or suspected cases of COVID-19, began in March 6th, in order to support the Regional Hub - Spallanzani Hospital.

Within 10 days, the Columbus Presidium was entirely dedicated to welcoming and treating patients with Coronavirus COVID-19 by making available 80 single hospital beds for non-intensive acute care dedicated to patients with infection (infectious disease specialty, pneumology and internal medicine) and 59 intensive care beds dedicated to positive patients.

To ensure the fastest possible activation, a redistribution and recovery plan for healthcare technologies was simulated in two phases: in phase 1 the first 21 Intensive Care beds and 28 single beds dedicated to ordinary hospital stays were activated; in phase 2, ended on March 31st, all the other Intensive Care and ordinary hospitalization stations were completed.

The “COVID19” Research Unit

To support the progress of scientific research as an essential response to the Coronavirus emergency, a specific COVID-19 Research Unit was set up.

The interdisciplinary team has the objective of developing innovative research activities and forging scientific cooperations for the study of the Coronavirus “COVID-19”, in order to be able to better understand it and discover cutting-edge diagnostic and therapeutic methods.

The Marriott hotel for low-care patients

In addition, the Policlinico Gemelli has activated the Marriott chain hotel located in via Moscatti, not far from the Columbus COVID 2 Hospital with single rooms for a total of 162 beds for post-acute low-intensity care patients, awaiting negativization from virus infection.

The hotel has been equipped with health equipment, such as pulse oximeters and instruments for measuring blood pressure and fever and with assistance provided by Gemelli medical and nursing staff and with the support of Gemelli A Casa (see page 47).



The partnership with Eni

A very important partnership was signed between the Fondazione Policlinico Universitario Agostino Gemelli IRCCS and Eni which with an extraordinary contribution supported all the technological investments of the transformation of the Columbus Presidium into COVID 2 Hospital. Thanks to the sensitivity and generosity shown in the most acute moment of a world health emergency, the Eni has thus shown concrete attention towards the sick and the Gemelli medical and health team who have relentlessly ensured the patients suffering from COVID-19 the best possible care in maximum safety. A choice of great value by a Company that is a pillar of the country in support of the health structures that have had the task of facing an unprecedented emergency health situation.



Solidarity and active participation alongside Gemelli, to support doctors and health workers, has done really the difference, allowing the Policlinico to find important resources necessary to face a state of crisis and great risk for the population.

*A special thanks to all those who joined the fundraising campaign "Coronavirus Emergency" from private citizens who promptly supported the Policlinico Gemelli with their donations, to important Institutions such as the **CEI** and the **Bank of Italy**, to Companies such as the **Società Reale Mutua of Assicurazioni**, **Atlantia**, **Edizioni Holding**, **Gruppo Caltagirone**, **G.C.F. Generale Costruzioni**, **ACEA**, **Cattolica Assicurazioni**, **Biagiotti Group**, **Maire Tecnimont**, **Finleonardo**, to private Foundations such as the **Valentino Garavani** and **Giancarlo Giammetti Foundation**, the **Nicola Irti Foundation**, the **Memmo Foundation**, the **Carla Fendi Foundation**, the **Ernst Young Italia Onlus Foundation**, to generous managers and many companies from different sectors.*

*Thanks to **Il Messaggero** for the promotion of fundraising among his readers in favor of the Policlinico.*

A heartfelt thanks to all the doctors, nurses, health workers and researchers who put all their skills and competences into the field, always placing themselves at the forefront without saving energy.

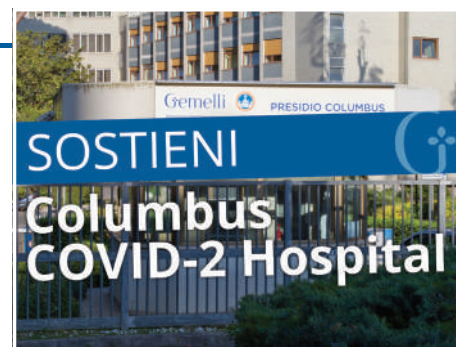
An extraordinary commitment also supported by the administrative structures of Gemelli that made this prompt reaction possible, preparing the technological equipment necessary for the ordinary hospitalization and intensive care units COVID-19 and providing personal protective equipment to always guarantee personnel safety involved in dealing with the serious health emergency.

Fundraising campaign

The opening of COVID 2 and the reorganization of Gemelli departments to take care of affected and suspected COVID patients has been a great organizational challenge, but also a huge financial commitment.

Important investments went to support Intensive Care for technological equipment, for the enhancement of dedicated staff, and not least for the supply of personal protective equipment (surgical and filter masks, overalls, gloves and safety glasses) for the safety of the personnel involved.

Fondazione Policlinico Universitario Agostino Gemelli IRCCS therefore launched a fundraising campaign: "Coronavirus Emergency" by opening two platforms (www.gofundme.com/f/sostieni-il-columbus-covid2-hospital, and dona.perildono.it/gemelli-columbus), as well as the use of its fundraising channels (donaora.policlinicogemelli.it).



Visit of Cardinal Turkson

Welcomed during the daily meeting of the Crisis Unit for COVID-19, Cardinal Peter K.A. Turkson, Prefect of the Dicastery for the Integral Human Development Service, addressed in the 3rd of April a speech of encouragement and support to Gemelli doctors and health workers.

The Cardinal personally brought the greetings and thanks of Pope Francis, for the work done by medical, nursing, and health workers and hospital chaplains of the Policlinico Gemelli.







IRCCS

About us

ABOUT US

Opened July 10th, 1964, area of excellence at which teaching of international level, innovative research and care activities dialogue for the health of patients, and for over 50 years an integral part of the Università Cattolica del Sacro Cuore, the Policlinico Universitario Agostino Gemelli took on the legal form of Foundation from 1st August 2015. A path that, in full continuity with the history of Gemelli, has allowed the acquisition of the autonomy necessary to manage its ever-increasing complexity and face the challenges imposed by a health context in strong evolution.

GOVERNANCE

Board of Directors

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ICT Direction

Paolo Sergi

Read more at:
policlinicogemelli.it

section:

*"The Policlinico/Structure and
organization"*

Board of Auditors

Supervisory Board

Clinical, Educational and Scientific Advisory Committee

Ethics Committee

IRCCS Scientific Committee

Control and Risk Committee

Fondazione Policlinico Universitario Agostino Gemelli IRCCS is organized in two hospital units:
Policlinico Gemelli and **Columbus**.

239 units
of which

85 Complex Operating
Units,
112 Simple Operating
Units and
42 Simple Operating
Area Units



7
Departments

19
Areas



GEMELLI IN NUMBERS*



1.575

Total beds



96.873

Total discharged



about 380

Transplants performed
(kidney, liver, cornea and marrow)



81.826

Access to the Emergency
Department



4.109

Babies born



60.880

Surgical procedures



10.702.953
of which 62% clinical analyses

Outpatient services



203.627

Internal Private Practice
Outpatient services performed
at the Foundation's ambulatories



670.000

Website visits
at policlinicogemelli.it
(from 01/06/2019 to 31/12/2019)



5.315

Number of employees



over 40

No Profit Organizations
operating within the Gemelli



53.747

Hours of training
enjoyed by staff



28,3%

Percentage of opposition
to organ donation



180.000

Online reports



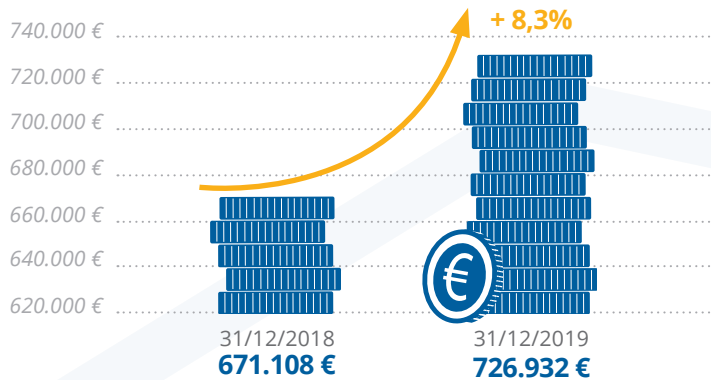
1.513.390

Meals provided
to patients and staff

VALUE PRODUCTION

Value of production and other revenue*

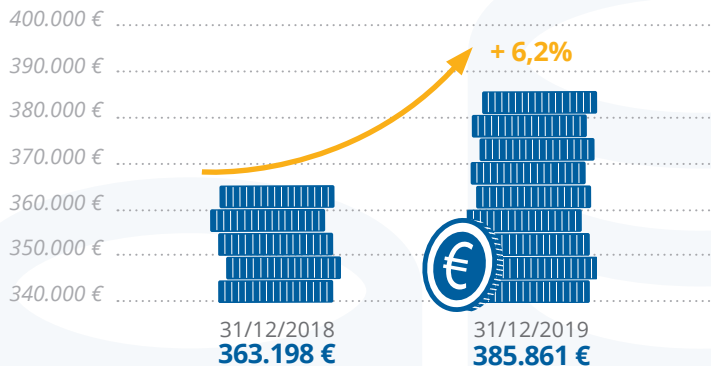
* in thousand of €



During 2019 the value of production grew by approximately 8.3% and the added value by approximately 6% reaching respectively 727 MI € and 386 MI €, moreover the production costs are basically stable (438 MI €) with a slightly lower incidence on the value of production (about 60%).

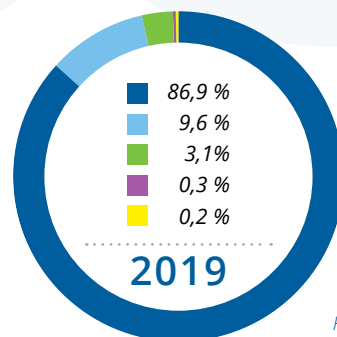
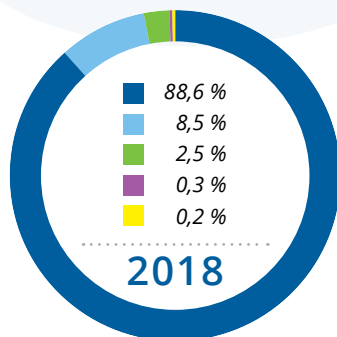
Gross global added value*

* in thousand of €



The allocation of value added was mainly due to the remuneration of personnel costs (substantially in line with the previous year) and of the Public Administration (for Value Added Tax paid on the purchase of goods and services).

Allocation of added value (2018-2019)



Caption:

- Staff remuneration
- Remuneration of the Public Administration
- Remuneration of credit capital
- Community / Environment Remuneration
- Ente System

The remuneration of the community and the environment, stable compared to 2018, includes the donations made and the impact on the environment of the eco-sustainable initiatives produced. The Ente System closes the year with an operating profit of € 0.7 million, equal to 0.2% as an allotment of added value.



KEY PROJECTS

The exponential specialized increase in knowledge and techniques in the clinical-care field in place at a global level requires that innovation be at the center of any management strategy and strategic development of a reality such as the Foundation.

For the Foundation, making innovation also means applying new methods of patient care and management, also developed in cooperation with external companies capable of bringing tangible added value.

Key Projects

DIGITAL HEALTH DOSSIER AND ELECTRONIC MEDICAL RECORD



It's called **"TrakCare"** the new advanced information system of the Policlinico Universitario A. Gemelli IRCCS, successfully launched in **October 2019** for all the wards of the Foundation and the Columbus Presidium.

Accompanied by various functions, including a **bedside electronic medical record system**, which feed the **patient's Health Dossier**, unified management of administrative and care activities, computerized management of drug administration, automated integration with **systems of corporate Decision Support System (DSS) and corporate data warehouse**, the introduction of the new system leads to significant steps forward in the process of digitizing processes and managing corporate information at the Policlinico Gemelli in synergy with the recent recognition of the Foundation as IRCCS (Institute of Scientific Hospitalization and Care) and with the next achievement of the Joint Commission International (JCI) certification.

What was activated in 2019 is **the first step towards a fully digitalized management of the patient's pathways and information** that will be followed step by step, from entering the hospital from the different access points to exiting the same, for each type of contact, both hospitalization, outpatient or emergency room, and in the future in home follow-up.

At any time of the stay in the patient's facility, all professionals will be able to access his structured data, **in compliance with the rules on data protection and privacy**, optimizing care and reducing latencies. All this, guaranteeing the connection to the main regional and national databases.

The release of the system **involved around 90 departments, 3,500 users, around 1,000 workstations, 30 critical services**. The next steps will concern outpatient and DH management, the dissemination of specialist medical records to all areas, the activation of functions to support research protocols and significant optimization functions in the allocation and planning of resources.



90

Departments involved



3.500

Users



about 1.000

Work stations



30

Critical services

Joint Commission International Accreditation Process



In order to strengthen and make systematic the continuous improvement of the quality and safety of the services provided, the Fondazione Policlinico Universitario Agostino Gemelli IRCCS has chosen to adopt the model defined by the Joint Commission International (JCI) standards and to pursue the accreditation recognized by this organization by 2020. The Joint Commission International (JCI) is one of the largest and most prestigious accrediting bodies in the world and the voluntary accreditation process ensures that a health organization meets specific standards in terms of quality and safety, with an application "transversal" in every area. A final accreditation visit (mock survey) by Joint Commission assessors will be scheduled end of 2020. All hospital areas and functions governed by JCI standards will be assessed.



THE NETWORK

Already since 2018, the clinical-care offer of the Fondazione Policlinico Universitario Agostino Gemelli IRCCS has extended beyond the Lazio Region, creating a network of relationships and cooperations that benefit an increasingly large audience of territories and community. From Gemelli Molise to Mater Olbia Hospital, the skills, operational processes, good clinical and management practices developed by the Foundation become development models and best practices for other healthcare experiences.

GEMELLI MOLISE

Gemelli Molise SpA, from December 100% FPG with transformation of the previous Foundation, located in Campobasso, with its **130 beds** and the recognized quality of specializations in the areas of **oncology** and **cardiovascular diseases**, constitutes **an important health reference for the whole South-eastern Italy area**: in addition to providing excellent clinical-assistance activities, it promotes refresher courses, conferences and training events for health sector operators.

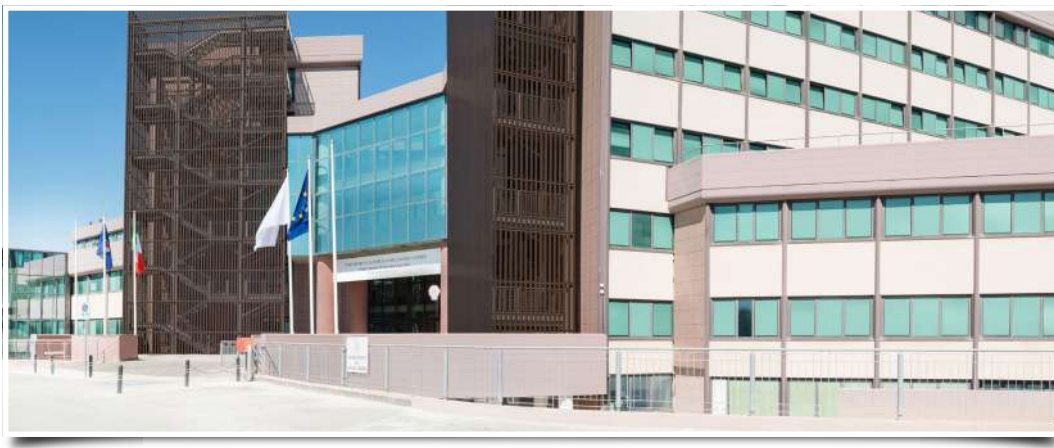
Since **July 2018**, the Fondazione Policlinico Universitario Agostino Gemelli IRCCS has been fully integrated into the clinical-care perimeter of Gemelli Molise and this has made it possible to further improve the quality of the services offered to the Molise territory and neighboring regions, as well as to be able to achieve important synergies in sharing common services, combining two fundamental objectives of greater effectiveness of care and greater efficiency in management.

Since **2008**, it has obtained the **"Women's Hospital" recognition** from the National Observatory on Women's Health (O.N.Da). In 2016 the quality of the services rendered by Gemelli Molise was also certified by the National Outcome Plan (PNE), the tool with which the National Agency for Regional Health Services (AGE.N.A.S) develops the assessment in the Italian Health Service of the outcomes of health interventions.

The hospital is also equipped with a cutting-edge and constantly improving **technology park**.

Since **September 2002**, **'Molise ART' Radiotherapy** has been the only Radiation Therapy Center in Molise, collaborating closely with all the oncological realities of the region and surrounding areas. To date, more than 13,500 patients have been clinically evaluated and the most modern and sophisticated techniques for setting up and executing radiotherapy treatments have been used. Molise ART has a dedicated 4D TC simulator, treatment planning systems that use advanced algorithms of artificial intelligence, Montecarlo calculation and radiobiological optimization. The two linear accelerators are of the latest generation with collimation systems of the radiant beams with millimeter precision, control of the patient's breath, verification of his positioning also of an optical type with body surface reconstruction, robotic treatment table and 3D/4D image verification systems.

The center has always been involved in oncology research and participates in various clinical protocols, also actively collaborating with the Gemelli Molise research laboratories in the field of genomics and radiomics.



Read more at:
gemellimolise.it

Gemelli
Molise



new works^(*) **58**

Scientific publications

(*) with cumulative IF equal to 177,7



6.800

Admissions (Ordinary and DH)



290.000

Outpatient services
(non-hospitalized patients)



130

Total beds

Note: All the data refer to 2019.

Research Projects:

several research lines are active in the field of development of predictive response models in oncology and biotechnology in cardiac surgery.

MATER OLBIA HOSPITAL

Mater Olbia Hospital is the result of the partnership between the Qatar Foundation Endowment and the Fondazione Policlinico Universitario Agostino Gemelli IRCCS in Rome who have decided to combine the skills and experiences to create a cutting-edge and excellent hospital at the service of the Territory of Gallura and throughout Sardegna.

The facility started its first outpatient activities in December 2018, and hospitalization activities began on 1st July 2019.

Already in the first months of activity in 2019, the number of **accredited beds** was **202**, of which **72 for rehabilitation activities**, which are expected to be fully activated in 2020.

The care offer, agreed with the Regione Sardegna, focuses on the pathologies with the greatest epidemiological incidence, more subject to passive mobility, or the phenomenon for which citizens, once diagnosed with a pathology, choose to go to be treated in other Italian regions .

During 2019, **over 900 hospitalized patients were made, including 261 treated in General and Bariatric Surgery, 173 in Gynecology and Senology and 171 in Neurosurgery.**

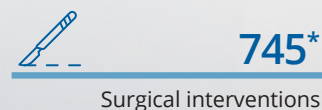
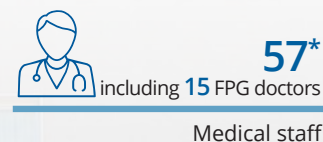
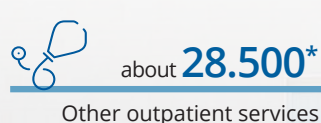
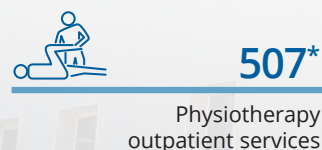
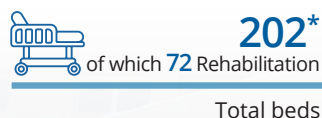
The average hospital stay was 3 days in 2019. Overall, the professionals of Mater Olbia performed **745 surgeries** in 2019, a value destined to be widely exceeded in 2020. Currently **5 operating rooms** are operational, one of which is dedicated to the Neurosurgery sessions and where **an intraoperative CT** has been installed, equipment installed only in three other Italian centers, and which allows the maximum possible precision in cranial and spinal interventions. To this must be added **3 rooms intended for endoscopy procedures**, in the first months of 2020, and another **4 operating rooms, 2 in the main operating block and 2 to be used for day surgery activities**, which will be activated as a consequence of the progressive increase in beds.



During 2019, the preparatory works for the opening, fixed in 2020, of the **Mater Olbia ART Radiotherapy Center**, which will be equipped with **3 machines** for the treatment of pathologies with innovative radiotherapy techniques, continued. In particular, among these, the **Zap-X radiosurgeon robot** will be installed, the third installation worldwide and the first in Italy, which is capable of affecting brain cancer cells and can be used for other head and neck diseases.

Obviously, the achievement of Mater Olbia's mission cannot be separated from the people who work daily in the structure. At the end of 2019, 57 doctors were operating in the facility, including 15 doctors by the Policlinico Universitario A. Gemelli IRCCS and Università Cattolica del Sacro Cuore, who, in coordination with the Scientific Directorate, are called to organize the care pathways in the facility. During 2020 it is expected to reach 101 units of medical personnel.

The same applies to non-medical personnel, which in December 2019 consisted of 139 units (58 nurses, 27 OSS, 14 physiotherapists and 12 technicians, to which are added an additional 25 units of the administrative sector and 2 managers) and who during 2020 will be progressively increased until reaching 349 units.



(*) All data are referring to 6 months.

Research

excellence

RESEARCH

The Research and Innovation activity, carried out by the Fondazione Policlinico Universitario Agostino Gemelli IRCCS, together with the Faculty of Medicine and Surgery of the Catholic University of the Sacred Heart, is an essential asset to develop and continuously improve the quality of health services, clinical assistance and training. In 2018, the Fondazione Policlinico Universitario Agostino Gemelli has been recognized as “research hospital” (Istituto di Ricovero e Cura a Carattere Scientifico, IRCCS) by the Italian Ministry of Health for two research disciplines, “Personalized Medicine” and “Innovative Biotechnology”, which represent the most innovative frontiers in today’s medical sciences, with significant impact on therapies and prevention.

THE GEMELLI'S RECOGNITION PATH AS "IRCCS"

An "Istituto di Ricovero e Cura a Carattere Scientifico" (IRCCS) is a hospital with excellent competences on research in, mainly clinical and translational, biomedicine. Research is important to find cutting-edge results for therapeutic applications in the hospital. It also means that hospitalization and care services of high specialty have the same level of quality, including quality assessment of service provision.

The Gemelli followed a specific procedure in order to be recognized as "research hospital" (IRCCS) by the Italian Ministry of Health.

- **June 2016:** Investigation start date.
- **10th October 2017:** The Lazio Region sends the IRCCS application for the Policlinico Universitario A. Gemelli, confirming the excellence of its activity for the disciplines "Personalized Medicine" and "Innovative Biotechnology", together with the Decree of the commissioner ad acta (03.08.2017) which certifies the consistency of the recognition with the National Health Planning
- **21st December 2017 - 08 January 2018:** Site visit.
- **28th February 2018:** Decree signed by the Minister of Health..
- **07th April 2018:** Publication on G.U. General Series N.81 07 April 2018 and constitutive advertising, with the start of the activity as "research hospital" (IRCCS).

The entire Fondazione Policlinico Universitario Agostino Gemelli received the "IRCCS" recognition for the disciplines "Personalized Medicine" and "Innovative Biotechnology". The Gemelli therefore becomes, as per the statute, the "Fondazione Policlinico Universitario Agostino Gemelli IRCCS".

Research lines

Scientific research in "Personalized Medicine" and "Innovative Biotechnology" is subdivided into **seven Research Lines**:

1. Translational research in personalized medicine for complex chronic diseases.
2. Clinical research in personalized medicine for complex chronic diseases.
3. Sustainability of personalized and predictive medicine in the national health system.
4. Innovative and predictive approaches in the elderly .
5. New frontiers of innovation in healthcare technologies and development of medical-surgical devices.
6. Innovative and personalized approaches in the science of women's and children's health.
7. Innovative biotechnologies and diagnostic and intensive care personalization courses for acute pathologies.

The mission of the IRCCS
is to align modern therapeutic opportunities with the innovative progress of scientific research, identifying "the right cure for the right patient, at the right time".



17.974.275,10 €

Total value of the Research



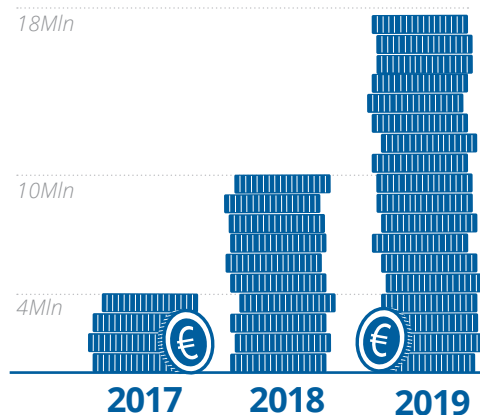
7.463.007 €

Clinical Trials for Profit

RESEARCH IN NUMBERS

The Value of Research in 2019

The research activity carried out by the Gemelli's researchers in 2019 was supported by **67 new non-profit research projects** financed by external parties, for a total contracted amount of over 10 million euros (10,511,268.10 €), to which must be added the **activated clinical trials** (with a turnover of € 7.4 million). The **total value of the research** produced for 2019 amounts to **€ 17,974,275.10**, with an increase of 61.56% if compared to the previous year.



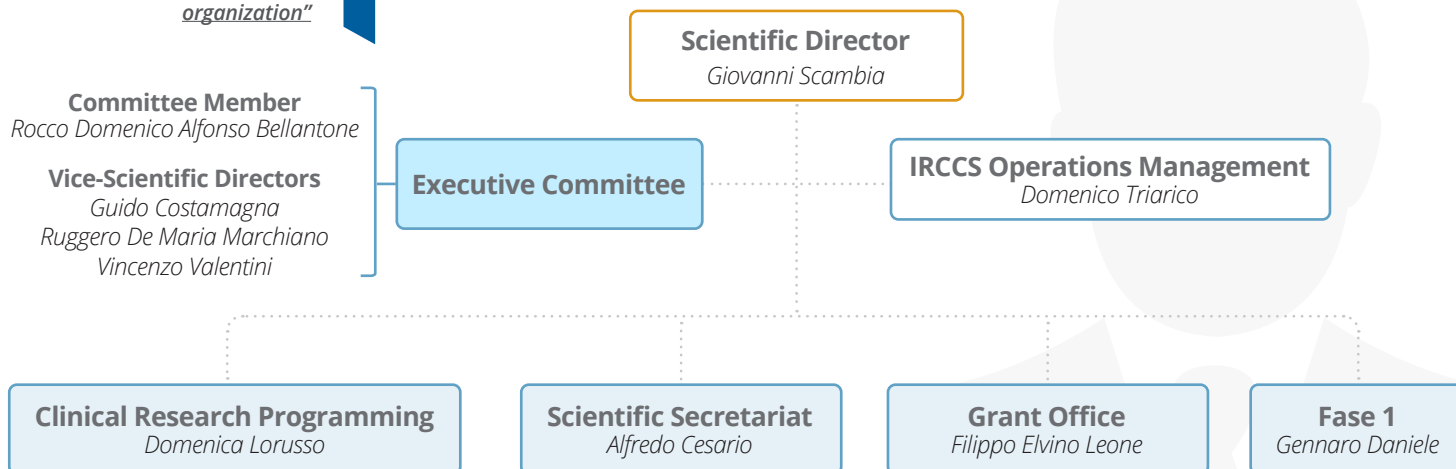
Focus on Non-Profit Research

The value of Non-Profit research stands at a total of over € 10 million, deriving from both Public/Private, National and International Competitive Calls, and from contributions and donations for research activities by bodies accredited in the area. This value demonstrates the high quality and solidity of our researchers' ideas, confirming the Gemelli's role as a promoter of innovation for patients and citizens.

Read more at:
policlinicogemelli.it
section:

"the Policlinico / Structure and organization"

GOVERNANCE IRCCS



Scientific Directorate COU SOU



GEMELLI SCIENCE AND TECHNOLOGY PARK (G-STEP)

The creation of a Scientific and Technological Park was born from the need of the Gemelli to formulate a high-quality scientific proposal that is competitive and sustainable. Providing researchers a direct and rapid access to highly sophisticated tools, qualified personnel and specific resources is an essential condition for developing research projects that have an impact on clinical assistance and technology transfer.

With these intentions, in 2019 the Scientific Directorate designed the **“Gemelli Science and Technology Park” (G-STeP), a network of services to support all stages of development of a scientific research project.**

G-STeP is composed of **20 Research Core Facilities** that provide specific high quality research services. All the facilities can be distinguished by technological themes and modus operandi as follows:

BASIC SERVICES

Basic Lab

It offers services for studies on live cells and cellular metabolism, targeted genetic analysis and analysis of microparticles. The goal is to offer a shared platform of basic research services to all researchers.

Biobank (XBIOGem)

It is a subsidiary company that offers certified storage services (ISO 9001) of biological samples (fresh tissue, paraffin tissue, blood, fluids, cell cultures) in liquid nitrogen, nitrogen vapours, mechanical freezers and storage remote controlled.

Electrophysiology

It offers services for the analysis of electrical signals generated by neuronal, skeletal and muscle-cardiac cells from patients and / or animal models.

Flow Cytometry

It offers services for the detection, counting, characterization, and separation of suspended cells.

Immuno Monitoring

It offers services for the characterization of cell phenotypes, analysis of T-cells lymphocyte subtypes, rapid analysis of HLA haplotypes and customized production of monoclonal antibodies.

Immunohistochemistry & Molecular Biology

It offers immunohistochemical tests on fixed and paraffin-embedded samples.

Microscopy

It offers a wide range of microscopes, spectroscopy tools and high-resolution image analysis resources.

GENERATOR (INFO SCIENCE CENTER)

Bioinformatics

It offers data processing services through computational and bioinformatics models for the study of biological systems at cellular and molecular level.

Data Collection

It offers services in the context of digital data collection.

Epidemiology & Biostatistics

It offers a wide range of services in the field of study design and data analysis.

Real World Data

It offers services for the collection and analysis a large amount of heterogeneous data (Real World Data), to extract useful information for the development of predictive models as well as decision-making support systems.

BIOLOGICAL MODELS

Animal Models

It offers services and consultancies on animal models of infection, immunosuppression, and neurodegenerative diseases.

Cell, Cell Biology & Regenerative Medicine

It offers cell culture services (primary cell lines, stem cells, etc.) for in vivo and in vitro research applications and medical studies (not for clinical use).

Organoids

It offers services for the development of human tumours 3D models, directly from the patient's surgical specimen.

“.OMIC” SCIENCES

Genomics

It offers services aimed at analysing the expression and functions of genes, with the use of Next Generation Sequencing (NGS) technology. Nucleic acid extraction can take place from blood, saliva and tissue samples in order to identify molecular targets that characterize specific human pathologies.

Liquid Biopsy

It offers isolation and analysis services for DNA, circulating neoplastic tumour cells (CTC) and / or other rare molecular species (such as exosomes and micro-vesicles) in human biological fluids.

Microbiota Analysis and Microbial WGS:

It offers services for the analysis, identification, and quantification of bacterial populations in human samples.

Proteomics & Metabolomics:

It offers services for the identification and characterization of proteins and metabolites from a biological organism.

Radiomics:

It offers advanced tools for a quantitative radiomic analysis of bioimaging.

Single Cell:

It offers genomics, transcriptomics and metabolomics analysis services carried out at the single cell level.

Excellence values

5

THE CLINIC

The close integration between medical activity, research and training constitutes the distinctive characterization and the great strength both for the quantity of patients treated and for the clinical areas of the Policlinico Universitario Agostino Gemelli IRCCS.

The centrality of the patient as a person, the implementation of cutting-edge skills, technologies and know-how, the ability to respond to complex care needs through increasingly customized solutions, confirm the distinctive features of the clinical and care activities put in place every day.

Research

CLINICAL ACTIVITY HIGHLIGHTS



81%

Ordinary stay in acute patients Region



19%

Ordinary stay in acute patients Extra Region



91%

Ordinary stay in acute patients SSN



9%

Ordinary stay in acute patients out of SSN



7

Average length of ordinary stay (days)



1.575

Total beds

89,4%

Occupation Rate
(Patients discharged, OS)

Acute Patients

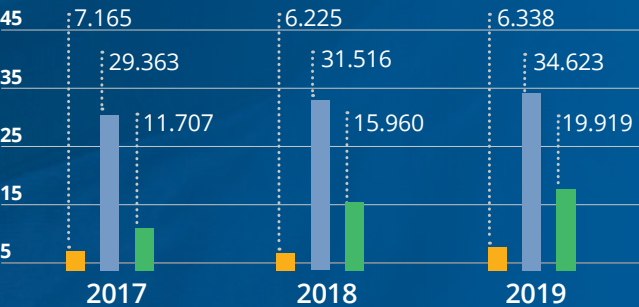
62.558 Discharged in OS
33.566 Discharged in DH
749 Discharged in Rehabilitation

Total Patients Discharged
96.873

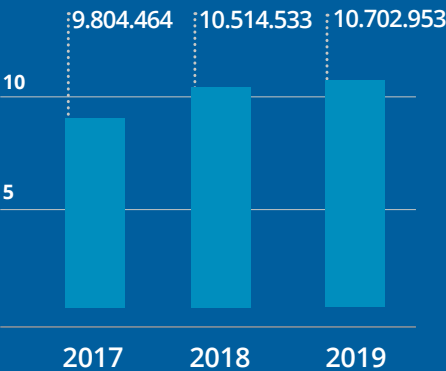
Surgical Procedures

60.880

OS DH Ambulatorials



Outpatient Services



64%

INTERNAL

6.871.841

36%

EXTERNAL

3.831.112

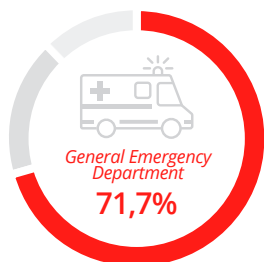
of which

21%

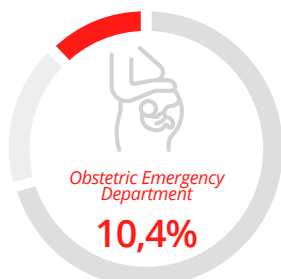
NO SSN

Emergency Department Total Access

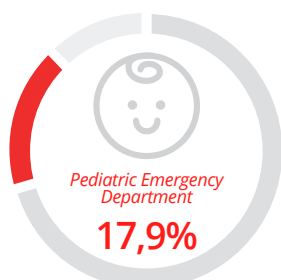
81.826



Accesses **58.645**



Accesses **8.527**



Accesses **14.654**

EMERGENCY DEPARTMENT



24.707

Hospitalized Patients

The Emergency Department of the Policlinico Universitario Agostino Gemelli IRCCS is a **2nd level DEA (Department of Emergency and Acceptance)**, and is the **reference for 7 1st level DEAs and 6 rescue units.**

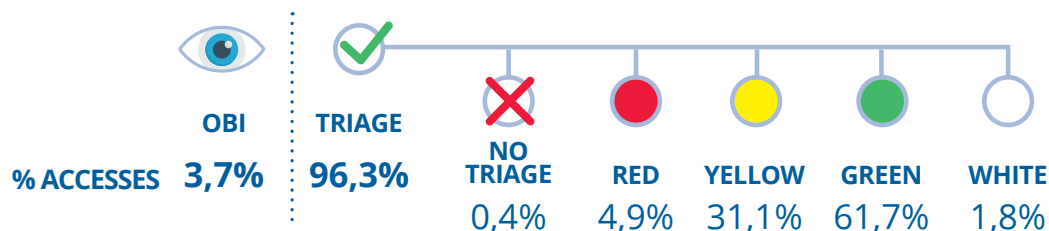
A hospital in the hospital, the first and most immediate contact point between the world of care and the population (**1.5 million people, the reference basin**) who turn to it to be able to respond to any type

of emergency, from the simplest to the most complex, which requires close cooperation between internal medicine and intensive care.

In December 2015, the new ED has been rethought according to an organizational and architectural model that responds to the criterion of the intensity of care, which allows you to "separate" patients who require greater intensity of treatment, offering **greater safety and comfort.**

The Gemelli Emergency Department is equipped with a **24-hour heliport**, which allows the transport by helicopter of major traumatological and medical-surgical emergencies.

Percentages of Accesses to the Emergency Department



Obstetric Emergency Department

Since October 2014 Gemelli has had a new Obstetric emergency department dedicated to women during pregnancy, which allows a short stay, even for a few hours, in equipped and reserved spaces to better resolve cases that could otherwise result in inappropriate hospitalizations or untimely. The presence of midwives, as well as the specialist doctor, makes it easier and more comfortable to observe three or four patients at the same time and understand what the correct solution to their request for assistance is.

Pediatric Emergency Department

The emergency department, born in January 2016 to deal with emergencies of patients aged between 0 and 18, open 24 hours a day, every day of the year. The facility is located next to the general emergency department of the general hospital and has a dedicated entrance appropriately signposted. The spaces of the Emergency Department include an ordinary Visitor Room, an additional Visit Room, intended for the management of urgency and isolation of the highly infectious patient, and an Intensive Short Observation (OBI) space, with two beds, where they are intended patients who need a short hospitalization (6-36 hours).

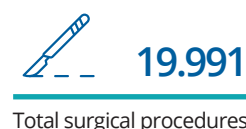
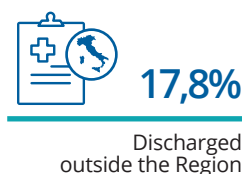
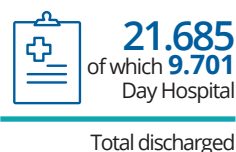


AGEING, NEUROSCIENCES, HEAD-NECK AND ORTHOPAEDICS SCIENCES DEPARTMENT

Director: Prof. Roberto Bernabei

Mission

The Department guarantees an organized and multidisciplinary response to the care and care needs of complex patients (especially the elderly population), with the aim of positively affecting their functional and mental decline and preserving self-sufficiency. Within the Department, the Head and Neck Area and the Neuroscience Area bring skills both to geriatric activity and to the elderly population, constituting a reference of excellence.



Area: Head and Neck

- Otolaryngology
- Eye cancer
- Ophthalmology
- Maxillofacial Surgery
- General Dentistry and Orthodontics
- Odontostomatological Surgery and Implantology
- Cervico-facial Oncology*
- Audiology*
- Gemelli Dental Center*

Area: Neuroscience

- Neurology
- Neurophysiopathology
- Psychiatry
- Neurosurgery
- Child Neurosurgery
- Clinical Center NeMO Rome Adults *
- Memory Clinic (*)

Area: Aging, Orthopedics and Rehabilitation

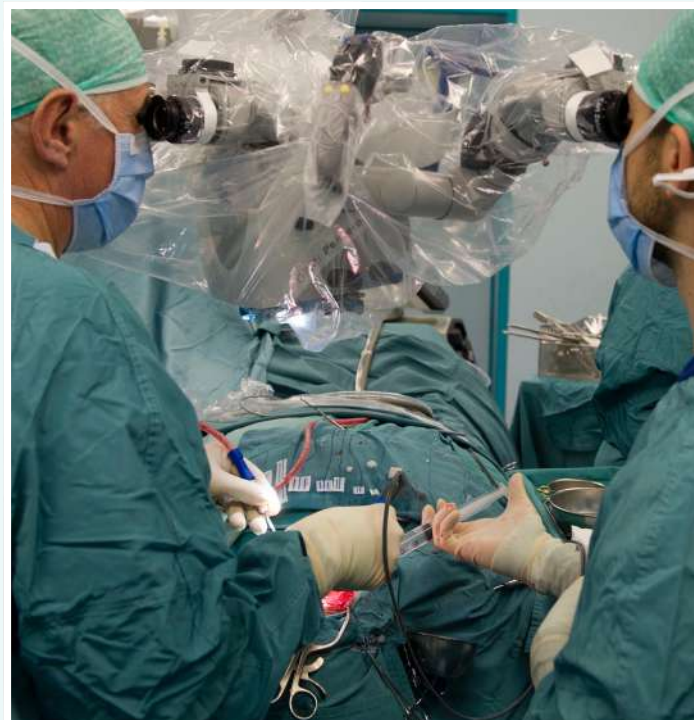
- Geriatrics
- Continuity of Care
- Rehabilitation and Physical Medicine

- Sports Medicine and Functional Reeducation
- Orthopedics and Traumatology
- Spine Surgery
- Columbus Orthopedics and Hand Surgery
- Columbus Geriatric Rehabilitation
- Columbus Cognitive-Functional Unit
- Memory Clinic (*)
- Palliative Care and Central Care Continuity *
- Neurorehabilitation for High Intensity*
- Rehabilitation and Functional Maintenance *
- Hospitalization and Rehabilitation Services *
- Columbus Shoulder Surgery *

* * *

CAPTION:
With * are indicated the SOU.

(*) SOU Inter-Area at 50% with Aging, Orthopedics, Rehabilitation Area.



CARDIOVASCULAR AND THORACIC SCIENCES DEPARTMENT

Director: Prof. Filippo Crea

Mission

The Cardiology and Cardiovascular Surgery Area deals with coronary heart disease, myocardiopathies, valvulopathies, arrhythmias, congenital heart disease of the adult, diseases of the aorta and peripheral vasculopathies, and pays particular attention to heart failure. The activity of the Pulmonology Area concerns a wide range of lung diseases (including emphysema, chronic bronchitis, asthma, bronchial, pulmonary fibrosis), to which is added lung cancer, one of the most frequent and most lethal forms of cancer.



154
of which **10**
of Rehabilitation

Beds



6.007
of which **255**
Day Hospital

Total discharged



114.942

Outpatient services



13,2%

Discharged outside the Region



3.245

Total surgical procedures



1.679

Surgical interventions
Cardiological and Cardiovascular
Surgery Area



1.566

Surgical Operations
Pneumology Area

Area: Cardiology and Cardiovascular Surgery

- Vascular surgery
- Cardiac surgery
- Cardiology
- Cardioanesthesia and T.I.C.
- Intensive Cardiology
- Non Invasive Cardiology Diagnostics Columbus
- Arrhythmology *
- Non Invasive Cardiology Diagnostics *
- Hemodynamics *

Area: Pulmonology

- Thoracic Surgery
- Pulmonology



CAPTION:
With * are indicated the SOU.

(*) SOU Inter-Area at 50% with Aging,
Orthopedics, Rehabilitation Area.

GASTROENTEROLOGICAL, ENDOCRINE-METABOLIC AND NEPHRO-UROLOGICAL SCIENCES DEPARTMENT

Director: Prof. Guido Costamagna

Mission

The close integration between medical and surgical activities characterizes this Department consisting of four different Areas. The wealth of skills and professionalism guarantees a multidisciplinary approach for the diagnosis, therapy and research of different pathologies: oncological pathologies, metabolic digestive and endocrine system pathologies (obesity and diabetes), autoimmune chronic inflammatory diseases, allergic diseases, diseases skin, urological and kidney diseases.



451

Beds



506.674

Outpatient services



29.733
of which 8.787
Day Hospital

Total discharged



20,4%

Discharged
outside the Region



25.893
of which 6.214
Abdominal
Surgery Area

Total surgical procedures

Area: Internal Medicine, Gastroenterology and Medical Oncology Area

- Internal Medicine and Gastroenterology
- Medical Clinic and Vascular Diseases
- General Medicine
- Clinical Nutrition
- Digestive Surgical Endoscopy
- Medical Oncology
- Liver Transplant Medicine
- Columbus Internal Medicine and Gastroenterology
- Columbus Internal Medicine
- Diagnostic and interventional ultrasound of the digestive system *
- Alcohol related pathologies *
- Medicine of peripheral vascular diseases *
- DH Gastroenterology and Microbiome transplantation *
- Allergology *
- Advanced nutrition in Oncology *

Area: Abdominal Surgery

- Digestive Surgery
- General Surgery

- General and Hepato-biliary Surgery
- Peritoneum and Retroperitoneum Surgery
- Emergency Surgery
- General and Liver Transplant Surgery
- Abdominal Surgery
- General Surgery 2
- Proctology *

Area: Endocrine-Metabolic and Dermo-Rheumatology

- Endocrinology and Diabetology
- Endocrine and Metabolic Surgery
- Obesity Pathologies
- Dermatology
- Endocrine Surgery
- Rheumatology Columbus
- Diabetology *
- Osteo-articular Pathologies Columbus *

Area: Urology-Nephrology and Kidney Transplantation

- Transplants of Kidney
- Urological Clinic
- Columbus Nephrology



CAPTION:
With * are indicated the SOU.

(*) SOU Inter-Area at 50% with Aging,
Orthopedics, Rehabilitation Area.

WOMAN AND CHILD HEALTH SCIENCES DEPARTMENT

Director: Prof. **Walter Ricciardi**

Mission

The Department guarantees a response to pediatric needs from birth and guarantees a response to the needs of patients from adolescence to menopause, through the use of advanced technologies and innovative methods of approach to pathology and with gender medicine oriented to extreme customization care in the women's health sector. It is able to assist high-risk pregnancies and uses modern investigation technologies and advanced therapies specific for the mother and fetus, as well as interventions in the uterus for particular malformations or dysfunctions of the apparatus. In 2019 the Center of Integrated Therapies in Oncology was born, specifically for the treatment pathways of cancer patients.

This Center is part of a series of projects dedicated to women's health such as:

- integrated center of senology, specialized in the prevention, diagnosis and treatment of breast diseases (including breast cancer);
- center of medicine and female pelvic reconstructive surgery;
- post-mastectomy breast reconstructive surgery with prosthesis in one operation or with microsurgical flap in one operation;
- center for microsurgical therapy of lymphedema;
- reconstructive surgery after skin cancers;
- plastic surgery after bariatric surgery.



303

Beds



394.514

Outpatient services



32.155

of which **12.938**
Day Hospital

Total discharged



15.738

Chemotherapeutic performances



10.978

Total surgical procedures



20,4%

Discharged outside the Region

BABIES BORN

4.109

TOTAL BIRTHS

3.913



Area: Women's Health

- Oncological Gynecology
- Obstetrics and Obstetric Pathology
- Breast Surgery
- Plastic Surgery
- Hospital Hygiene
- Columbus Gynecological Surgery
- Ovarian Cancer *

- Cervix cancer *

Area: Child Health

- Pediatrics
- Neonatology
- Pediatric Surgery
- Child Neuropsychiatry
- Specialist Pediatrics *
- Pediatric Oncology *

- Pediatric First Aid *
- Spina Bifida and Malformative Uropathies *
- NeMO Roma Pediatric Clinical Center *

Area: Pathological Anatomy

- Pathological Anatomy
- Coordination of Sectoral Activities *
- Gyneco-pathology and Breast Pathology *

CAPTION:
With * are indicated the SOU.

(*) SOU Inter-Area at 50%
with Aging, Orthopedics,
Rehabilitation Area.

EMERGENCY, ANESTHESIOLOGY AND REANIMATION SCIENCES DEPARTMENT

Director: Prof. Massimo Antonelli

Mission

The Department brings together a wide range of Areas and specializations able to guarantee patients and the territory an articulated response to care needs for time-dependent situations and pathologies and for widespread pathologies. The core of the activity of this area is represented by the emergency room for adults and children, which welcomes and assists all patients with acute medical, surgical, gynecological and traumatological interests. Perioperative care is carried out in this Area for patients undergoing surgery in all areas of surgery, from the oncology field to bariatric, endocrinometabolic, pediatric and organ transplants (liver and kidney).



81

Beds



1.619

of which 208
Day Hospital

Total discharged



7,6%

Discharged
outside the Region



8.364

Outpatient services



Area: Emergency Medicine and Emergency Room

- Emergency Medicine and Emergency Room

Area: Anesthesia, Resuscitation, Intensive Care and Pain Therapy

- Anesthesia Intensive Care and Clinical Toxicology
- Anesthesia of General Surgery and Transplants
- Anesthesia of Specialist Surgery and Pain Therapy 1
- TIP and Pediatric Trauma Center
- Anesthesia in Obstetrics, Gynecology and Pain Therapy 2
- Columbus Anesthesia and Resuscitation
- Trauma and Shock



CAPTION:
With * are indicated the SOU.

(*) SOU Inter-Area at 50% with Aging,
Orthopedics, Rehabilitation Area.

DIAGNOSTIC IMAGING, ONCOLOGICAL RADIOTHERAPY AND HEMATOLOGY DEPARTMENT

Director: Prof. **Vincenzo Valentini**

Mission

The Department of Diagnostic Imaging, Oncological Radiotherapy and Hematology includes equipment, resources and structures in which the activities are the result of an intense cooperation of numerous experts belonging to different fields: radiologists, medicinuclear, radiotherapists, oncologists, hematologists, physicists, chemists, radiochemists, biologists, engineers, biometrists.



79

Beds



2.516.387

Outpatient services



3.496
of which 1.024
Day Hospital

Total discharged



8.697

Chemotherapeutic
performances



85.777

CAT scan



18.888

Magnetic Resonances



25,7%

Discharged outside the Region

Area: Diagnostic Imaging

- General Diagnostic and Interventional Radiology
- Radiology and Neuroradiology
- Nuclear Medicine
- Dental Radiology and Columbus Radiology
- Emergency Radiology *
- Interventional Neuroradiology *

Area: Oncological Radiotherapy

- Oncological Radiotherapy
- Health Physics
- Radiochemotherapy *
- Outpatient visits Oncological Radiotherapy *

Area: Ematology

- Hematology and Hematopoietic Stem Cell Transplantation
- Hematology Service and DH

- Hemotransfusion
- Hemorrhagic and Thrombotic Diseases *
- Geriatric Hematology and Rare Hemopathies *
- Chronic lymphatic leukemia *
- Extramedullary lymphoproliferative diseases *

* * *

CAPTION:
With * are indicated the SOU.

(*) SOU Inter-Area at 50% with Aging, Orthopedics, Rehabilitation Area.



LABORATORY AND INFECTIOUS DISEASES SCIENCES DEPARTMENT

Director: Prof. **Maurizio Sanguinetti**

Mission

The Department is one of the sectors with the highest degree of transversality within the Foundation, providing diagnostic and analysis services to all Areas. An area in which timeliness and the time factor constitute a fundamental element of the activity. The most frequently requested exams (about 100 types) are performed in high automation in Corelab and reported on the same day. In the Department there is also the Integrated Infectivology Consultancy Unit which carries out consultancy activities on infectious diseases throughout the Policlinico, with the aim also of implementing antibiotic and diagnostic stewardship programs.

It should also be noted that the Microbiology Laboratory has obtained certification from the National Transplant Center for the preparation of the material to be used in Microbiota transplant procedures, activities of absolute value at the Foundation level. This activity is supported by two separate research projects financed by the Ministry of Health and has been the subject of important scientific work published in the Annals of Internal Medicine.



41

Beds



1.272

of which **644**
Day Hospital

Total discharged



8,1%

Discharged
outside the Region



6.676.421

Total Outpatient service

4.924.699

Internal

1.751.722

External

Area: Laboratory diagnostics

- Chemistry, Biochemistry and Clinical Molecular Biology
- Medical Genetics

Area: Microbiology and Infectious Diseases

- Microbiology
- Infectious Diseases
- Virology *

CAPTION:
With * are indicated the SOU.

(*) SOU Inter-Area at 50% with Aging, Orthopedics, Rehabilitation Area.





Read more at:
cemadgemelli.it

DIGESTIVE DISEASE CENTER (CEMAD)

Director: Prof. Antonio Gasbarrini



over
50.000

Outpatient visits



over
100

Professionals

CEMAD, Digestive System Disease Center, born with the support of the **Fondazione Roma**, in just over two years of activity has established itself as a **national reference point** for the diagnosis and treatment of a large number of Digestive System Diseases, such as **Chronic Intestinal Inflammatory Diseases, tumors, malformations, and degenerations that affect the digestive tract and related organs such as the liver, biliary tract and pancreas.**

Among the **main research activities** developed at CEMAD, a national reference center for the treatment and diagnosis of diseases of the digestive system, there is the study of the intestinal microbiota and its modulation for therapeutic purposes.

The study of the composition of the intestinal microbiota is the basis of numerous research projects that have enabled the identification of particular “microbial signatures” in various pathologies, not only gastrointestinal, with implications for the identification of pathogenesis mechanisms and new “targeted” therapeutic strategies in the context of personalized medicine.

The center is also the promoter of **numerous research projects on faecal microbiota transplantation (FMT)** with various objectives including standardization and dissemination of the technique and expansion of current clinical indications.



CEMAD is also **the reference center for Chronic Inflammatory Bowel Diseases (IBD).**

For the management of these pathologies, a personalized approach has been developed where the patient, in its entirety and complexity, is placed at the center and evaluated according to the needs by a multidisciplinary team of specialists. Among these, there are also nutritionists and psychologists who take charge of the patient by accompanying him on the long journey that characterizes complex chronic diseases such as IBD.



over
12.000

Nutritional evaluations



over
30.000

Endoscopy and echoendoscopy



17.000

Diagnostic and interventional
ultrasound scans



over
2.500

Day hospital



over
4.000

Breath tests

SPECIALIZATIONS AT CEMAD

- *Gastroenterology*
- *Diagnostic and operative digestive endoscopies*
- *Diagnostic and interventional gastroenterological ultrasounds*
- *Breath test, food intolerances*
- *Nutritional advice*
- *Dietetics*
- *Hepatology*
- *Pancreatology*



THE DIABETES CENTER

Director: Prof. Alfredo Pontecorvi

The Gemelli Diabetes Center deals with research for the study of the interaction between diabetes and mechanisms concerning platelet aggregation and coagulation and its potential involvement in the pathogenesis of complications, especially peripheral arterial disease.

Furthermore, studies are active to identify new early markers, indicators of micro and macroangiopathic complications.

As regards gestational diabetes, studies are underway for the use of technology, in particular the continuous monitoring of blood sugar, for the clinical definition of the metabolic structure during gestation.

A cooperation is active with the CNR for the definition of algorithms that can govern the infusion of subcutaneous insulin therapy.

Finally, also through cooperation with international centers of excellence, a program is active for the redefinition of cardiovascular involvement in diabetes and its treatment. There is the Clinical-Assistance Path of the Policlinico Gemelli for the care of the patient with diabetic foot and for the management of diabetes during pregnancy.

With regard to type 2 diabetes, patient management is global from a metabolic, endocrinological and internal level point of view, with proven experience in the use of new diabetes drugs, including the most innovative ones through the execution of clinic trials.



Read more at:
policlinicogemelli.it
 section:

**"Centers / Comprehensive
 Cancer Center"**



over
50.500

Total patients



over
16.500

Hospitalized patients



over
34.000

Outpatients



about
1.200.000

Outpatient services

ONCOLOGY AT GEMELLI

Since its establishment in 1964, Gemelli has always dedicated pioneering attention to Oncology and over the years has developed an integrated network of reception, diagnosis, therapy and rehabilitation services, putting in place a continuous capacity for innovation. Always aware that assistance to the cancer patient does not only concern the management of the treatment of the disease, but requires a "global management", aimed at recognizing and alleviating psychological and relational problems, which can influence the therapeutic path.

COMPREHENSIVE CANCER CENTER

Director: Prof. Giampaolo Tortora

Starting from this approach philosophy, which is expressed in the avant-garde activity of Medical Oncology, Surgery, Interventional Radiology and Radiotherapy, Gemelli has put in place the **Comprehensive Cancer Center** to structure in an even more organic way all the operating units and services that carry out oncological activities within the Foundation, strengthening the principle of global care throughout the patient's clinical-care path.

This through staff with integrated skills, professional figures such as the psycho-oncologist and nutritionist, reception programs and humanization of care. The Comprehensive Cancer Center of the Policlinico Universitario A. Gemelli IRCCS is home to a structured basic and translational research on cancer combined with an integrated portfolio of services and services that embrace the patient's entire clinical-care path. The clinical-care pathways in place for cancer patients, specific for each disease, favor a complete integration between the various specialists, according to a multidisciplinary approach centered on the patient.

The coordinated activity with all the structures of the Policlinico allows us to offer a global response to the patient's health demand, making use of the most advanced equipment, useful both in the diagnostic phase (latest generation multilayer CT, PET-TC) and in the therapeutic phase (three-dimensional conformal radiation therapy, modulated intensity radiation therapy and stereotaxic radiation therapy, drugs and treatments that are increasingly personalized on the molecular target).

Patient management is taken care of by the **Tumor Boards**, multidisciplinary and multi-professional groups made up of all the specialists involved in the management of a particular tumor pathology, who meet weekly to discuss clinical cases and make shared decisions on the diagnostic-therapeutic path. more appropriate to adopt. The latter makes use of the figure of the Oncological Care Manager, facilitator of contacts between the Patient or family members / caregivers and the members of the Tumor Board at each stage of the clinical path, through support for the operational management of the path itself. The platform allows you to organize and manage the work of the Tumor Boards for the discussion of clinical cases, making available to the multidisciplinary group all the examinations, images and information necessary for the discussion of the diagnostic-therapeutic process.

Continuous research is a fundamental component of the holistic approach to the patient and his needs. Research aimed at strengthening the possibilities of intervention of precision medicine, through the identification and selection of patients with specific tumor characteristics and the use of the different "weapons" available, chemotherapy, molecular target drugs, immunotherapy, radiotherapy, in a combined and integrated way, according to a true and ever more specific personalization of the treatment.

GEMELLI ART

(ADVANCED RADIATION THERAPY)

Director: Prof. Vincenzo Valentini

With the inauguration, in June 2019, of the highly advanced MRIdian high-tech treatment room and the update of the new hybrid Radiotherapy equipment with Magnetic Resonance, the **Gemelli ART (Advanced Radiation Therapy)** confirms itself as a national and international reference point in the field of Oncological Radiotherapy.

The Center, equipped with **cutting-edge technologies and research laboratories**, in addition to the areas dedicated to therapies, has training spaces for doctors and operators and places for information and for listening to patients, which make it one of the European principals most accredited in the treatment of tumors.

The Gemelli ART offers patients the most advanced clinical assistance and the best therapies, making available the most innovative technologies, both in outpatient and hospitalization, as needed. Highly specialized treatments are proposed using **cutting-edge radiotherapy techniques which, by combining advanced imaging and radiotherapy, guarantee extreme precision, personalization of care**, organ preservation and function, guaranteeing **greater healing opportunities**.

The high level of innovation and the number of technological instruments active at Gemelli ART allow a very high standard of service ranging from the **reduction of waiting times** to the possibility of customizing the patient's treatment times in an extremely versatile way, according to his needs.

Most of the patients were followed in a **multidisciplinary context**, through discussion of the problems of the individual patient in meetings between the various specialists involved in order to propose to each patient the treatment strategy most appropriate to his clinical situation and to help him in taking the most appropriate decision for his need.

INTERVENTIONAL ONCOLOGY CENTER - IOC

Inside the Gemelli ART there is the Center for Interventional Oncology which, with its two interventional rooms and a dedicated dosimetry, offers **interventional radiotherapy treatments (brachytherapy)** and interventional oncology procedures such as positioning Spacers and fiducials useful to improve accuracy and tolerance of external beam radiotherapy.

The high number of patients and the wide range of care especially oriented especially to gynecological, prostate, skin and head and neck treatments, place the Center as a reference structure in the Italian and international scene. Furthermore, with its training school in interventional radiotherapy (INTERACTS - INTERventional Radiotherapy ACTIVE Teaching School), the structure is accredited as a training center by the International Atomic Energy Agency (IAEA) and by the Brachy Academy.

In 2019, the IOC received the **Patients' Digital Health Awards**, an award promoted by the Digital Health Academy in cooperation with more than 40 Patient Associations, for the **MISSION (MultiSenSory Integrated System for patient cOmpliance improvement) project**. In fact, the therapy room offers a multisensory environment that can be customized by the patient to better experience the experience of interventional radiotherapy.

Read more at:
gemelliart.it



35.000*

Radiotherapy sessions



25.000*

IMRT (Modulated Intensity
Radiotherapy) sessions



20.000*

Radiotherapy visits



1.000*

Interventional Radiotherapy
Procedures (brachytherapy)

(*) rounded values.





75

Beds dedicated to transplants



32

Liver transplants



62

Kidney transplants
(42 from deceased donor,
20 from living donor)



166

Hematopoietic
stem cell transplants
(76 self-transplants and 90 allografts,
between consanguineous and
non-consanguineous)

TRANSPLANTS

The Gemelli transplantation activity is carried out at **6 Complex Operating Units**: COU General and Liver Transplant Surgery, COU Liver Transplant Medicine, COU Kidney Transplants, COU Nephrology, COU of Hematology and Hematopoietic Stem Cell Transplantation and COU of Ophthalmology. There is also a Transplant Center which deals with the coordination of organ harvesting and transplantation.

LIVER TRANSPLANTS

The Policlinico Gemelli is one of the Liver Transplant Centers of the Lazio Region and is also the Unique Liver Transplant Center of the Abruzzo Region in 32 liver transplants in 2019. The surgical organ harvesting team received 49 multi-organ harvesting missions at the headquarters in the hospitals of the Lazio region and other regions; the organs removed were then used both by the Gemelli Transplant Center and by the other Centers.

KIDNEY TRANSPLANTS

In 2019, 62 kidney transplants were performed, 42 from a deceased donor and 20 transplants from a living donor, placing the Foundation in 1st place in Lazio among the kidney transplant centers. In addition, also in 2019, the Gemelli is in 1st place in the Central South for the activity of kidney transplants from a living donor. This result can be explained by the continuous organizational and innovative effort started in 2016, after the birth of the Kidney Transplant Operational Unit. The organizational restructuring has offered patients with patients with chronic renal failure modern models of kidney transplants, not very common in the regions of Central and Southern Italy, such as incompatible ABO living donor transplants, cruciate living donor transplants between hyperimmune couples and transplants as a preventive living donor, that is, before entering dialysis.

BONE MARROW TRANSPLANTS

The bone marrow transplants activity, started since 1988, is accredited according to current legislation and complies with the GITMO (Italian Bone Marrow Transplant Group), EBMT (European group of blood and bone marrow transplants) and JACIE (Joint Accreditation Committee- ISCT & EBMT). The activity covers all types of hematopoietic stem cell transplants from the simplest, such as autologous transplantation (the patient receives, after high-dose chemotherapy, his own cells that have been taken from the marrow and then assigned cryopreserved) to the most complex, such as allogeneic transplantation from an unfamiliar donor that can be performed with haematopoietic stem cells taken from the bone marrow or peripheral blood by apheresis or from umbilical cord blood.

CORNEA TRANSPLANTS

The Ophthalmology Clinic performs all types of corneal transplants: perforating keratoplasty, anterior lamellar, posterior lamellar. In recent years the number of transplants has increased progressively over 500 in the last 5 years. Among the various types of corneal transplants, the ultra-thin posterior lamellar transplants "DMEK" is highlighted, for which the Ophthalmology Clinic ranks among the first in Italy.

INTENSIVE THERAPIES

Over the years, the Foundation has structured a complete offer of aids for intensive care, which can now meet the needs of all types of patients, from the newborns, to the post-surgical patient, to emergency interventions. This is thanks to a continuous specialization of medical and healthcare personnel, but also thanks to an attention and a continuous investment in the personalization of responses to needs.

TIN - NEONATAL INTENSIVE CARE

The **Neonatal Intensive Care Unit (TIN)**, **Sub-TIN** and **Neonatal Pathology**, excellences of Gemelli, since 2018 **guarantee access to parents 24 hours a day**, with the aim of promoting closer contact between parents and premature babies. This also takes place through **"Kangaroo mother care"**, the practice of providing continuous skin-to-skin contact between parents and infant, thus promoting breastfeeding and reducing hospitalization times.

TIP - PEDIATRIC INTENSIVE CARE

The Gemelli Intensive Care Unit and Pediatric Trauma Center (TIP) has just been completely renovated to make it more performing and welcoming. It was the first in Italy to open its doors to the families of young patients for most of the day. In addition to managing all pediatric medical and surgical emergencies, it is the first national Pediatric Trauma Center by number of hospitalizations. It has **8 intensive beds** where **around 600 children and teenagers** are treated annually.

REANIMATION, INTENSIVE THERAPY AND CLINICAL TOXICOLOGY

This operating unit includes **Reanimation (20 beds)**, **TIPO (17 beds including 3 at the Columbus Presidium)** and **TINCH (10 beds)**. The operating unit treats all emergencies and the most serious pathologies involving organ failure, treats major trauma and offers the most advanced aids for the treatment of circulatory shock, refractory cardiac arrest and severe respiratory failure including treatments of extracorporeal circulation and the most modern mechanical ventilation techniques. The volume of hospitalizations reaches 1000 cases / year. The Poison Control Center is an integral part of this 24-hour service, offers telephone consultancy for all toxicological emergencies and is the regional center for antidotes.

STROKE UNIT - INTENSIVE NEUROLOGICAL THERAPY

The Stroke Unit, **Level III Hub**, has **8 beds** and is a convergence point for all the most serious patients, where the most advanced procedures for stroke therapy can be implemented, such as endovascular interventional procedures.

TIC - CARDIOSURGICAL INTENSIVE THERAPY

It is an **8-beds** intensive care unit for hospitalizations immediately following surgery, where a team of cardioanesthesiologists assisted by specialized nurses operates. Together with the 14 beds of Cardiological Intensive Care, it constitutes an integrated, technologically advanced center, which allows you to modulate the intensity of care, guaranteeing patient accessibility and safety through better usability and integration of information.



103

Total beds



The beds for single Intensive Care

TIN.....	32
TIP.....	8
TIPO.....	17 ^(*)
REANIMATION.....	20
TINCH.....	10
TIC.....	8
STROKE UNIT.....	8

^(*) of which CIC 3



INNOVATION IN SURGERY

CLASS

In the last twenty years, thanks to scientific research and the introduction of new technologies, surgical techniques have been profoundly revolutionized: if on the one hand endoscopic approaches (laparoscopy, robotic surgery and hysteroscopy) are today the gold standard for the treatment of many gynecological diseases, on the other, integrated treatments represent an example of personalized medicine for patients suffering from gynecological tumors. These therapeutic realities take place in the **CLASS operating unit**. Inaugurated in September 2018, it extends for about square meters. 950 and has four large rooms available beyond the spaces necessary for their operation such as material storage spaces, recovery rooms and staff rooms. Each room has an average area of approximately sq m. 50 and is equipped with the latest technological standards and **systems engineers such as 4k, 3D and infrared technology for surgical vision** and complete multimedia integration for the recording and **streaming of live surgery**. The continuity of the operating activity carried out 6 days out of seven made it possible to perform a total of **3,417 surgical procedures in 2019, of which 1,879 were laparoscopic and 1,538 laparotomic**.

GEROME

Today Gemelli is one of the few hospitals in the world to have **two surgical robots**, used for urological and gynecological interventions, but also for general and thoracic surgery.

By putting technologies and know-how gained by the staff in a coordinated way, the **GeRoMe (Gemelli Robotic and Mentoring center)** was set up, a Robotic Surgery Center that stands as a national and international reference in applied Robotic Surgery, in Research, in Training and Mentoring in Robotic Surgery.

The simultaneous presence of all the robotic platforms available on the market makes the GeRoMe Center unique, and constitutes an important step towards a new concept of Personalized Robotic Surgery, enhancing the use of the different robotic platforms available.

In 2019, **over 700 robotic interventions** were performed.



INNOVATION IN INFRASTRUCTURE

Thanks to its transversal and multidisciplinary approach, the Fondazione Policlinico Universitario Agostino Gemelli IRCCS encourages the innovation of its infrastructures in order to improve its medical and care offer more and more. Here are the main projects of 2019.

Private Hub

As part of the conversion works of the former Protected Residence, by September 2020 the construction of a medicine center (Hub) is planned for the Private Activity. The complex will host over 30 specialist clinics and there will be an area of diagnostic imaging with a 3T MRI, a CT scan, ultrasound and a mammogram.

New Building for Health, University and Research Activities

The new building will be the result of the merging of the needs of the Health and University areas: the foundation stone will be laid in 2021. It is an important work, also in terms of size, with an area of almost 30,000 square meters, which it responds to a logic of integration between research, training and assistance according to an organizational model centered on the patient. The plans for health activities (from 4th to 10th) will house outpatient spaces, Day Hospitals and Wards, with double or single rooms for 200 total beds. From an architectural point of view, the introduction of the “wells of light” (window modules placed in the lateral spines), which allow natural light to filter through, and the creation of a reception point at the entrance of each hospital ward, will allow to humanize spaces for the benefit of patients and their families. The building will also host a new university area (from floor 0 to floor 3), with the unification and reorganization of the laboratories of the biological institutes and with new spaces for the departments.





PRIVATE

PRIVATE PRACTICE

With the introduction of the Private Activities and Customer Service Department, in 2016 a strong boost was given to the organic structuring of the activities aimed at patients who wish to benefit from the care and assistance services of the Policlinico Gemelli in private form. The Policlinico Universitario Agostino Gemelli IRCCS makes its range of outpatient and surgical and hospitalization activities available to private patients, allowing the patient to choose the professional who will follow him during his care path.

PRIVATE PRACTICE

The Gemelli Private Practice is aimed at patients who personally bear the costs of healthcare services and those who are covered by supplementary funds and insurance.

During 2019, the offer of services structured by the Foundation for patients who choose to access services from private individuals has grown: a wide range of outpatient, surgical and hospitalization clinical activities that allow the patient to resort to services by choosing the professional who will follow him in his care path.

In addition to the classic diagnostic or therapeutic services, **the proposal for private activity is organized in prevention programs** that allow you to have a complete, multidisciplinary and personalized picture of a specific state of health.

The courses can have the preventive purpose to provide a general picture of health even in the absence of symptoms or be aimed at identifying a complete diagnosis; there are also paths related to nutrition and wellness..

CHECK UP

From **October 2019** the project of the new area dedicated to Check Up at the Columbus Presidium was started. The area has been totally renovated and made even more comfortable for everyone: patients, carers and visitors.

By means of the check ups, identification and early diagnosis of certain pathologies is achieved through specific laboratory analyzes, diagnostic tests and specialist visits.

Thanks to the experience and competence of the specialist doctors of the Policlinico A. Gemelli, it is possible to develop **personalized courses**, supported by the figure of the **Tutor Doctor** to offer a final clinical evaluation relating to the patient's overall health.

CONVENTIONS

There are 35 agreements at the Foundation with the main players in the intermediated healthcare spending sector. Through these agreements it is possible to access the range of clinical activities offered by the Foundation in the form of direct assistance (with payments fully or partially paid by the Supplementary Healthcare Fund or by the Insurance) and indirect assistance (with payment of subsidized rates totally charged to the patient).

In 2019 hospitalizations carried out under agreements with Supplementary Healthcare Funds and Insurance are **72% of the total hospitalizations** carried out in Private Activity, with a growing trend compared to the previous year (over 200 hospitalizations approximately).

Read more at:
privato.policlinicogemelli.it



203.627

Outpatient services



Gemelli **64**

Columbus **34**

Outpatient specialties



Gemelli **705**

Columbus **147**

Doctors engaged in
private outpatient activities



29.071

Monthly calls to the CallCenter
06-8881 8881

Read more at:
privato.policlinicogemelli.it



91
of which **16**
at CIC

Beds

Read more at:
prenoting.policlinicogemelli.it



25.000

Registered users



35.000

Online Reservations

Read more at:
privato.policlinicogemelli.it/
punto-gemelli-san-basilio/



PRIVATE ACTIVITY IN RECOVERY REGIME

During 2019, the offer of services related to private hospitalization activities developed on the basis of three main directives:

1. Increase in solvent beds: from 79 to 91.
2. Review of organizational flows with direct effects on patient retention and satisfaction.
3. Greater involvement of doctors (over 400 hospitalization doctors).

The hospital stays are around 6,000. Of these, 87% in Gemelli and the remaining 13% in Columbus. The most requested specialties are: Gynecology, General Surgery and Orthopedics.

PRENOTING GEMELLI

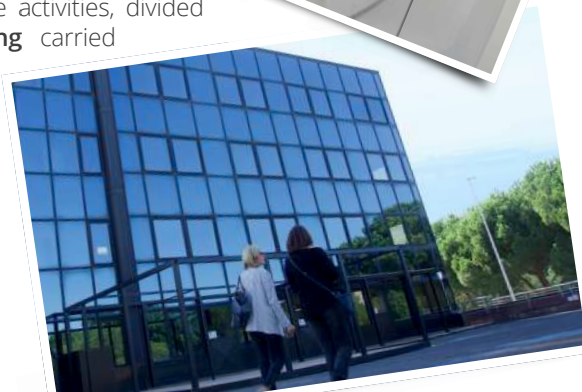


Policlinico Gemelli has created a web/app platform for its users to access their private business services. Booking Gemelli is **an App for Android and iOS** and a website that allows anyone, **24 hours a day and 7 days a week**, to book and pay for a visit or exam at the Policlinico Gemelli in a private regime. All this has an immediate benefit on the **reduction of queues at the waiting desk** and allows you to better manage reservations and cancellations with positive impacts on waiting lists. With Booking Gemelli you can choose the service or the doctor, check the availability and the cost in total transparency, book the reservation and cancel it with a click.

PUNTO GEMELLI

"Punto Gemelli" is the first external outpatient facility of the Policlinico Universitario Agostino Gemelli IRCCS opened in Rome in the San Basilio district, where specialist visits are carried out and clinical diagnostic and laboratory activities carried out not in agreement with the SSN.

The outpatient facility, where a team of specialists from the Policlinico Gemelli operates, is spread over an area of 500 square meters dedicated entirely to healthcare activities, divided into three specific areas: **diagnostic imaging** carried out by means of TC64 layers and RM1, 5T; diagnostic imaging by X-ray, CT-Con Bine, Mammografo, MOC, 3 ultrasounds, one of which specializes in gynecology; clinical analysis laboratory; specialist visits and clinical check-ups: Diabetes, Heart, Thyroid, Celiac Disease, Liver, Gynecological and Senology.



DENTAL CENTER: GEMELLI DENTISTRY

Starting from **March 2019** the dental department Gemelli Dental Center is managed by "Teeth and Health" which is responsible for creating its own brand Dental Centers and dental departments within hospitals and outpatient clinics, dealing with all organizational and bureaucratic aspects, from the planning and operational management of the activity.

The Dental Center supports its patients through the provision of any dental service thanks to its team of professionals (dental doctors, dental hygienists, etc.) experts in the various branches of dentistry, including: conservative dentistry, child dentistry, cosmetic dentistry, sedation dentistry, orthodontics, pathology and oral medicine, dental prosthesis, odonto-stomatological surgery, endodontics, gnathology, periodontology, dental hygiene, implantology.

The Dental Center is equipped with the most modern technologies such as an intraoral scanner: a modern system for detecting dental impressions that avoids the annoying paste that is defined as suffocating by many and reduces time by the dentist by 50%, or 3D radiology, CONE BEAM, that thanks to a very low dosage of waves, it allows (if the dentist finds particular urgent needs) an immediate diagnostic evaluation of important dental pathologies.

Furthermore, at the Center we design and manufacture, starting from 3D printed study models, mobile prostheses made with CAD-CAM and 3D printing techniques, but also individualized devices and transparent aligners. Finally, in combination with virtual programming, it is possible to carry out guided insertions of implants without flaps and without sutures.

Read more at:
[privato.policlinicogemelli.it/
gemelli-dental-center/](http://privato.policlinicogemelli.it/gemelli-dental-center/)



1.000

Patients



3.289

Dental performances

GEMELLI A CASA

Gemelli a Casa is the **private home care service** born out of the partnership between the Policlinico Universitario Agostino Gemelli IRCCS and the OSA Cooperative - Health Operators Associates, an Italian player with 35 years of experience in the social and health sector. Launched in **October 2019**, it offers advanced responses to citizens' health needs, ensuring a global and integrated management in the most welcoming and familiar place: your home. Gemelli a Casa makes available to patients **a multidisciplinary team** - made up of doctors, nurses, physiotherapists, social and health workers and rehabilitation - guaranteeing high quality standard services thanks to the Individualized Assistance Plan (PAI).

From blood sampling to therapies for people discharged from the hospital or suffering from chronic diseases, Gemelli a Casa guarantees patients and their family members a continuity of care and a plurality of services on a clinical, health, social and psychological level. The services, in fact, range from specialist to post-acute rehabilitation and maintenance treatments, from occupational therapy to speech therapy through palliative care. In addition to the non-self-sufficiency, **specific performance packages** have been identified, including those for the cardiology area (sampling, examination, ECG, ultrasound), pneumology (examination, spirometry, EGA), orthopedic (examination, standard pre-hospitalization, infiltrations). The data recorded since the start of the service are more than positive. In the first three months of activity, there were **over 1,500 calls to the toll-free number** that provides users with all the information to activate the services. The contacts translated into **over 6,500 home delivery services**, with a conversion rate of estimates exceeding 92% (January 2020 data).

Read more at:
gemelliacasa.it



*the best care
in the best place*



over 1.500*

Call toll free 800 132 688



over 6.500*

Home delivery services

(*) Data Ott-Dic 2019

Clinical Trial Center SpA

Company controlled by the Fondazione Policlinico Universitario Agostino Gemelli IRCCS and owned by Principia SGR, active in the context of profit clinical trials conducted mainly by researchers from the Gemelli Foundation.

GAC (Gemelli A Casa)

Gemelli a Casa (see page 47) is the private home care service born from the partnership between the Fondazione Policlinico Universitario Agostino Gemelli IRCCS and the Cooperativa OSA - Operatori Sanitari Associati.

GHS (GEMELLI HEALTH SYSTEM)

Company wholly owned by the Fondazione Policlinico Universitario Agostino Gemelli IRCCS, focused on the design and manufacture of Special Medical Foods, but also of complex supplements and medical devices.

XBioGem

Company born from the partnership between the Fondazione Policlinico Universitario Agostino Gemelli IRCCS and BioRep (Sapio Group), which provides laboratory services and the collection, conservation and distribution of human biological material, guaranteeing the highest levels of quality and safety.

PARTICIPATIONS

Laying the foundations for a possible network of relationships and cooperations that benefit an increasingly large audience of territories and communities, Gemelli in recent years has started the development of some successful spin-offs in different areas. The skills, operational processes, good clinical, care and management practices developed by the Foundation thus become development models for competitively addressing the national and international market.

CLINICAL TRIAL CENTER (CTC)

Clinical Trial Center SpA, a company controlled by the Fondazione Policlinico Universitario Agostino Gemelli IRCCS and owned by Principia SGR, is active in the context of profit clinical trials conducted mainly by researchers from the Gemelli Hospital. During 2019 the volumes of profit studies managed by CTC SpA increased significantly.

More than 200 profit studies evaluated by the Foundation's Ethics Committee involved CTC SpA in the various project start-up phases, an increase compared to the 155 studies of 2018.

In economic terms, this increase in activity was reflected in a greater volume of turnover which in 2019 was equal to € 7.6M, an increase of 20% compared to the "SMO PROFIT" turnover of the previous year.

90% is attributable to studies conducted in 10 therapeutic areas, where the main contribution, measured in terms of % distribution on turnover for each therapeutic area, was provided by Oncological Gynecology (27%), Child Neuropsychiatry (19%) and Gastroenterology (10%).

As for relations with pharmaceutical sponsors, more than half of the turnover (54%) is generated by relations with 10 pharmaceutical companies.

The goal for 2020 is to consolidate the role of support to clinical research companies operating in the Policlinico Gemelli and, at the same time, to activate partnerships with other hospitals to expand the customer portfolio for the services offered by the company.

Read more at:
policlinicogemelli.it
section: *"the Policlinico/ Spin-off organizations"*



219

Profit studies



383

Non profit studies



7.659.203 €

Annual revenue



GEMELLI HEALTH SYSTEM (GHS)

The first year of life of Gemelli Health System was a year of research and strong and continuous work to create an “original” path, with the aim of completing Gemelli’s commitment to taking care of and taking care of the patient in a complete way and, at the same time, fill the gaps in the supply of suitable and necessary nutrients for all those patients with rare diseases or with clinical conditions that require specific nutritional supplementation.

A line of Foods for Special Medical Purposes (AFMS) that develops and grows, offering nutritional proposals developed by an integrated Research that starts from the laboratory, is completed at the patient’s bed and follows him, day by day, in his path of recovery, cure.

Scientifically studied foods specially formulated for subjects who have particular and specific nutritional needs, transitory or permanent, linked to pathological pictures of different complexity and severity. Here are the specific proposals for each of the areas from which the Gemelli Health System path has been based.

The first AFMS to be made available:

GemelliHealth Syndromic Obesity

Developed as a nutritional support for subjects suffering from Syndromic Obesity (present in genetic pathologies of the child such as Prader-Willi Syndrome, Bardet-Biedl Syndrome and Down Syndrome) supporting the syndrome-specific nutritional approach.

GemelliHealth MICI/IBD

Special Medical Purpose Food specially formulated for the dietary treatment in the acute and chronic phase of patients suffering from chronic inflammatory intestinal diseases MICI/IBD (such as Crohn’s disease and Ulcerative Colitis).

Will soon be available:

GemelliHealth Cardiac Surgery

Food for special medical purposes, hyperproteic, with high energy density, specially formulated for the dietetic management of patients suffering from cardiovascular diseases in the perioperative phase, who present sarcopenia, fragility or cardiac cachexia.

GemelliHealth RASopathies

Food for Special Medical purposes with high energy density, specially formulated for the dietetic management of patients suffering from Rasopathies or pathologies that lead to growth retardation associated with hypermetabolism, such as Noonan syndrome, WilliamsBeuren syndrome, Rett syndrome, Infant Cerebral Palsy.

GemelliHealth Immun-ONS

Complete Special Medical Food, specially formulated for the dietetic management of malnutrition states of cancer patients suffering from gynecological, urological and gastrointestinal tracts, in the perioperative phase. Its composition is characterized by the presence of essential nutrients for which it has been recognized a specific role in immunonutrition.

XBIOGEM

Read more at:
xbiogem.it

BIOGem
BIOREP GEMELLI BIOBANK

XBioGem is a company born from the partnership between the the Policlinico Universitario Agostino Gemelli IRCCS and BioRep (Sapio Group) which provides laboratory services and the collection, conservation and distribution of human biological material, guaranteeing the highest levels of quality and safety.

This is done in order to **support academic research**, but also to **develop cooperation paths with the pharmaceutical industry, the biotech industry, public and private health centers and laboratories**.

In **June 2019**, in the presence of Prime Minister Giuseppe Conte, AISLA, Gemelli and XBioGem inaugurated the **first National Biobank dedicated to research on ALS**, which will be located at the Policlinico and managed by XBioGem. In this way, for the first time in Italy, researchers engaged in the fight against amyotrophic lateral sclerosis, an incurable disease that affects over 6 thousand Italians, will be able to count on a facility for the conservation of the biological tissues necessary for research on this terrible disease open to all scientists in the world.

The high specialization, the avant-garde technologies available to the company and the standardization of the most advanced methods for sampling the material make **XBioGem the reference provider of biological samples and high-level laboratory services**, capable of creating and provide data useful for the success of scientific research.



People

THE COMMUNITY

With **over 5000 employees** and daily reports with thousands of stakeholders, the Policlinico Universitario A. Gemelli IRCCS is a nationally significant company that operates in an economically sustainable manner in a complex context such as that of Health. The merit of the successes achieved in this delicate balance is of all the collaborators who work, each for their own skills and responsibilities, within the Gemelli. People who every day join the Foundation's mission with motivation and commitment, they guarantee excellent and accessible care for the entire community with professionalism and humanity.

8

EXCELLENCE

THE WORKING COMMUNITY

	Total
Medical staff	1.030
Nursing staff	2.106
OTA, auxiliaries, OSS	680
Sanitary technicians / other sanitarians	461
Administrative	686
Other staff (clerks, technical operators)	352
Total Staff	5.315



454

Independent
Collaborators



years 46

Average age
of staff



61%

Percentage of women
out of total staff

TOP EMPLOYER AND LE FONTI AWARDED TO EXCELLENCE

A path of attention to skills oriented to the professional growth of people that in 2019 allowed the Foundation to stand out in different areas in the field of personnel management.

In particular, **the Top Employers Italy certification** and the **Le Fonti Awards** recognized the Human Resources Department with vision and intelligence in adopting innovative practices capable of guaranteeing personnel management oriented towards recognition of merit, valorisation of talents and the introduction of forms of welfare tailored to each individual employee. With the Le Fonti award, the Foundation has been proclaimed "Excellence of the year" in the management of personnel in Healthcare, while the Top Employer Italy certification has recognized the processes implemented in different areas: talent strategy, workforce planning, management of performance, leadership development, career management, remuneration and benefits and organizational culture.



*Effectiveness of
the Occupational Health
and Safety policy.*

*The process of continuous
improvement of OHS, with the
adoption of effective prevention
and protection measures, is
comforted by the reduction of
harmful events for workers in
the workplace.*



-30%

Accidents in the
workplace



+80%

Accidents while traveling
to the workplace

SAFETY AT THE WORKPLACE

Ensuring workplace safety is **an ethical and moral duty**. Top Management, in compliance with the principles outlined by the Constitutional Charter and the relevant legislation, has established guidelines and objectives to achieve a **safe environment**, not only for workers, but also for students, patients, users and visitors of Foundation structures.

With the document called **“health and safety at work policy”**, the Top Management has disciplined the following principles:

- *eliminate or reduce the risks, as far as possible, caused by complex work activities also by adopting the best and most advanced technologies available;*
- *pursue a continuous improvement of safety conditions during work;*
- *increase awareness, knowledge and competence of employees through targeted training and education.*

The implementation path of the workplace health and safety management system is located in this riverbed in accordance with BS OHSAS 18001 which saw, in February 2019, the prestigious certification milestone (cert. No. 281098-2018 -AHSO-ITAACCREDIA) unique at a national level for healthcare facilities of this size.

The great result achieved, the result of an interdisciplinary work coordinated by the prevention and protection service, and which involved many company functions, also materializes with objective data that see a significant improvement in the safety of operators, for example in the sensitive contraction of accidents occurred during the performance of the work activity in the period 2016-2019.

COU HOSPITAL HYGIENE

It carries out technical-operational coordination activities within the **Team of Infection Control (ICT)**, with the cooperation of Doctors, Biologists, Nurses, and other health professions, contributing to the **surveillance and prevention of infections** related to hospital care, with particular attention to epidemiological emergencies and to the most consolidated national and international scientific evidence.

It has **coordinated the 2019-2020 flu vaccination campaign**.

The COU Hospital Hygiene works, collaborating with the Health Department, to **ensure patient safety in the hospital**, contributing to the needs of the “prevention system” within the Foundation.

The COU collaborates in the evaluation of the Construction Site Safety Plan from the point of view of hygiene and health and participates in periodic meetings and inspections on the matter, carrying out environmental checks at the end and, if necessary, during construction activities

It is the headquarters of the Specialization School of Hygiene and Preventive Medicine of the Università Cattolica del Sacro Cuore and, therefore, contributes to directing the training of medical specialists to respond to modern challenges of Public Health with methodological rigor and address to problem solving.

ENVIRONMENTAL SUSTAINABILITY

VIABILITY PROJECT

The cooperation between Mobility Management and the Foundation's Technical Office and the Councilor for Mobility of the Municipality and the Mobility Agency of the Municipality of Rome continues. The project relating to **the reorganization of the road system around the Campus**, officially presented to the population in 2018, was approved and financed; the vehicle and pedestrian flows revised in order to enhance all access to the structure and decongest the area surrounding the main entrance will be implemented during 2020.

ATTENTION TO ENERGY SAVING

The Committee of the Ministry of the Environment has decided that, for continuity of the efficiency improvements performed on technological systems in recent years and for the fact that Gemelli is a public utility health structure, the Foundation is exempted from 70% of the CO2 quotas issued in 2019 for the operation of hospital activities corresponding to lower emissions for around 23,000 tons of CO2 and savings of around 550,000 euros.

All this is the result of the efficiency processes provided by the cogeneration plant which, despite the size and flows of people and goods moved every day, have allowed the Foundation to maintain a **sustainable environmental impact**.

In particular, it should be noted that:

- Bureau Veritas has verified the goodness of the Foundation's energy management system, issuing the **ISO 50001 certification**.
- In all the refurbishment projects of the hospital wards, guidelines were followed which envisage the replacement of the old lighting fixtures with new ones using **LED technology** and the installation of **remote controlled systems** which, according to the internal temperatures of the wards and the external temperatures, regulate the quantities of energy for space heating and cooling.
- **The circulation system for hot and cold fluids has been optimized.**
- A **column** has been installed **to recharge the electricity of the Foundation's shuttles and electric cars.**

The combined effect of these interventions led to a **decrease in gas consumption of around 200,000 cubic meters and a lower CO2 emission which can be estimated at around 392 tons.**

Read more at:
policlinicogemelli.it
section: *"Formazione / Gemelli
Training Center"*



Read more at:
treecenter.it



GTC (GEMELLI TRAINING CENTER)

The GTC - Gemelli Training Center, the Center for Experiential Training and Simulation in Medicine of the Fondazione Policlinico Universitario Agostino Gemelli IRCCS, was created to enhance and improve the technical skills and transversal skills of healthcare workers, through simulation methods that replace and amplify the real experience, with the main objective of creating a reliable and safe healthcare system for patients and for the operators themselves. The GTC, with the training initiatives offered, wants to represent the excellence of training in the clinic, surgery and diagnostics, thanks to the use of the most modern simulation technologies and experiential training methodologies, aimed at learners of all levels, by the student of medicine to the experienced professional. For 2019, the GTC has provided 234 training projects, of which 71 open to external participations, 139 for internal staff and 18 dedicated to students and specialists, with a total of 1,557 training hours provided and 5,291 participations, with growth important of 239% in terms of training proposals offered, compared to 2018.

In a logic of constant improvement and growth, the GTC has undertaken, for the two-year period 2019-2020, an international accreditation process (UEMS-NASCE) which represents an important opportunity for growth, adaptation to international criteria, specific to the Multidisciplinary Simulation Center, of development of European relations and networks and sharing of experiences and knowledge in training with Simulation Centers in Europe.

TREE CENTER

2019 was a year of intense activity for the Tree Training Center (Teaching and Research for Education in Emergency Medicine and Anesthesia) and saw important scientific and educational appointments spread **over 1500 hours of activity and 1600 participants**. The main lines of activity follow:

University teaching and corporate training FPG and IRCCS:

- Bachelor of Medicine and Surgery: high fidelity simulation for 5th year students (both in Italian and in English);
- School of Specialization in Anesthesia, Resuscitation, Intensive Care and Pain;
- School of Specialization in Emergency Medicine;
- Master in Pediatric Intensive Care;
- Master for Nursing Coordinators, Master in critical area nursing;
- Master Risk Management, Course "From the relationship of care to the relationship that cures";
- Training course "Humanization in cardiac surgery";
- Communication course in clinical trials.

"Open" teaching:

- Adult and pediatric cardiorespiratory resuscitation (AHA and IRC);
- Coagulopathy in trauma, Simulation Master Class (Level 1 and 2);
- Ultrasound simulation, PGDT: from Theory to Simulation to Clinical Practice.

Scientific-didactic events: ESICM Fellowship in Hemodynamics, Lazio Simula 2019 and activation of the Regional Register of Simulation Centers.

THE COMMUNICATION

NEW WEBSITE AND SOCIAL

The new website **www.policlinicogemelli.it**, online from June 2019, has been completely renewed in its graphic layout and includes a navigation and usability system designed “for a smartphone”.

Developed in both Italian and English, it allows to search for pathologies, professionals, performances and many other information thanks to a sophisticated artificial intelligence system that guides the user in research, managing to anticipate his needs.



1.130.000

Sessions



about 670.000

Visits to policlinicogemelli.it website
(unique users from 1/6/2019 to 31/12/2019)



The Foundation has been present on the LinkedIn platform **since 2018**, with a page that presents news and updates relating to the clinical-scientific activity of the Foundation's professionals, ongoing innovations and, of course, job opportunities. To date, the page has **over 21,000 followers**.



The Fondazione Policlinico Universitario Agostino Gemelli IRCCS has also been on Facebook **since March 2019**, with the aim of extending its contact points with all its stakeholders. The page offers medical and other information regarding the new projects it has created, the services it offers, the events organized and much more. At the beginning of 2020 it has **more than 10,000 followers and over 2,000 registrations** in the structure.

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Notice regarding the nature of the information:

The Mission Statement contains information relating to projects and intent in progress and future fulfillment. However, various factors could cause future activities and results to be somewhat different in some respects from the intentions presented here. Furthermore, this Mission Statement is not intended or intended in any way to solicit any form of economic commitment on the part of stakeholders, for which reference should be made to the financial information tools available at the Foundation.



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