IGTP
Germans Trias i Pujol Research Institute

Strategic Plan 2023–2027

Germans Trias i Pujol Research Institute (IGTP)

Instituto de Salud Carlos III

CERCA Centres de Recerca de Catalunya

HR EXCELLENCE IN RESEARCH

Contents

1. Introduction and methodology

The Germans Trias i Pujol Institute (IGTP) is a Health Research Institute accredited in 2009 by the Carlos III Health Institute (ISCIII). It has as its basic nucleus the Germans Trias i Pujol University Hospital (HUGTIP) and is part of the research centres of excellence of the Generalitat de Catalunya, centres in the CERCA system. As such, the IGTP is an entity that facilitates a dynamic of transversal operation and scientific strategy with the aim of enhancing biomedical research on the Can Ruti Campus with regards to its role as a health research institute accredited by the ISCIII.

The IGTP is made up of a total of ten scientific research institutions within the framework of the ISCIII, some of them included in the Can Ruti Campus and others in the scientific environment of biomedical research of the Institute that extends over the metropolitan health area of northern Barcelona.

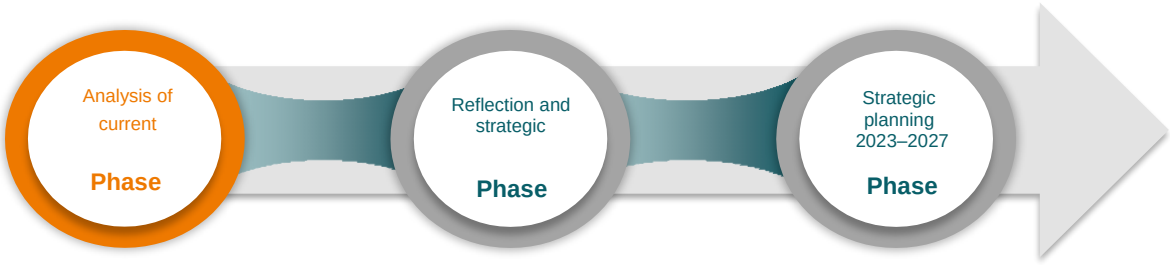
The IGTP's new Strategic Plan 2023–2027 aims to define the strategic priorities of the institution through the formulation of unique actions to be developed in the next five years that allow us to consolidate and strengthen our scientific capacities in all areas of activity. In order to do this, we will take into account the current context, and the expectations and aspirations of the organization in line with our mission and vision.

The methodology followed for the development of the new IGTP Strategic Research Plan consisted of the preparation of an analysis of the current situation, aligned with a

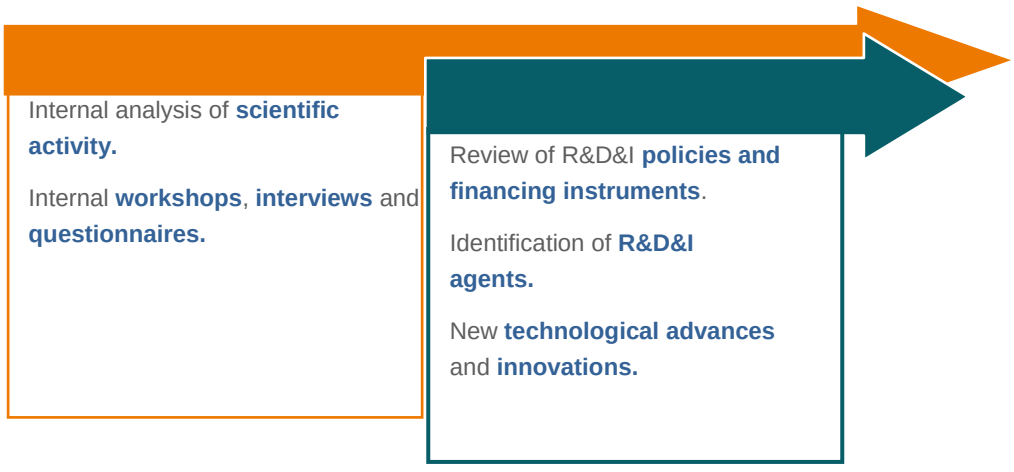
process of participatory reflection on the main areas that impact on the Institute's activity, in order to highlight expectations about the future of research and the development of specific action plans. The analysis of the situation and participatory reflection on the IGTP Strategy for the coming years takes into account internal and external aspects. In this respect, the Strategic Plan is the result of all the analysis, reflections and opinions carried out regarding the positioning of the IGTP in the coming years.

The Strategic Plan has been structured in three phases aimed at identifying challenges and specifying actions in line with the challenges set out in the 2030 Agenda and the Sustainable Development Goals.

The following are the phases into which the Strategic Plan has been structured:



- Phase 1: Analysis of the current situation was organized as an internal analysis of the Institute and an analysis of the environment where a review of the policies and financing instruments of R&D&I and new advances and technological innovations in translational research is made.



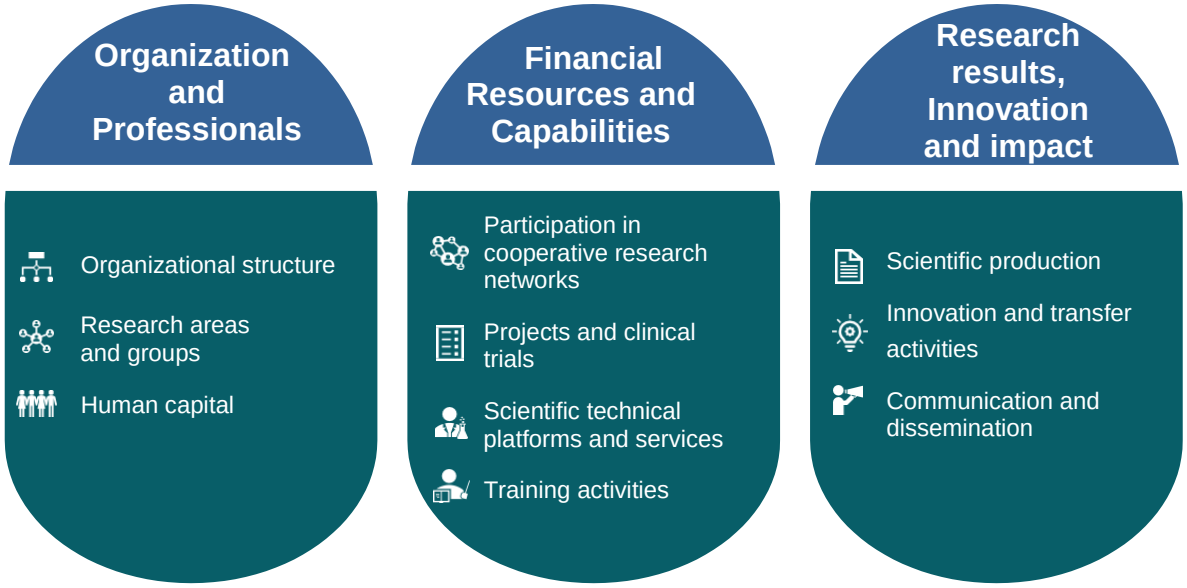
- Phase 2: Reflection and strategic design, where the positioning of the Institute for the next five years is reflected through the identification of the

Strengths, Weaknesses, Opportunities and Threats (SWOT) related to IGTP's R&D&I. Additionally, there was a review of the Mission, Vision and Values and definition of the strategic objectives, focus and lines to be developed.

- Phase 3: Strategic Planning, which considers the formulation of the strategy through the development of the operational action plans in which the lines defined in Phase 2 are set.

2. Internal Analysis of the IGTP

The internal analysis of the IGTP was carried out based on the information recorded by the IGTP administration units and provided by the units' own personnel. This analysis aims to identify the resources available to the Institute, the processes that are carried out and the results obtained, as indicators of scientific activity, bringing together the different aspects of the scientific research value chain. The analysis was organized into the following three parameters, which together allow us to understand the current situation of the Institute and help to identify future actions.



The main data corresponding to the different parameters on which the internal analysis is structured is shown descriptively. A more detailed description can be found in the attached IGTP Situation Analysis 2017–2021 document.

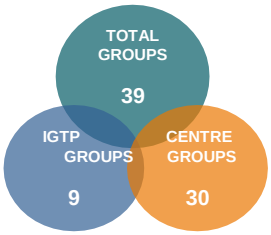
2.1. Research Areas and Transversal Programmes

The research activity of the IGTP is carried out in nine scientific areas, to which the different research groups that are part of the Institute are attached. The research is also organized into two Transversal Programmes that are being deployed in order to develop a more coordinated scientific strategy among the different agents of the campus.

The research areas of the IGTP and their composition at the group level are described below:

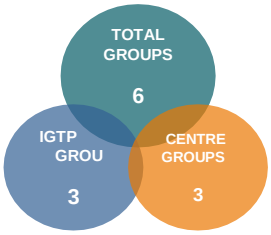
Cancer

Translational research of personalized oncology is developed in this area, in addition to the clinical manifestations and molecular pathogenesis of associated tumours. This is carried out through studies of molecular diagnostics, such as biomarkers and molecular processes related to chemotherapy resistance, among others.



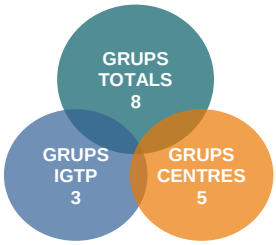
Cardiovascular Diseases

Research in the area of Cardiovascular Diseases is centred on the development of new treatments, focusing its research on two aspects, clinical and translational, through the search for biomarkers for the diagnosis and prognosis of heart failure and the study of different types of cells with potential for regeneration, such as stem cells.



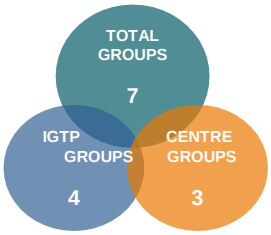
Community Health

Groups in this area are committed to researching various diseases that may have an epidemiological and social impact.



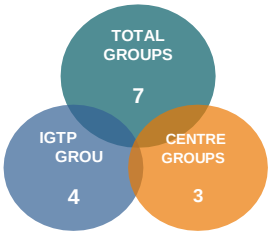
Digestive Liver Diseases

The research in this area is translational and in addition to being oriented towards the study of ulcerative colitis and Crohn's disease, it also focuses on the study of diseases with a high impact on health and quality of life and on the mechanisms responsible for hepatocarcinogenesis and tumour progression, among others.



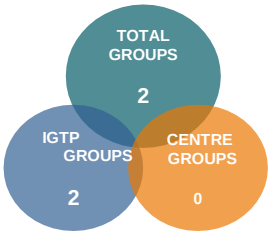
Endocrinology and Diseases of Metabolism, Bone and Kidneys

These groups focus their research on the field of kidney diseases and associated disorders, on molecular studies that have an impact on pathologies involved at the endocrine level, and on obesity, as well as on other diseases that may be associated with diabetes.



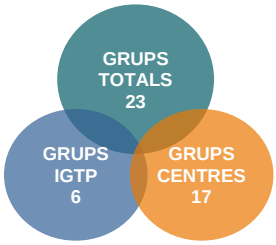
Immunology and

This area brings together research groups focused on undertaking translational research for the development of new pharmacological agents, advanced diagnosis in immunopathology, the development of immunological tolerance-inducing therapies, as well as for the development of immunotherapies for the prevention and treatment of type 1 diabetes and other autoimmune diseases.



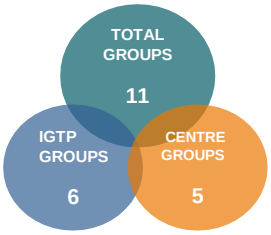
Infectious Diseases

The groups focus their research on the diagnosis of infectious diseases using microbiological, immunological and molecular techniques. This area studies infectious diseases that affect public health and which may be caused by drug-resistant bacteria, *Mycobacterium tuberculosis* or SARS-CoV-2.



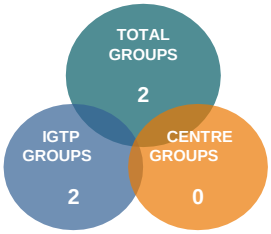
Neuroscience

This research is aimed at the study of neurovascular disorders and strokes in order to facilitate the development of innovations in this field, and the identification of markers of neurodegenerative diseases and specific therapies.



Behavioural Science and Drug Abuse

Research is focused on complications arising from alcohol and drug abuse, especially opiates and cocaine. The area is comprised of research groups focused on undertaking translational research for the development of new pharmacological agents and advanced diagnosis in immunopathology.



The IGTP research groups are distributed in the nine scientific areas, each with its specific line of research. At the time of the analysis, the Institute had 39 groups belonging to the IGTP itself, HUGTIP, the Catalan Institute of Oncology (ICO) and the Barcelona Institute for Global Health (ISGLOBAL). In **Figure 1** it can be seen that in the last four years the groups have experienced a positive evolution with a rate of increase of 8%.

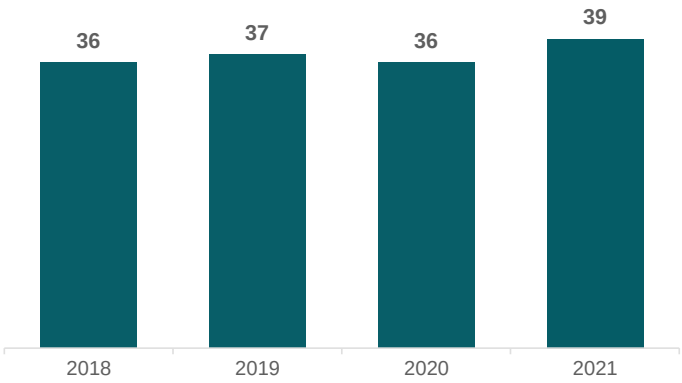


Figure 1: Evolution of the number of research groups 2018–2021

In addition, the Institute forms a part of groups with linked institutions, with there being 66 groups belonging to said linked institutions, giving a total of 105 groups that make up the Institute (**Figure 2**).

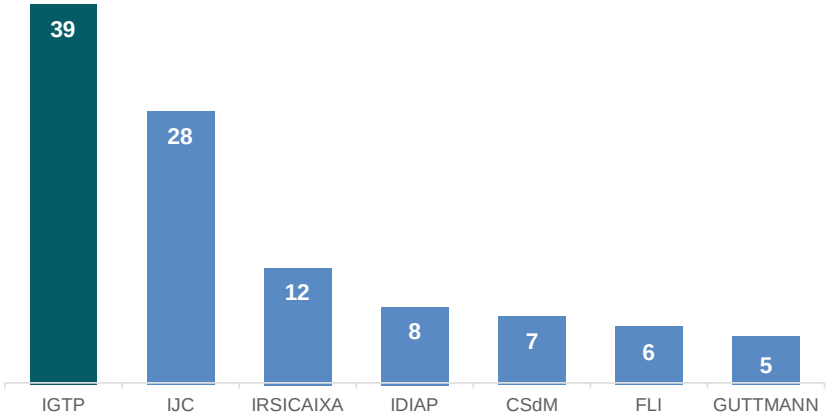


Figure 2: Distribution of research groups linked to the IGTP

The Transversal Research Programmes have been defined based on specific lines of research and prioritized according to the needs of the Campus, aimed at generating additional value in research with an impact on improving patient care activity. So far, two transversal Programmes have been configured: the Translational CAncer REsearch Programme (CARE) and the Public Health and Primary Health Care Programme.

TRANSLATIONAL CANCER RESEARCH PROGRAMME (CARE)

The **CARE Programme** was established as an inter-institutional and interdisciplinary network of Can Ruti Campus researchers with common research interests in **cancer,** and with **shared activities and resources** on Campus.

The main objective of this Programme is to attack cancer in its different forms, with the aim of accelerating the transfer of knowledge generated and technological advances to the diagnosis, treatment and prevention of the disease.

This programme's core is based around IGTP, HUGTiP and ICO.

PUBLIC HEALTH AND PRIMARY HEALTH CARE PROGRAMME

The **Public Health and Primary Health Care** Programme is a multidisciplinary network of researchers with common population/community research interests, and like the CARE Programme, with shared activities and resources on the Can Ruti Campus.

This programme aims to promote the development of collaborative multidisciplinary research based on epidemiological monitoring, public health and primary care, led by different Can Ruti actors and primary care teams, with the core institutions being IGTP, HUGTiP, *Institut Català de la Salut* (ICS), *Instituto Universitario de Investigación en Atención Primaria* (IDIAP Jordi Gol), *Centre d'Estudis Epidemiològics sobre les ITS/HIV/SIDA de Catalunya* (CEEISCAT), ICO, and the Department of Health of the Generalitat de Catalunya.

All the programmes that are defined in the IGTP environment are open for the different institutions linked to the IGTP to participate, such as ISCIII. They will all have the unique platforms of the IGTP as key technological resources, including the **Centre for Comparative Medicine and Bioimaging (CMCiB) and the Genomes for Life (GCAT) cohort** which will offer support to these programmes and provide key positioning at different levels (local, national and international).

2.2. Scientific Technical Platforms and Services

The IGTP Common Platforms and Services are available to professionals to support research activities according to the needs of the different projects. In this regard, the Institute has the following platforms:

Supercomputing[1,2]	Provides researchers (computational biologists and biostatisticians) with the infrastructure and computational support necessary for the management of systems and software and even the creation of customized solutions.
Cytometry[2]	Support service for IGTP research and for clinical diagnosis in HUGTiP Immunology with annual training courses in flow cytometry.
Microscopy[2]	Scientific and technological support to research and clinical welfare groups in the field of microscopy and related disciplines. Offers advice to IGTP researchers as well as external groups.
IGTP-HUGT[1] **Biobank**	Stores several collections of biological samples available for basic and translational research, providing the scientific community with access to the samples and associated data.
Proteomics and Metabolomics[2]	Support in the field of proteomics for the identification of proteins in biological fluids, tissue and cell cultures. Focused on collaboration with researchers for the development of techniques, analysis of samples and preparation of results.
Cryobiology	Makes the necessary space and infrastructure available for the development of cryopreservation tasks and to keep equipment, facilities and samples in good condition.
Translational Genomics[1]	Technical/methodological support and advice in order to promote research, innovation and training in the area of genomics. Organizes technology courses aimed at students and technical research support personnel.
Genomics and Bioinformatics[1,2]	Provides support to research groups in genomic technologies and bioinformatic analysis tools, as well as facilitating access to the latest advances.
Lab Managing	Support in the proper functioning and operation of common services for researchers in the proper use of equipment, coordination in daily activities, technical support at the administrative and communication level between laboratories, guaranteeing occupational safety, as well as the promotion of projects, meetings, and training activities, among others.
Comparative Medicine and Bioimaging[1]	CMCiB supports projects in large diagnostic imaging animals with 3T magnetic resonance, a radiodiagnostic and intervention room as well as fully equipped operating rooms including a hybrid operating room; for preclinical models it has biosafety level 3 spaces, laboratories and animal rooms.
High Content Genomics and Bioinformatics	Offers support in genomic and bioinformatics technologies to Can Ruti research groups and institutions with a focus on data generation. It was born as an IMPPC project.

UPIC Clinical Trials[1]	Facilitates the development of clinical and biomedical research through its own structures. Phase I, II, III and IV clinical trials are carried out, such as observational, independent promotion or industry trials.
Advanced Statistics Unit and management of Big Data[1]	This unit aims to advise on methodological analysis, and epidemiological and clinical research design. In addition, it provides support in advanced statistical analysis and modelling based on large databases (Big Data). Project to be deployed during this strategic plan.

[1] The following six common services and platforms must be provided: animal care, genomics and proteomics laboratories, computer systems, biobank, clinical epidemiology and biostatistics, and clinical trials unit.

[2] At least four of the following services must be provided: structural and molecular analysis, metabolomics, cell bioimaging with confocal and electron microscopy, cytometry and cytogenetics, bioinformatics, clean room, and cell cultures

Based on this and as established in the ISCIII Accreditation Guide, the IGTP has all the essential services for accreditation such as: Supercomputing; Cytometry; Microscopy; IGTP-HUGT Biobank; Proteomics and Metabolomics; Translational Genomics; High Content Genomics and Bioinformatics; Centre for Comparative Medicine and Bioimaging; UPIC Clinical Trials; Advanced Statistics Unit and Big Data management.

2.3. Human Capital

In recent years, the number of professionals dedicated to research in the IGTP has increased by 37%, reaching a total of 998 professionals in 2021, the year in which the Institute had the largest number of professionals. Of these professionals, 71% correspond to research staff while the remaining 29% are support staff (Figure 3).

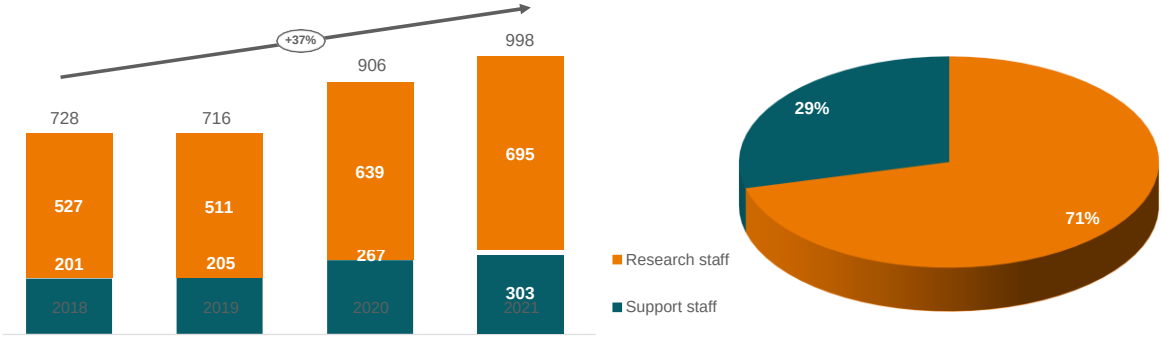


Figure 3: Evolution and distribution of IGTP professionals (2017–2021)

By 2021, more than 40% of research personnel belonged to the R1 category of Euraxess, 27% to the R3 category, followed by 25% of professionals in R2 and 5% in R4. As such, by 2021, almost 70% of the research staff were in categories R1 and R3 (Figure 4).

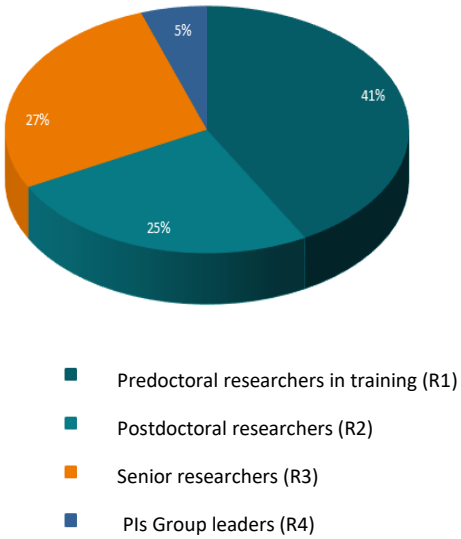


Figure 4: Distribution of IGTP Professionals by Euraxess profile in 2021

2.4. Fundraising and Research Activity

2.4.1. Funding

The analysis of the funding received has been carried out with the funding data of the last five years (2017–2021), corresponding to projects, income from scientific platforms and innovation activities, private funding and structural funds, among others, with a higher amount in 2021 that came to €23 million and an annual average of €18.5 million. The item with the most weight is that of public and private projects (€37.8 million), followed by funding from private funds (€33.0 million) and structural funds (€12.2 million) (Figure 5).

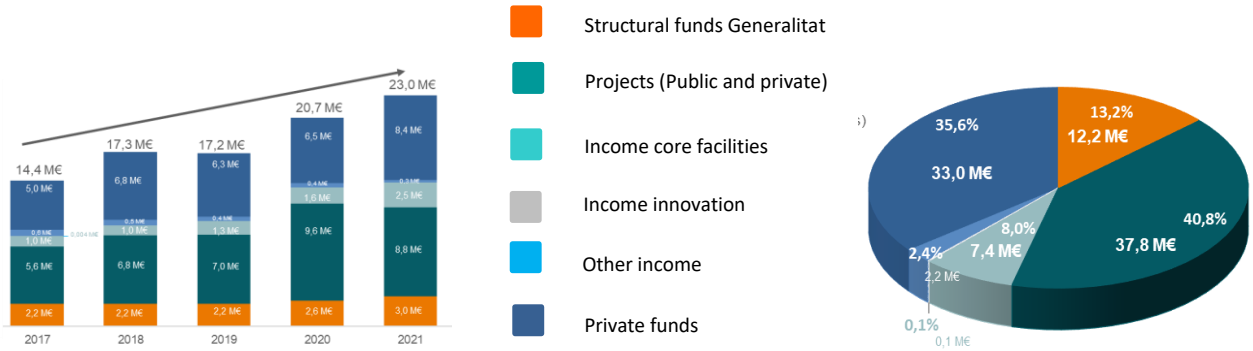


Figure 5: Evolution and yearly distribution of total funding by source of funds (2017–2021)

The funding of research projects have maintained a positive and similar evolution over the course of the years, reaching a maximum value in 2020 of €9.6 million. Public projects show an average of €5.5 million per year (Figure 6: Relationship of funding by public and private projects during 2017–2021).

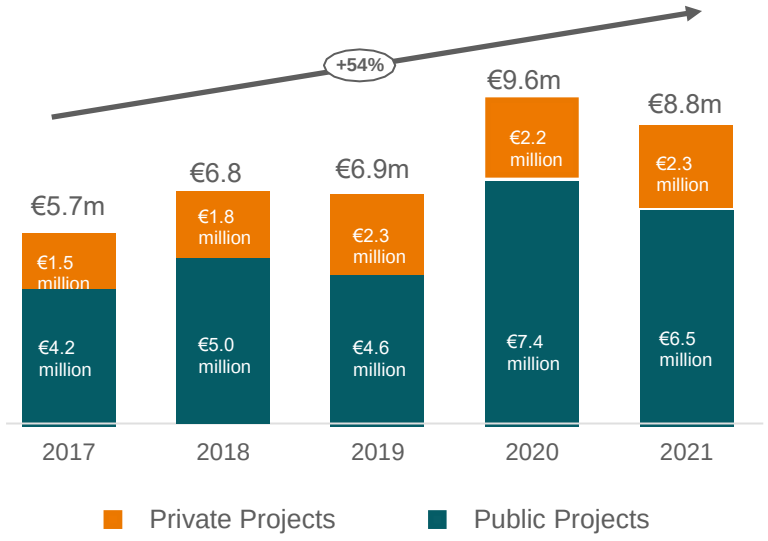


Figure 6: Relationship of funding by public and private projects during 2017–2021

The increase in funding obtained in 2020, as a result of the funding mobilized for the development of projects in lines of research on SARS-CoV-2, is to be highlighted.

It can be seen that the clinical studies initiated increase over the entire period by 43%, with 2021 being the year in which the highest amount was obtained (€7.9 million). The average funding for clinical studies amounts to €6.4 million per year and with an increase in 2021 of 16% (Figure 7).

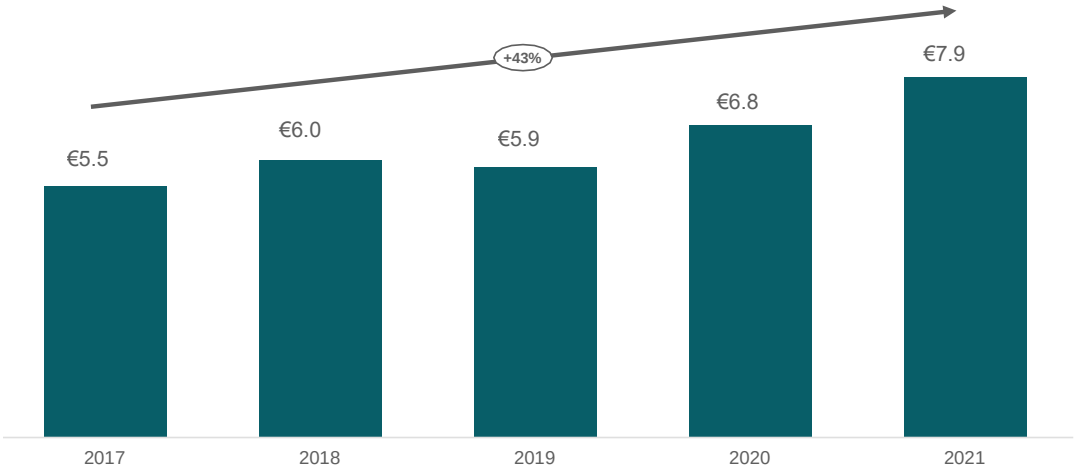


Figure 7: Evolution of funding of clinical studies initiated during the period 2017–2021

Figure 7 shows the relationship between all HUGTiP clinical services and the five services with the highest amount of activity over the last five years. In this

regard, oncology and haematology services have the highest proportion of clinical studies initiated over the period (28% and 22%, respectively), followed by infectious disease (8%), dermatology (6%) and cardiology (6%) services. The other services account for 31% of total studies[3] (Figure 8: Distribution of clinical studies initiated by health services (2017–2021)).

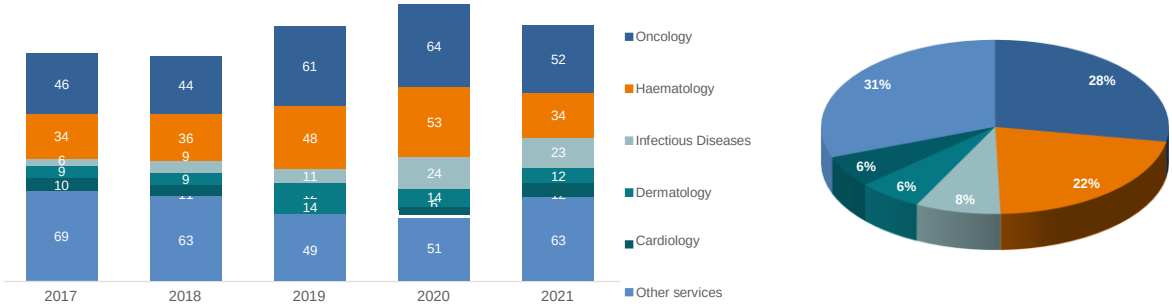


Figure 8: Distribution of clinical studies initiated by health services (2017–2021)

Figure 9 analyses the relationship between research projects and clinical studies in terms of total funding obtained. Together they represent 76% of the funding raised, the highest percentage being for project funding, which represents 41%, followed by clinical studies with 35%. In addition, the percentage of project funding for the year 2020 is 46%, in line with the increase in funding obtained for the development of projects in that year (Figure 9).

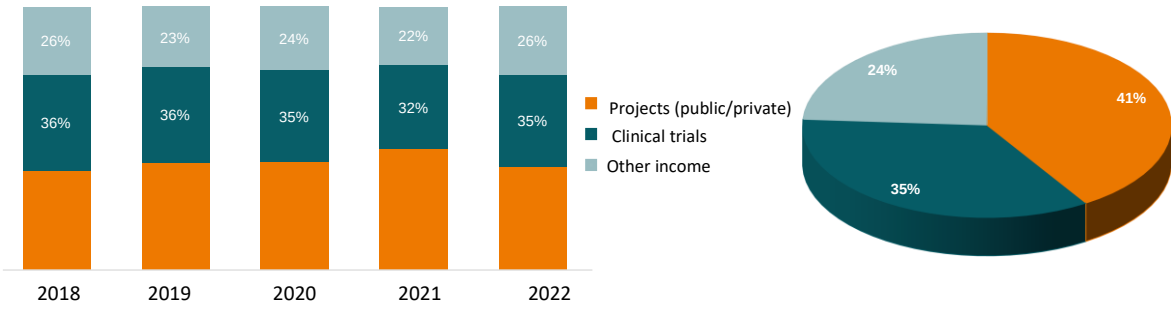


Figure 9: Relationship between funding for projects and clinical studies (2017–2021)

[3] Clinical studies include clinical trials and observational studies.

2.4.2. Projects

During the 2017–2021 period, the IGTP has kept a total of 217 research projects active, mainly through public funds (80%). Public projects are significantly increasing over the course of the years with respect to private projects. The largest number of projects in 2020 was as a result of the demand for the development of competitive projects focused on studies of the SARS-CoV-2 virus and COVID-19 disease, which represents an increase of 68% compared to the active projects in 2019 (Figure 10).

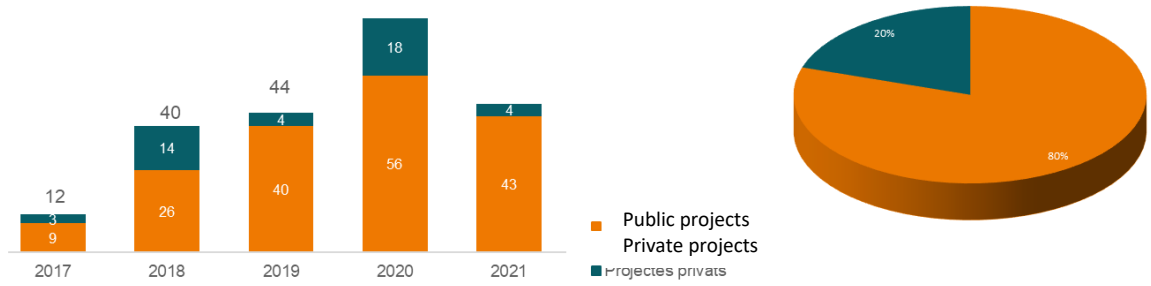


Figure 10: Evolution and distribution of research projects during the period 2017–2021

2.5. Scientific production

During the years 2019 and 2021, articles and reviews by the IGTP grew by 42%, reaching the highest number of documents in 2021 (929). Specifically, in this time the institute accumulated a total of 2,345 documents, 21,556 Cumulative Impact Factor points and 9.2 Average Impact Factor points (Figure 11).

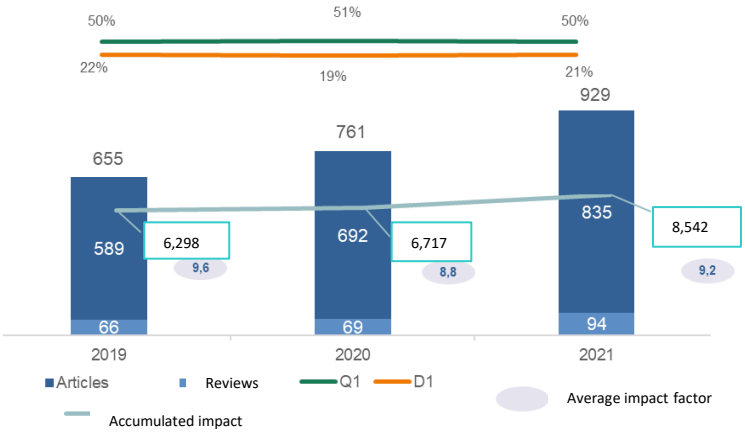


Figure 11: Annual distribution of articles and reviews during the period 2017–2021

The IGTP maintains a proportion of the quality indicators corresponding to the first quartile and decile sustained over time. The average percentage of publications in the first quartile is 50% and in the first decile 21%. The highest number of publications in the first quartile was reached in 2021 and in the first decile in 2019 (Figure 11).

2.5. Transfer of results

In terms of transfer activities, in the last five years, the IGTP has positioned itself as the research institution in the Catalan BioRegion with the second highest number of spin-offs created, according to the 2021 BIOCAT report.
In the 2017–2021 period, the IGTP has kept a total of eight spin-offs active, creating a total of five new ones during this period. Two of these spin-offs have obtained the “Seal of Excellence”, granted by the European Commission to facilitate access to new financing channels.

AHEAD THERAPEUTICS

2017

Uses a patented technology based on **PS liposomes** containing autoantigens to develop treatments targeting **different autoimmune disorders**: Type 1 Diabetes, Multiple Sclerosis and other diseases

BIOINTAXIS

2018

Developing **gene therapy treatment for Friedreich's ataxia**, a rare **neurodegenerative**, inherited, progressive disease that typically affects adolescents and young adults.

TIME IS BRAIN

2020

Developed the medical device, **BraiN20**, which automatically records and analyses **neuronal electrical activity** in order to improve the prognosis of **acute ischemic stroke.**

NIMBLE DIAGNOSTICS

2022

Will market a medical device to **monitor stents** implanted through microwave technology, **identifying heart problems early**, non-invasively, and quickly moving from reactive to active care.

BREAZ

2022

Developing a device for the detection and monitoring of chronic respiratory diseases, starting with COPD. Designed for Primary Care and serves as a tool to help doctors speed up the diagnosis and

When analysing the activity of the Innovation Unit, it can be seen that in the last five years there has been considerable activity in applying for new patents and utility models, with six patents and two utility models being owned by the institution.

Patents applied for

Utility models

2.6. Communication activities

The communication activity of the IGTP is carried out through different internal and external channels. In the period 2017–2021, various activities have been developed to communicate and disseminate scientific activity, aimed at both professionals and society. The following image details the activities implemented[4].

SCIENTIFIC OUTREACH

Activities aimed at IGTP researchers and increasingly aimed at all Can Ruti Campus researchers.

- Seminars
  - Coffee Talks
  - Bioinfor talks
  - Can Ruti Campus Seminars
  - Iriscat Seminars
  - 3R CMBiB Seminars
  - WiS symposium
  - IGTP core Facility Seminars Series 2020
  - B·ARGO Translational Sessions
  - PI seminars
  - Open science
  - Women in Science
- Days
  - B·ARGO Courses and Days
  - World Rare Disease Day Commemorative Event
  - COVID Network
  - EATRIS Workshop: promotion of translational biomedical research
  - IGTP Scientific Retreat
  - CMCiB activities

OUTREACH ENVIRONMENT AGENTS*

Activities aimed at the general public to increase knowledge of the research carried out by the IGTP.

- Activities for society organised by the IGTP:
  - FECYT science week
  - Visits to the IGTP
- Activities in collaboration with Campus centres:
  - Josep Carreras Leukaemia Research Institute
  - Foundation for Fighting Infections
  - IrsiCaixa
- Activities for society by IGTP researchers:
  - *Ad hoc* lectures by researchers in educational centres.
  - Can Ruti PhD Committee

Since 2017, through the Amics Can Ruti initiative, the IGTP, together with the participation of other institutions on the Can Ruti Campus[5], has organised various outreach activities aimed at society on the research, care, scientific and teaching activities carried out at the Institute. Some of these activities are focused on talks in libraries, visits to laboratories, participation in cultural activities and participation in local fairs, among others.

Non-exhaustive analysis.

HUGTiP, ICO; Josep Carreras Leukaemia Research Institute (IJC), Banc de Sang i Teixits, CEEISCat, Fundación Lucha contra las Infectiones (FLI); Institut de Diagnóstic per la Imaget; Universitat Autònoma de Barcelona and IDIAP Jordi Gol.

3. Main Conclusions of the IGTP Internal Analysis

- The IGTP has 105 research groups, with 39 groups belonging to the IGTP itself and 66 belonging to the institutions that are part of the IGTP such as ISCIII. In addition, between 2017 and 2021 the Institute has managed to accredit 18 research groups according to the AGAUR evaluation criteria for SGR groups.
- In 2021, the IGTP had a total of 998 professionals, including 71% research staff, with 41% of them in the R1 category, 25% in R2 and 27% in R3 according to distribution by Euraxess profile.
- The funding received by the Institute has increased by 80%, especially from public funds (73%). This translates into a greater provision of resources, contracting of services, publication expenses, etc.
- The funding obtained for clinical studies and for projects are proportionally similar, in terms of percentage, and represent 76% of the funding raised.
- In the period analysed, an average of 43.4 active research projects were maintained per year, with ISCIII being the main funding agent. Oncology and haematology services undertake the majority of the clinical studies.
- The IGTP brings together common platforms and services aligned with those established by the ISCIII. In addition, it has units that stand out for their unique activities in Bioimaging and genomics studies, such as the CMCiB and GCAT.
- The IGTP groups participate in cooperative research networks in various thematic areas and have participated significantly in the new RICORS networks, created during the period analysed.
- Publications by the IGTP show a positive trend, coming to a total of 2,705 documents during the entire period analysed, with production and quality indicators for scientific publications in Q1, for both articles and reviews.
- The Institute stands out with regard to the activity developed by the Innovation Unit, with a total of 21 patents applied for between 2017 and 2021 and eight active spin-offs, two of them created in 2022. This means the IGTP has the second largest number of spin-offs created by institutes in Catalonia.

- In the last five years, the IGTP has opted for the dissemination of scientific activity through activities aimed at society in collaboration with other centres on the Campus, contributing to raising society's awareness of various scientific matters and promoting science as a vocation for young people.
- In line with outreach activities, the IGTP has promoted the *Amics Can Ruti* initiative that seeks the sponsorship of companies and individuals for the development of research projects for treating various diseases, improving health care, training young people, volunteering and donating blood, among others.

4. Main Aspects of Analysis of the Environment

The preparation of the IGTP Strategic Plan also includes an analysis of the situation in the environment that covers health research policies and trends at the European, national and Catalan levels. This analysis together with the internal analysis are the starting point for addressing and defining the new actions that will make up the IGTP strategy.

Below are the main conclusions of the analysis of the environment. A more detailed description can be found in the attached IGTP Situation Analysis 2017–2021 document.

EUROPEAN FUNDING

- Funding from European Union programmes represents a significant source for the health sector. In recent years, initiatives have been approved to address the emergency caused by COVID-19 and the cancer mission.

- The Horizon Europe Framework Programme 2021–2027 (with an allocation of €100 billion) is complementary to other European instruments such as the ERDF and the Next Generation EU Programme, the latter driven mainly to face the health challenges caused by COVID-19.

- Within Horizon Europe, the EU4Health programme and the Health Cluster promote the strengthening of the health system through a better use of research results and by encouraging innovation in clinical practice.

- In Spain, the Next Generation EU funds are endowed with a budget of €140 billion and are executed through the Recovery, Transformation and Resilience Plan and through the REACT-EU funds and the MRR.

- The Strategic Projects for Recovery and Economic Transformation (*PERTEs*), included in the Recovery Plan, are committed to enhancing collaboration between administrations, companies and research centres, with the

PERTE para la Salud de Vanguardia being the most relevant in the field of health and biomedicine.

STATE PROGRAMMES

- The Spanish Strategy for Science, Technology and Innovation (*EECTI*) 2021–2027 and the State Plan for Scientific, Technical and Innovative Research (*PEICTI*) 2021–2023 promote competitive financing programmes, such as the Strategic Action on Health (*AES*), in order to strengthen the development of R&D&I in advanced therapies, precision personalized medicine or infectious diseases.

- The ISCIII, through the *AES*, has launched initiatives related to the *PERTE de Salud de Vanguardia*, according to the investment plan provided for in the Recovery and Resilience Plan of the European Union.

- Among the actions coordinated by the ISCIII are the Precision Medicine Infrastructure associated with Science and Technology (*IMPaCT*), research projects in Precision Personalized Medicine, the RICORS networks and the CERTERA consortium.

CATALONIA

- Catalonia is still one of the regions with the greatest amount of innovation, being the region with the fourth highest spending on R&D&I at the state level, in addition to being the region in Spain with the greatest capacity to attract and retain talent.

- RIS3CAT 2021–2027 addresses the great challenges in Catalonia with calls for research and innovation projects through technology initiatives applied to health with the help of Catalan institutions such as universities, research centres, companies, etc.

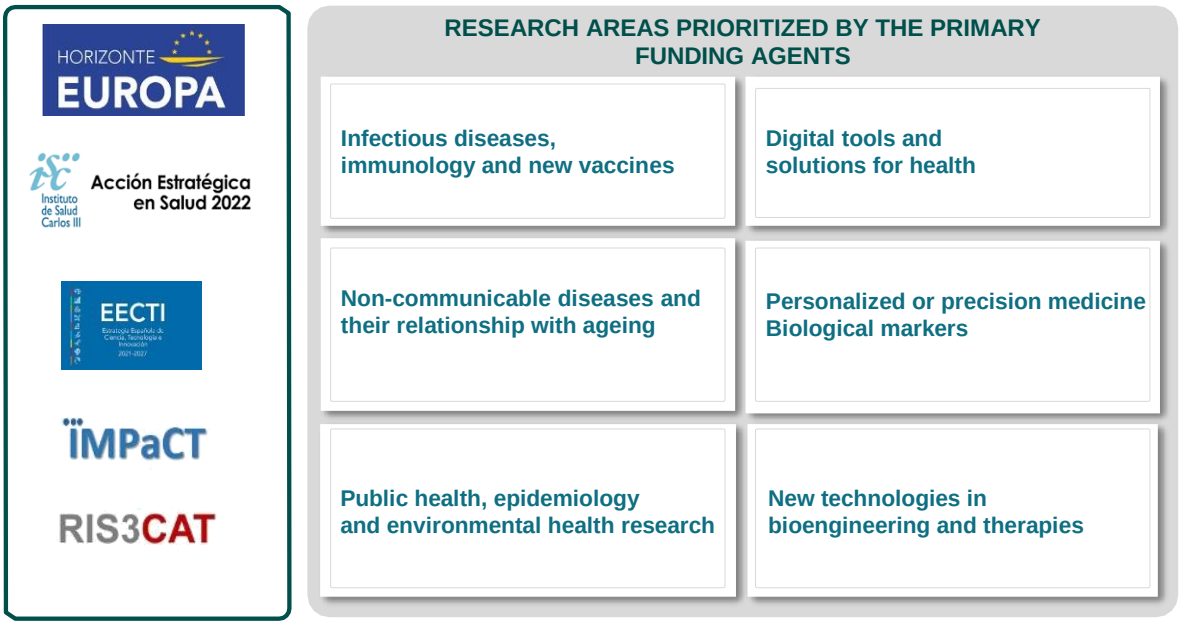
- The total investment in R&D of the pharmaceutical industry in Catalonia is €149.3 million (28.27%), leading the number of clinical trials by phase.

5. Trends in Scientific Research

Trends in biomedical research in recent years have focused mainly on personalized medicine, infectious diseases and vaccines, and new medical devices. Currently, there is an orientation to carry out research with alternative methods, through bioimaging in animals and the formation of organoids that simulate real tissues.

Cohort genetic studies are becoming increasingly consolidated, which is making it possible to configure population databases that allow the design of strategies for the early diagnosis and treatment of the most complex diseases.

The main research areas prioritized by the primary funding agents in the Institute's environment are listed below, while more detailed information can be found in the attached 2017–2021 Situation Analysis document.



The following paragraphs briefly describe some trends in health of high interest in the context of the IGTP, where personalized medicine and new technologies play a relevant role in the sustainability of the health system.

Personalized and precision medicine

In personalized medicine, advanced therapies (molecular, cell and gene therapy) are used as highly innovative treatments to stop or reverse the progress of diseases. They are supported by scientific advances both at the basic and clinical level, allowing the development of predictive models in the creation of new therapies and for taking more effective therapeutic decisions.

Infectious diseases and vaccines

The knowledge and advances generated over the years after the pandemic have had a positive impact on research in other therapeutic areas, such as immunotherapy. New vaccine developments have targeted cancer, human immunodeficiency virus (HIV), and the universal flu vaccine. In addition, the pandemic has shown the need to develop new therapeutic strategies due to the limitations of traditional vaccine development mechanisms.

Medical devices

The market for medical devices in recent years has grown rapidly in parallel with the technological trends of the health sector, due to the increase and aging of the population and the increasing prevalence of chronic diseases, the growth of complex surgery and transcatheter interventionism, the advances in micro and nanotechnology, new (bio)materials, the development of Information and Communication Technologies (ICT), etc. In this area, 5G technology comes into play, offering advantages in the monitoring of patients in real time, which leads to the decentralization of some health services and in some cases to the effective implementation of robotics in hospitals.

Bioimaging

Among the challenges that society currently faces is reducing preclinical research in animals, making it necessary to obtain new knowledge about unknown biological mechanisms supported by technical and scientific advances in order to prioritize animal welfare and ensure rational use of these techniques. One of the tools currently available is the use of bioimaging in animals, which allows molecular and structural analysis of different pathologies. Another tool under development is the use of *in silico* models to predict the responses of biological systems.

AI and Big Data

Artificial intelligence techniques allow diagnostic procedures to be performed much faster and more reproducibly, while Big Data analysis allows the creation of prediction models that can feed artificial intelligence processes to further personalize medicine with an impact on patient care, improved quality of care and a reduction in the use of resources. New technologies have an infinite number of applications and processes that facilitate the restructuring of care, with new therapeutic strategies, increasing in turn the hope and quality of life of patients.

Tissue engineering and regenerative medicine

In recent years, tissue engineering or regenerative medicine has been developed, with applications both in clinical trials and in advanced therapies. Tissue engineering allows the stimulation of cellular and molecular response in a controlled way, through third generation biomaterials, such as bioactive or bio-absorbable materials, to act as temporary supports in the repair of tissue defects.

Cohort genomic studies

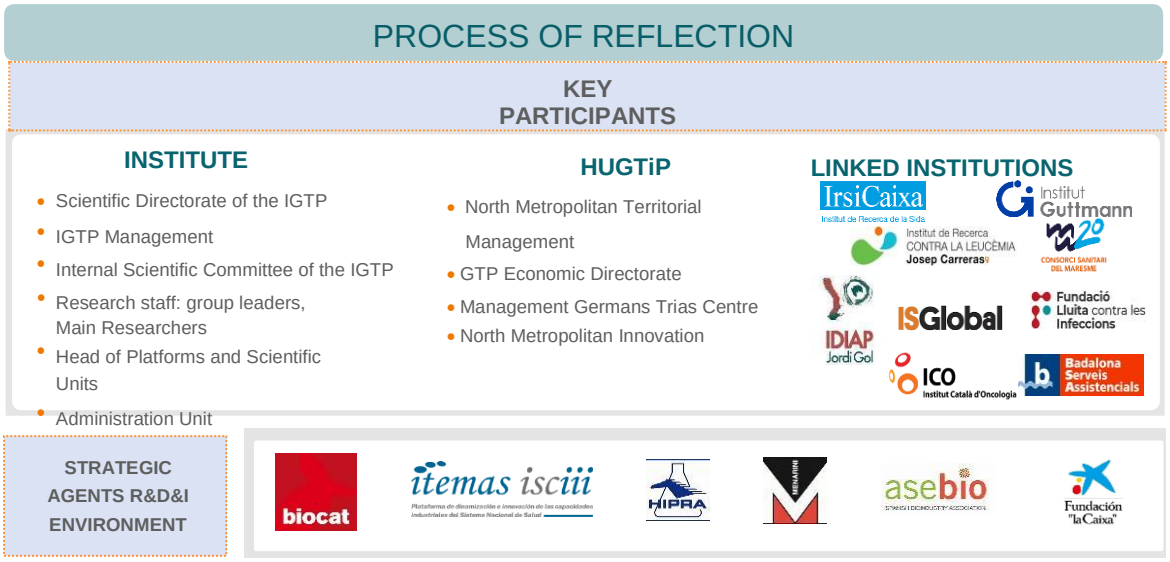
The genomic study of cohorts, based on the comparison of specific results in similar individuals with genetic differences, is another of the new areas to which research has been dedicated in recent years. The collection of cohort data can be very useful to expedite the implementation of personalized and precision medicine strategies along with the collection of environmental data linked to the health of the population.

6. Strategic reflection and challenges identified

The IGTP Strategic Plan defines the strategic priorities of the Institute and provides a proposal for unique actions to be developed in the coming years, taking into account the current situation of the Institute, as well as elements that have been established in the environment regarding R&D&I policies and funding.

For the development of the strategy, the positioning of the IGTP in the current context and expectations about the future of research at the Institute have been taken into account, through the participatory process of reflection discussed at the beginning of the document, which consisted of the development of structured questionnaires, internal workshops for key staff in the Institute, as well as interviews aimed at key external agents and surveys of professionals from institutions linked to the IGTP.

The Board and Management of the centre were also invited to participate in this process, as well as those responsible for the administration units and coordinators of platforms and differentiated units (CMCiB and GCAT). In addition there were professionals from related institutions, as well as representatives of the Board, Management and Innovation department of the HUGTiP and strategic agents from the R&D&I environment (BIOCAT, ITEMAS, La Caixa Foundation and collaborating companies).



The process consisted of six Management meetings, three strategic reflection workshops to identify unique actions, 155 online questionnaires aimed at group leaders and main researchers in the Institute, with a participation rate of 33%, and 30 interviews aimed at members of the IGTP, key external agents (public bodies and companies) of interest in the field of R&D&I in health with the aim of shaping the new strategic planning for the next five years.

6.1. SWOT Analysis

The SWOT analysis identifies the Strengths and Weaknesses of the organization, as well as its Opportunities and the Threats to it within the framework of the organization's environment. This allows positive aspects to be reinforced and solutions to be provided for those areas of improvement that have been identified.

Strengths

ORGANIZATION AND INSTITUTIONAL SUPPORT

- **Centre accredited by the ISCIII** and **affiliated with CERCA** as part of its vocation for excellence.
- **Representation on the Board of Trustees** of all the institutions integrated into the IGTP.
- **Institutional support from the HUGTiP Management** in promoting and strengthening research and innovation in healthcare services.

SCIENTIFIC STRUCTURE

- **Integration of centres with reference research** in fields such as oncology, infectious diseases, neurosciences, immunology or Primary Care and Community Health, promoting translational research together with HUGTiP.
- **Growth in the number of research groups** that currently make up the IGTP, and growth in its own research groups.
- **Growth in the research and technical support personnel linked to the Institute,** mainly IGTP and HUGTiP personnel.
- **Creation of transversal research programmes** defined with regard to specific scientific lines or challenges.

PEOPLE MANAGEMENT AND PROFESSIONAL TRAINING

- **Accreditation with the "HR Excellence in Research" seal** and implementation of planned actions, highlighting the equality plan.
- **Promotion of a common research training programme on the Campus** to meet the needs of professionals in different fields.
- Continuity of the **Talents Programme** for the promotion of health research.
- Development of **training initiatives for medical students and resident doctors,** and promotion of their collaboration in **research projects.**

FUNDING OF PROJECTS AND CLINICAL TRIALS

- **Continued growth of revenues received by competitive projects**, both national and international.
- **Continued growth in the number of clinical trials initiated and their funding,** currently accounting for 35% of the revenue received.
- **Exceptional number of clinical trials in early phases** (52% in Phases I and II), with respect to Phases III and IV.

RESOURCES, RELATIONSHIP AND ALLIANCES

- **Active participation in networked research structures and consortia** in various national and international thematic areas (RICORs, CIBER).
- **Increasing activity in the number of publications, maintaining high levels of the main indicators of quality and scientific excellence.**

INNOVATION ACTIVITY AND RESULTS

- **Promotion of the Innovation Unit** of the IGTP, in coordination with the Innovation Unit of the HUGTP, as a support structure in the management of the innovation and transfer processes.
- **Exceptional activity in patents and utility models applications** resulting from the innovation initiatives of researchers.
- **Creation of four spin-offs in recent years,** thereby becoming the research institute with the second most number of spin-offs in Catalonia in this field.

RELATIONSHIP AND ALLIANCES

- **Trajectory of collaboration and close relationship with Can Ruti research centres.**
- Maintenance and **promotion of strategic agreements with research centres in the biomedical environment**, with regard to research projects and services.
- **Development of initiatives to disseminate scientific activity,** aimed at both professionals and society, highlighting the *Amics de Can Ruti* initiative.

INFRASTRUCTURES AND SCIENTIFIC SERVICES

- **Availability of scientific platforms and services, some with a high level of equipment and highly qualified personnel** aimed at supporting Campus professionals and external customers.
- **Exceptional investment in the adaptation of infrastructures and equipment** of scientific platforms with cutting-edge technologies, **in particular the CMCiB.**
- **Positioning of the CMCiB as a unique translational medicine facility with international renown** in comparative medicine and bioimaging.
- **Promotion of the GCAT project** within the commitment to promote and implement predictive medicine, data science, and personalized and precision genomic medicine.
- **Participation in European network infrastructures**, in particular the EATRIS network.

WEAKNESSES

ORGANIZATION AND MANAGEMENT

- **A complex organization with 10 research institutions** currently integrated into the IGTP as health research institutes accredited by the ISCIII.
- **Consolidation of the structure and resources of the administration, strategy and innovation units** in line with the growth of the IGTP **is still in process**.
- **Partial implementation of a modular system for the comprehensive management** of the Institute's activity.

SCIENTIFIC STRUCTURE

- **Heterogeneity in the distribution of the number of groups and personnel** assigned to the different scientific areas, currently being reconfigured.
- **Partial formalization of the evaluation processes of the research activity** of the research groups.
- Need to develop actions aimed at the **configuration and promotion of emerging researchers and research groups**.

PEOPLE AND TALENT MANAGEMENT

- **Activities are still limited when promoting research among HUGTiP professionals** which facilitates their participation in projects and integration into research groups.
- **Need to develop a policy of attracting research talent to HUGTiP and the IGTP itself,** which is also aligned with a strategy for renewing talent**.**
- The **retention strategy for research talent** and the career development plan are still in their infancy.
- Lack of a **research training plan that responds to the needs** of researchers while being participatory with the Can Ruti institutions.

STRUCTURAL FUNDING AND COMPETITIVE PROJECTS

- **Lack of greater structural public funding** that facilitates the attraction of talent**.**
- **Revenues from international calls** with room for growth.
- **High dependence on research projects from ISCIII** compared to international projects.

MANAGEMENT AND FUNDING OF CLINICAL TRIALS

- **Lack of promotion of greater participation in and development of clinical trials** in certain HUGTiP care services.
- **Limited resources and infrastructure for the management** and administrative monitoring of clinical research.
- **Need to consolidate the Clinical Research Unit** in order to lead, coordinate and provide support for the development of new clinical trials.
- Lack of **accreditations of excellence of the clinical services and groups of the HUGTP** at the Catalan (XUEC), state and European level.

RELATIONSHIPS, ALLIANCES AND COMMUNICATION

- **Collaboration strategy between Can Ruti research centres not objectified in scientific actions**.
- Need to develop actions aimed at the **interaction and strengthening of relationships between research groups** in areas of interest.
- Limited promotion of the **IGTP affiliation policy** in the results of scientific activity, mainly in the publication of articles and reviews.

- **Need to strengthen the resources of the IGTP communication unit.**
- **An IGTP communication plan, both internal and external, aimed at improving the image of the Institute is still to be defined and implemented.**
- **Lack of a communication strategy and promotion of scientific platforms and infrastructure** aimed at internal and external customers.

TRANSFER

- **Participation in the pending ITEMAS Innovation Platform**, the main network at the national level for the dynamization of innovation and transfer.
- **Need to consolidate the Innovation Unit at the resource level**, in accordance with the innovation and transfer activity developed at the Institute.
- **Lack of a plan to encourage innovation activities** among researchers.

SPACES, INFRASTRUCTURES AND SCIENTIFIC SERVICES

- **Lack of spaces in the IGTP** to meet the demand of research groups, platforms and scientific services.
- **Need to evaluate the performance of the platforms, in relation to their use, available services** and their complementarity with other infrastructures in the environment.
- **Need to update high-level equipment** in some scientific services.
- Limited financial support for the **centre's researchers to access the scientific services offered, and in particular the CMCiB**.

Opportunities

POLICIES AND FUNDING

- **Increase in European funds** to respond to the social and economic consequences caused by the COVID-19 pandemic.
- **Continuity of the Health Cluster as one of the main pillars of the Horizon Europe Programme**.
- **Implementation of the *PERTE para la Salud de Vanguardia*** in the field of biomedical research, within the Recovery and Resilience Plan of the European Union and the European Next Generation EU funds.
- **Promotion at the state level of personalized medicine**, including predictive medicine, data science, and genomic medicine as strategic areas.
- Alignment of lines of **research in advanced therapies with the Catalonia 2030 and CERTERA programme**.
- **Positive alignment of the areas and lines of research of the IGTP with the main policies for promoting research**.

RELATIONSHIP AND ALLIANCES

- Interest in **maintaining and promoting new framework agreements with institutions in the scientific and healthcare environment** for their linkage and/or integration into the IGTP, including: Badalona *Serveis Assistencials*, CRG, ICN2 or IBEC.
- Ability to **strengthen the relationship with universities (UPC, UAB and others)** for the development of joint collaborations in areas of interest.
- Ability to **strengthen and promote alliances with public and private agents around CMCiB** in the development of bioimaging, preclinical studies of vaccines and immunotherapies, validation of prototypes and medical devices in in vivo models.
- **Partnership with the Jordi Gol Primary Care Research Institute** for the integration of staff and research groups in the IGTP and the promotion of lines of research in this field.

MANAGEMENT AND FUNDING OF CLINICAL TRIALS

- Capacity for **coordination with the clinical research units linked to the ICO and the Fight Infections Foundation**, which have procedures, resources and extensive experience in the

coordination and monitoring of clinical trials.

- Opportunity to increase **participation in clinical trials** in several HUGTiP services that currently do not have adequate support or resources.

RESEARCH AND SCIENTIFIC SERVICES

- **Diversification of the lines of research of centres that make up the IGTP,** which allows for seeking synergies and new areas of collaboration between research groups.
- **Synergy and complementarity of research lines and scientific platforms with the new Caixa Research Institute Centre**, mainly in the field of infectious diseases.
- **Ability to promote the Campus as a reference point in personalized immunology and infectious diseases**, advanced therapies, and health and climate based on precision medicine, predictive medicine, and data science, with the support of infrastructures and platforms, mainly the CMCiB.
- Participation in the **new spaces** in Alella and BCIN, as well as the construction of **a supplementary module** in the Mar building.
- Capacity for **positioning within the North Hub of Barcelona for biomedical research and innovation** together with agents from the scientific and business environment in the pharmaceutical and biotech field.
- **Participation in the CERCAGINYS initiative,** as a platform for access to the scientific and technical infrastructures of the CERCA centres.

Threats

POLICIES AND FUNDING

- **Competition for funds for research and innovation** in the biosanitary field is increasing.
- The **ISCIII evaluation criteria and indicators** for the reaccreditation of Health Research Institutes are **increasingly demanding**.
- The **differences in quantification criteria in the evaluation of scientific excellence** between the different agents (ISCIII and CERCA) make it difficult to recognize the particularities of each institution or to define clear strategic objectives.
- **Sponsorship initiatives are scarce compared to other countries** in the environment, as are the benefits of the tax incentive framework.

TRANSFER

- **Funding opportunities for innovation are still very limited**.
- **Policies for developing public-private partnerships in the field of research and innovation are still scarce**, which makes it difficult to implement transfer and innovative initiatives.
- Lost **opportunities for transfer** and innovation in the Institution's own projects.

RESOURCES, RELATIONSHIP AND ALLIANCES

- **Professional careers for researchers and their promotion in the health environment is still underdeveloped** compared to other countries, which makes it difficult to attract, retain and renew talent in institutions.
- There are **difficulties in increasing personnel in public health systems**, as well as in maintaining research personnel with more clinical research profiles.
- Difficulty in hiring certain senior management profiles due to a lack of competitiveness with regard to salaries.
- Joint effort between the institutions currently linked to the IGTP to **maintain a scientific and institutional relations strategy at the Can Ruti level** with aligned objectives and vision for the future.

- Capacity to **strengthen scientific platforms through participation in European consortia and networks,** such as the EATRIS network.
- Ability to develop **innovation advisory services** for healthcare and research centres.

6.2. Keys Points of the IGTP's Strategic Reformulation 2023–2027

Among the priority lines of the IGTP's strategic planning is the consolidation of the research developed on the Campus with a vision open to collaboration through transversal and inter-institutional research programmes, which in turn support the scientific strategy, promote the internationalization and visibility of scientific activity and promote the uniqueness of the IGTP and the Campus.

6.2.1. Interrelationship Model and Scientific Strategy

Below is the Institute's interrelationship and shared scientific strategy model:

- Within the framework of the new Strategic Plan 2023–2027, and as a continuation of the activity developed in the last period 2017–2021, it is proposed to **continue promoting the configuration of Transversal Research Programmes** of a multidisciplinary nature and which is open to the participation of the research groups attached to the IGTP and in areas in which the IGTP and the Campus itself are reference points, and have scientific and technological capabilities and singularities.

- The development of this interrelationship model through transversal programmes allows the establishment of a collaborative nexus between the groups of the different institutions on the Campus, most of which are linked to the IGTP. It also **allows us to position and make visible the areas in which we are reference points in biomedical research**, while facilitating the configuration of highly competitive projects and the search for new ways of funding at the international level.

- The Programmes aim to strengthen the framework of collaboration and scientific links of the entities that are part of Can Ruti, enhancing the uniqueness and strengths of each of them and, in turn, seeking complementarity between them.

- Each programme must have a **scientific and governance structure** for its management and development that coordinates the activities carried out by the different research groups.

- Likewise, **research objectives with high added value** must be defined which are aimed at the development of **scientific activity on the frontier of knowledge**

and with clear monitoring indicators, based on criteria of excellence and translation into clinical practice and social impact.

- It is intended that the programmes have an **inclusive vision and are open to the participation of researchers or research groups on the Campus,** as well as the central participation of the scientific platforms and infrastructure of the institute.

6.2.2. Potential Transversal Scientific Programmes

The IGTP has several Programmes defined according to this new transversal and interrelationship scientific model. The implementation of the new Strategic Plan brings with it the definition of new Programmes related to research that is developed at the Campus level, in areas such as immunology, public health, advanced therapies and climate, among others, which are considered strategic and differential for their development throughout this new period and which are aligned with the Sustainable Development Goals in order to achieve research of excellence aimed at improving the health of the population.

The following are some of the programmes that are intended to be implemented in this new period:

PERSONALIZED AND POPULATION-BASED IMMUNOLOGY PROGRAMME

The Programme in Personalised and Population-based Immunology aims to set up an inter-institutional and interdisciplinary network of Can Ruti Campus researchers with research interests in the processes of the immune system associated with various prevalent diseases such as cancer, and inflammatory, infectious and neurological diseases, based on precision medicine, predictive medicine, and data science.

HEALTH AND CLIMATE PROGRAMME

Coordinates the different projects that are configured, through an inter-institutional network that seeks to increase interdisciplinary collaboration between researchers, in the care of the health of people, animals and the environment based on the One Health concept and with interest in addressing the impact of climate change in health and in line with the Sustainable Development Goals.

ADVANCED THERAPIES PROGRAMME

Facilitating the development of new treatments based on more effective and safer advanced therapies through a network of researchers and external actions such as the CERTERA Consortium and the CNTA that facilitate the development of medicines, strengthening R&D&I capacities and promoting scientific collaborations with the support of the IMPaCT infrastructure and Red Terav.

As mentioned at the beginning, the different programmes will try to integrate themselves into the unique platforms of the IGTP, such as the CMCiB and the GCAT.

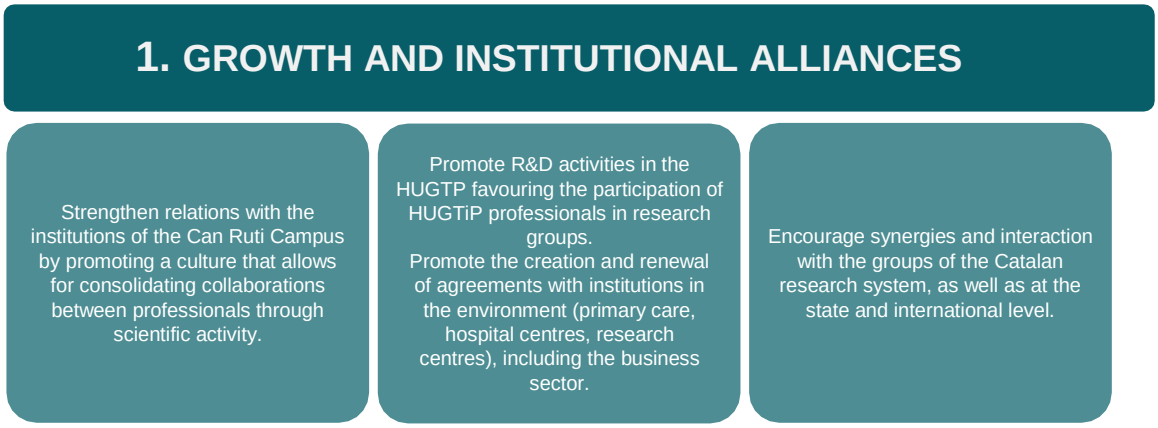
PROGRAMME FOR OTHER RARE DISEASES

Coordinates research projects on rare diseases at national and international level, allowing a reduction in diagnostic barriers and improving the clinical management of patients, with special interest in neuromuscular, ocological, haematological and neurogenetic diseases, such as neurofibromatosis, schwannomatosis and related syndromes such as phakomatosis.

The unique platforms, such as GCTA and CMCiB, are intended to be integrated into the different existing programmes and those that are configured in the future.

6.2.3. Challenges to be Addressed in the New Strategic Period 2023–2027

Based on the previous situation analysis, the following challenges have been identified as needing to be addressed in the next Strategic Plan 2023–2027 with the aim of continuing to work on consolidating the strategic model of the IGTP.



2. SCIENTIFIC MODEL AND PROMOTION OF TRANSVERSAL SCIENTIFIC PROGRAMMES

Consolidate the **reorganization of the research areas** by seeking **affinity between the groups** and committing to the **figure of the area coordinator**. Implement **classification and evaluation processes for research groups**, based on the results of their scientific activity.

Encourage the interrelation of research groups by committing to the **development of collaborative projects** with institutions on the Campus. Consolidate the **configuration of transversal scientific programmes** in areas of interest to the Institute.

3. PROMOTION OF CLINICAL RESEARCH

Adapt the **management of clinical research** at the level of its needs for resources, processes, monitoring, through the **configuration of a Clinical studies unit** that allows the promotion of clinical research in the other HUGTiP care services.

4. RESOURCE MANAGEMENT, TRAINING AND PROFESSIONAL DEVELOPMENT

Commitment to the **configuration of a management structure** that supports all the needs of researchers.

Promote the participation of professionals in **competitive calls**, mainly international calls and with a special focus on European ones.

Guarantee the implementation of actions defined in the "*HR Excellence in Research*" Plan for the management of people, in turn committing to **the promotion of training, the recognition of research careers, gender equality** and providing adequate support to the newest profiles.

5. SPACES, INFRASTRUCTURES AND SCIENTIFIC PLATFORMS

Strengthen the **scientific platforms of the IGTP with a focus on being a point of reference**, through the configuration of collaboration agreements and in order to optimize the support and use of said services.

Promote the configuration of **research projects through transversal programmes** with the support of the CMCiB.

Implement a **plan to promote and advertise the platforms** that also considers the dissemination of the services they offer and provides advice on their use to professionals.

Have a **Space Plan** to meet the demand of research groups, platforms and scientific services in the coming years.

6. INNOVATION AND IMPACT

Continue to promote innovation among the Institute's professionals, through the **provision of resources, participating in networks**, and **searching for alliances,** which together allow for the adaptation of support activities in the processes of valuation and transfer of results.

Promote the **communication and visibility** of the Institute at the level of **health research results** and their **impact** on **society**.

6.2.4. Mission, vision and values

During the development of the strategy, the Mission, Vision and Values of the IGTP have been revised so that they are aligned with the challenges posed, incorporating the elements of international competitiveness, prevalent pathologies, improvement of people's health and quality of life, social impact and willingness to serve.

Reformulation 2023–2027

MISSION

The mission of the IGTP is to create a multidisciplinary and multi-institutional environment that allows translational research to be carried out with maximum efficiency in order to improve people's health and quality of life.

*The mission of the IGTP is **to be a centre of excellence, which** supports a multidisciplinary and multi-institutional environment which allows translational research and cutting-edge innovation **aimed at solving health challenges** from prevention to cure of diseases.*

VISION

The vision of the IGTP is to be a prestigious biomedical research centre, a reference point in Catalonia and in the world, which contributes to the improvement of people's health and quality of life through sustainability, excellence, professional experience and the technological transfer of its research.

*The vision of the IGTP is to be a prestigious biomedical research and innovation centre, **which works to improve people's health and quality of life** through **maximum efficiency** and sustainability, excellence, professional talent, technology transfer, access to advanced technologies and **cooperation, in order to ensure the greatest impact**.*

ALU

Leadership and research excellence: to be a reference point in prevalent and relevant areas of knowledge.

Innovation: conceptual, methodological, technological and clinical-therapeutic.

Commitment to society: progress in the pursuit of health through training, translationality and knowledge transfer.

Multidisciplinarity: facilitates cooperation and synergies between internal and external groups.

Ethics and humanitarian vision of biomedical research: strict respect for the ethical foundations and the humanitarian vision of biomedical research.

Leadership and research excellence: to be a reference point in prevalent and relevant areas of knowledge.

Innovation: conceptual, methodological, technological and clinical-therapeutic.

Commitment to society: progress in the pursuit of health through training, translationality and knowledge transfer.

Multidisciplinarity: facilitates cooperation and synergies between internal and external groups.

Ethics and humanitarian vision of biomedical research: strict respect for the ethical foundations and the humanitarian vision of biomedical research.

Sustainability: in the management of resources and the environment.

Willingness to serve: to be the best at working for vocation, ethics, and equity.

6.2.5. Strategic objectives

The strategic objectives represent the goals to be achieved in the development of the Mission and the Vision. In this regard, for the next five years the IGTP has formulated ten strategic objectives that will address future challenges and on which the focus and lines to be developed are oriented[6]. These objectives are aligned with the SDGs, in terms of reducing inequalities, climate and sustainability, among others.

SO1	**Commitment to a Campus model that facilitates greater participation and coordination between institutions in R&D activities, creating an environment with unique capabilities.**	**GROWTH AND INSTITUTIONAL ALLIANCES**
SO2	**Promote participation among HGTP professionals in research activities, as well as the relationship with other entities in the environment.**	**GROWTH AND INSTITUTIONAL ALLIANCES**
SO3	**Consolidate collaboration between the groups that make up the institutions of the Campus, strengthening scientific programmes and favouring the development of high-impact multidisciplinary projects.**	**SCIENTIFIC MODEL AND PROMOTION OF TRANSVERSAL SCIENTIFIC PROGRAMMES**
SO4	**Strengthen the scientific structure and promote the coordination of the areas and research groups with a system that allows the redefinition and promotion of the areas, as well as the evaluation of groups.**	**SCIENTIFIC MODEL AND PROMOTION OF TRANSVERSAL SCIENTIFIC PROGRAMMES**

The colours represent the association of the strategic objectives with the challenges to be addressed in the new strategic period 2023–2027.

SO5	Promote the growth of clinical research in HGTiP care services by adapting the Clinical Trials Unit, the processes and the necessary resources.	PROMOTION OF CLINICAL RESEARCH
SO6	Guarantee the R&D management processes, ensure the adequacy of resources and the provision and functional distribution of spaces.	MANAGEMENT OF SPACES, RESOURCES, TRAINING AND PROFESSIONAL DEVELOPMENT
SO7	Ensure the implementation of initiatives that facilitate the promotion, training, and professional development of researchers, as well as gender equality.	MANAGEMENT OF SPACES, RESOURCES, TRAINING AND PROFESSIONAL DEVELOPMENT
SO8	Position the IGTP as a reference node in scientific platforms in the environment and position the CMCiB as a unique facility at national and international level.	INFRASTRUCTURES AND SCIENTIFIC PLATFORMS
SO9	Promote and consolidate the innovative culture within the Institute, as well as the actions aimed at supporting the processes of innovation and technology transfer.	INNOVATION AND IMPACT
SO10	Promote the communication of the IGTP considering both actions for disseminating scientific activity and those that promote the participation of society.	INNOVATION AND IMPACT

Main SDGs with an impact on the development of the Strategic Plan:

6.2.6. Focus, Strategic Lines and Action Plans

The focus and strategic lines described below support the structure of the new Strategic Plan, in accordance with the objectives set out above, which will also mark the action plans. For the new Strategic Plan, the IGTP has defined four focuses aimed at achieving the objectives set out and which in turn are aligned with the Institute's objective, in achieving the goals of the Sustainable Development Goals (SDGs) of the 2030 Agenda (Figure 12).

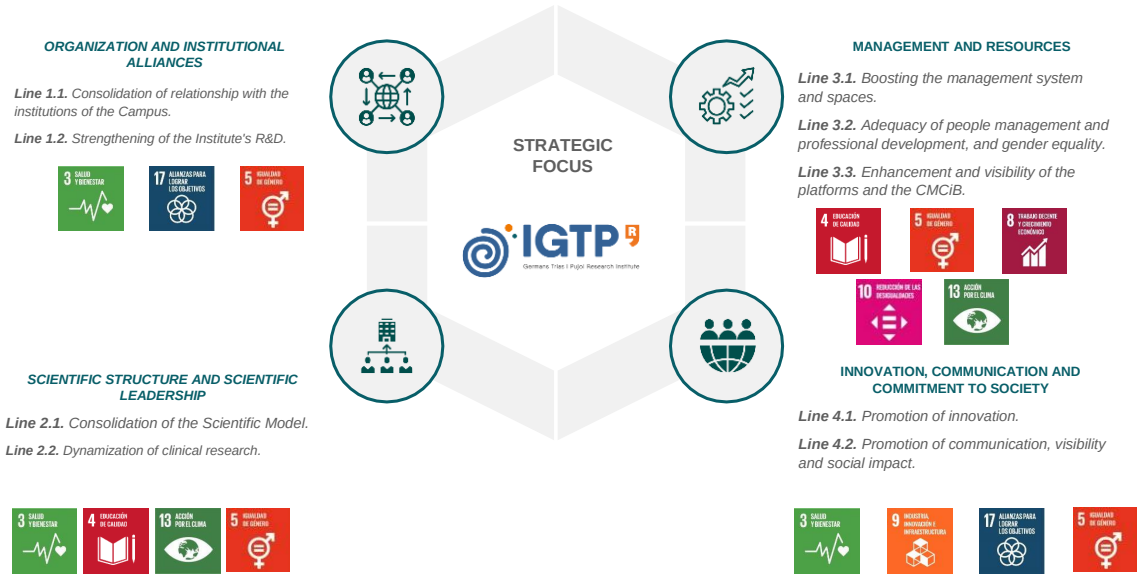


Figure 12: Association of strategic focus with the SDGs of the 2030 Agenda

The four focuses contemplate the strategic lines that are broken down into the different action plans and which in turn describe the main activities to be developed in the next five years. A summary of the structuring of the strategic formulation is shown below with more detailed information in the attached document Strategic Development 2023–2027.

Focus on Organization and Institutional Alliances

- **Line 1.1.** Consolidation of relationship with the institutions of the Campus.

  1.1.1. Plan for enhancing collaboration with the institutions of the Can Ruti Campus under the framework of the accredited ISCIII.

- **Line 1.2.** Strengthening of the Institute's R&D.

  1.2.1. Plan for the promotion and development of research among HUGTiP professionals.

  1.2.2. Plan for the consolidation of alliances with entities and research centres in the environment, mainly in the field of primary care and health centres.

Focus on Scientific Structure and Scientific Leadership

- **Line 2.1.** Consolidation of the Scientific Model.

  2.1.1. Plan of adaptation of the monitoring and evaluation system of the scientific activity of the areas, groups and research programmes.

  2.1.2. Plan for the consolidation of transversal scientific programmes.

- **Line 2.2.** Dynamization of clinical research.

  2.2.1. Plan for the consolidation of the management of clinical research.

  2.2.2. Plan for the configuration of a Clinical Trials Unit.

Focus on Management and Resources

- **Line 3.1.** Boosting the management system and spaces.

3.1.1. Plan for the consolidation of the administration unit, improvement of processes, spaces and institutional digitization.

3.1.2. Resource attraction and internationalization plan.

- **Line 3.2.** Adequacy of people management and professional development, and gender equality.

3.2.1. Development plan for the people management and training policy.

3.2.2. Plan for research career development, recruitment and consolidation of talent.

- **Line 3.3.** Enhancement and visibility of the platforms and the CMCiB.

3.3.1. Plan to promote the IGTP as a reference node in the field of scientific platforms.

Focus on Innovation, Communication and Commitment to Society

- **Line 4.1.** Promotion of innovation.

4.1.1. Plan for integrating innovation into the IGTP.

4.1.2. Plan for relationships with entities in the business sector.

- **Line 4.2.** Promotion of communication, visibility and social impact.

4.2.1. Internal communication plan.

4.2.2 Plan for scientific dissemination and commitment to society.

Each of the plans is developed from this strategic formulation according to the defined strategic lines and in a specific time frame. In addition to the actions, each action plan specifies the purpose, those responsible for it, execution time, and monitoring and results indicators.

The IGTP Strategic Plan 2023–2027 also has an annex called the Scorecard, which summarizes the Plan and relates the actions to the different monitoring and results indicators, measurement objectives and periodicity.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Institut Català de la Salut


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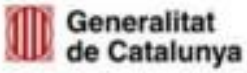
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