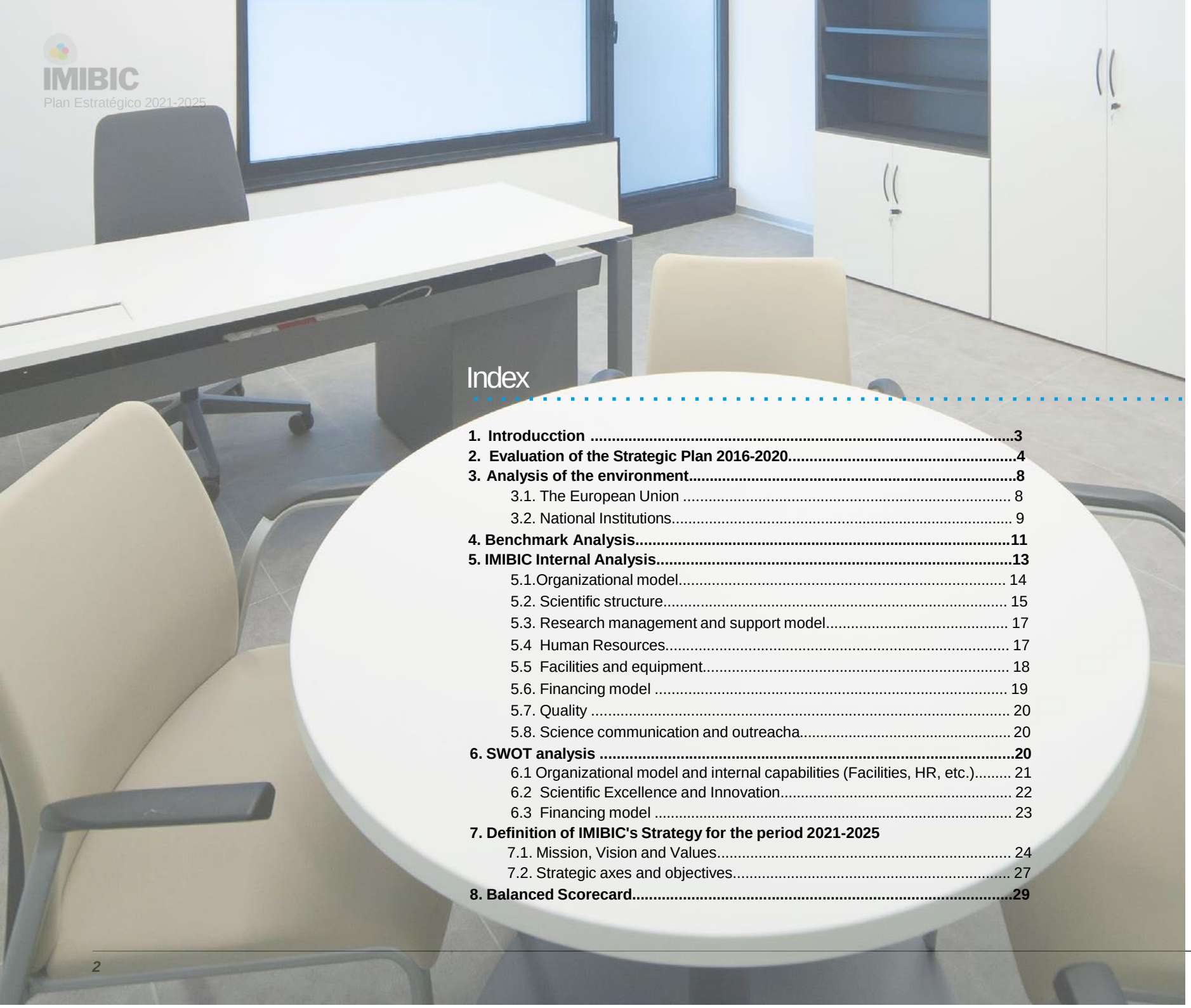
IMIBIC INSTITUTO MAIMÓNIDES DE INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA

Executive Summary of the Strategic Plan

2021-2025



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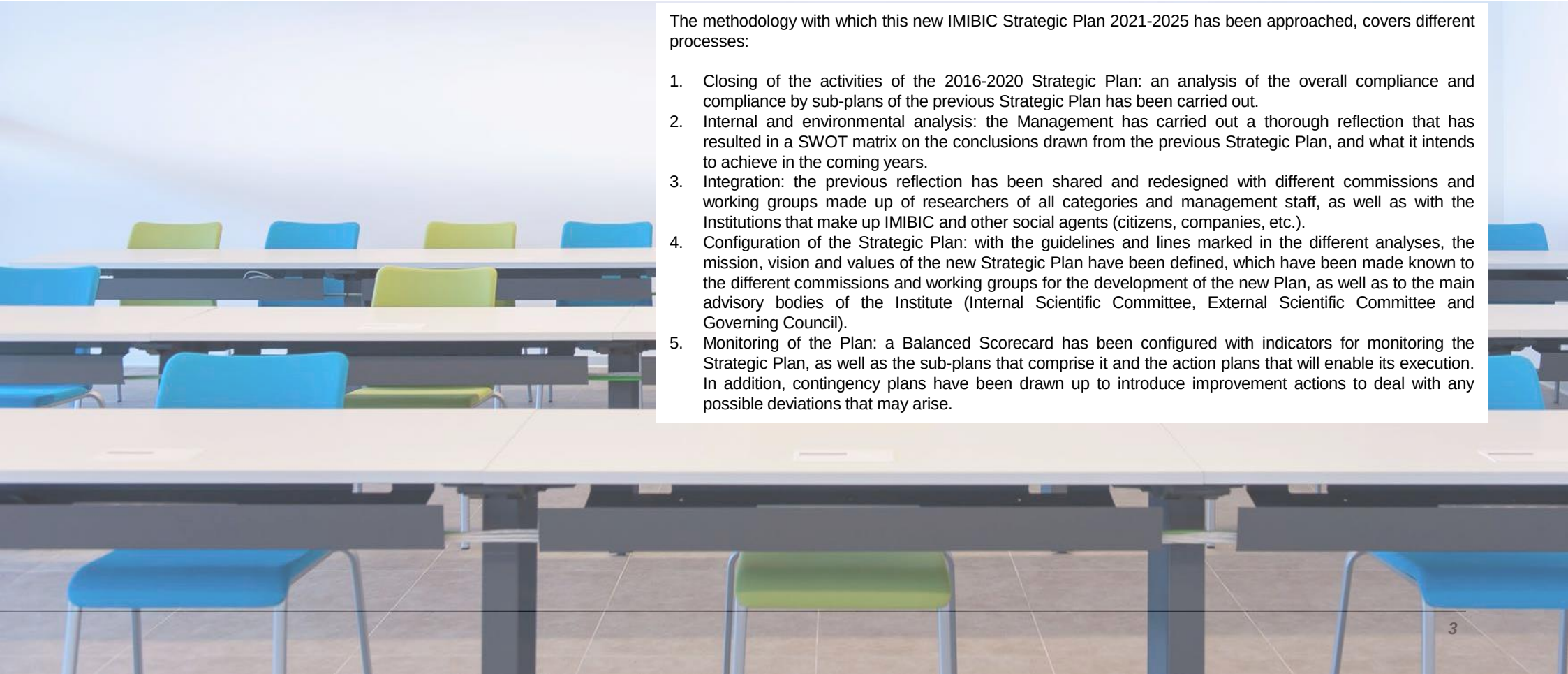
1. Introducction

This Executive Summary document of the Strategic Plan of the Maimonides Institute of Biomedical Research of Cordoba (IMIBIC) aims to summarize the development and strategic lines for the time horizon 2021-2025.

This new Strategic Plan has been developed taking into account, among others, the Horizon Europe Strategy, the Spanish Strategy for Science, Technology and Innovation (EECTI - 2021-2027) and the Strategy for Research and Innovation in Health in and Innovation in Health in Andalusia of the Ministry of Health and Families of the Regional Government of Andalusia (2021-2024).



The methodology with which this new IMIBIC Strategic Plan 2021-2025 has been approached, covers different processes:

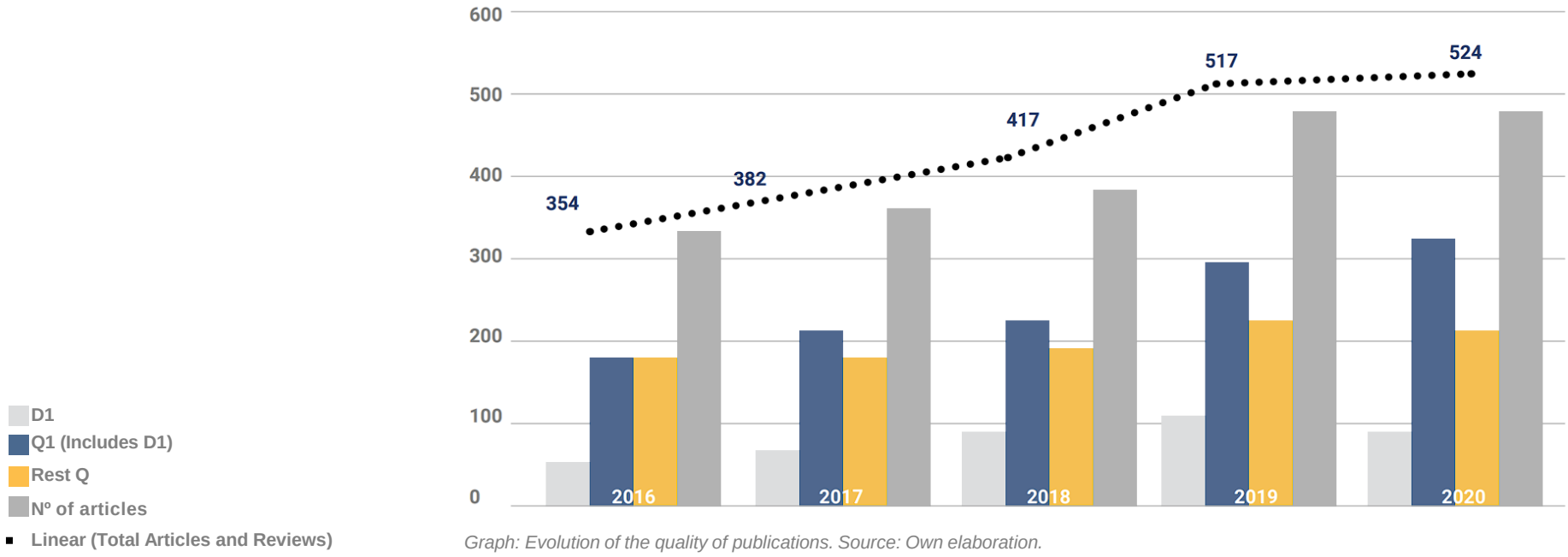
1. Closing of the activities of the 2016-2020 Strategic Plan: an analysis of the overall compliance and compliance by sub-plans of the previous Strategic Plan has been carried out.
2. Internal and environmental analysis: the Management has carried out a thorough reflection that has resulted in a SWOT matrix on the conclusions drawn from the previous Strategic Plan, and what it intends to achieve in the coming years.
3. Integration: the previous reflection has been shared and redesigned with different commissions and working groups made up of researchers of all categories and management staff, as well as with the Institutions that make up IMIBIC and other social agents (citizens, companies, etc.).
4. Configuration of the Strategic Plan: with the guidelines and lines marked in the different analyses, the mission, vision and values of the new Strategic Plan have been defined, which have been made known to the different commissions and working groups for the development of the new Plan, as well as to the main advisory bodies of the Institute (Internal Scientific Committee, External Scientific Committee and Governing Council).
5. Monitoring of the Plan: a Balanced Scorecard has been configured with indicators for monitoring the Strategic Plan, as well as the sub-plans that comprise it and the action plans that will enable its execution. In addition, contingency plans have been drawn up to introduce improvement actions to deal with any possible deviations that may arise.

2.

2. Evaluation of the Strategic Plan 2016- 2020

The IMIBC Strategic Plan for 2016-2020 was made up of 5 strategic axes and 3 transversal lines. In general terms, we can say that most of the milestones that were of the milestones that had been considered in the Plan have been achieved. The IMIBIC has experienced a remarkable growth in most of its indicators, scientific production, fund raising, clinical research, etc. However, after a thorough analysis, areas for improvement have been identified.

The growth in the number of publications in indexed journals has been significant in the five-year period 2016-2020. Not only has there been an improvement in number, but also in quality, as it has been possible to increase the percentage of publications in the first quartile, as well as the average impact per article.



Graph: Evolution of the quality of publications. Source: Own elaboration.

In turn, this growth has been accompanied by an increase in the number of research projects with competitive funding of national origin. The following graph shows the evolution of active competitive projects of public call according to the funder (International - I, National -N, Autonomous - A).

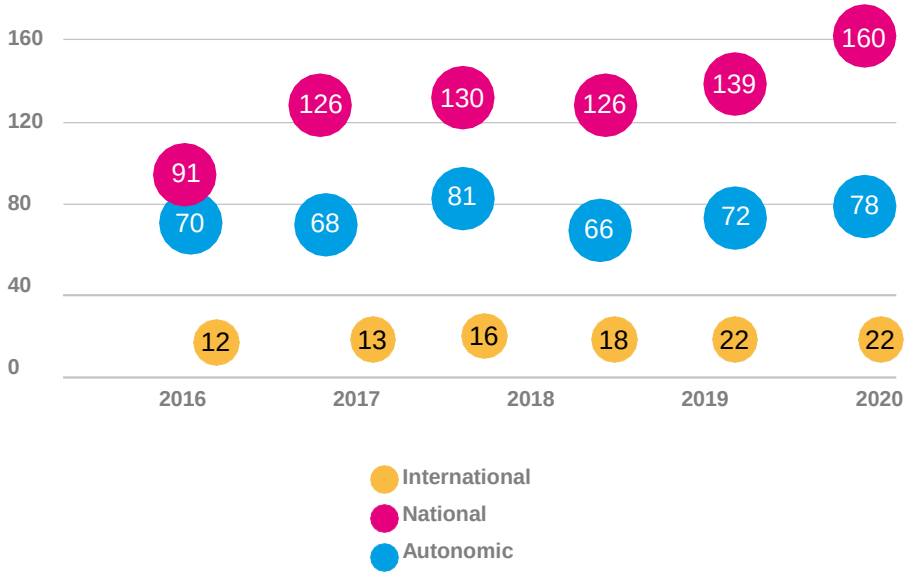
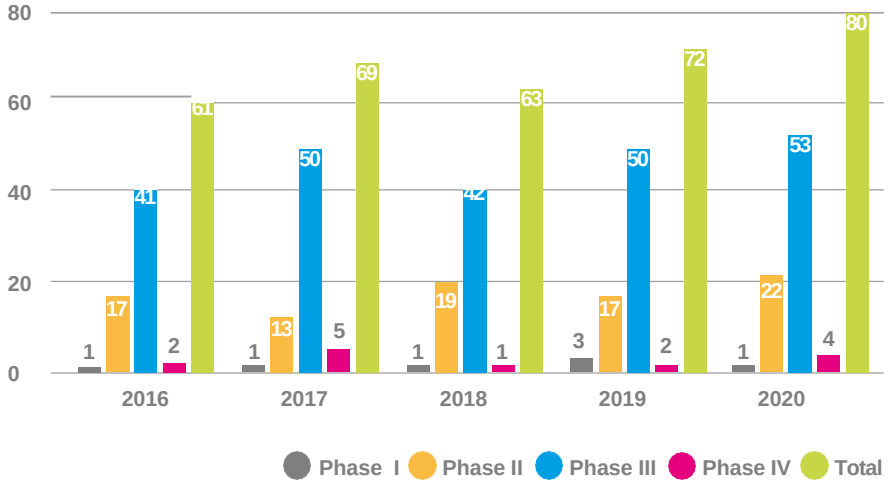


Image: Evolution of active competitive public call projects according to funder. Source: Own elaboration.

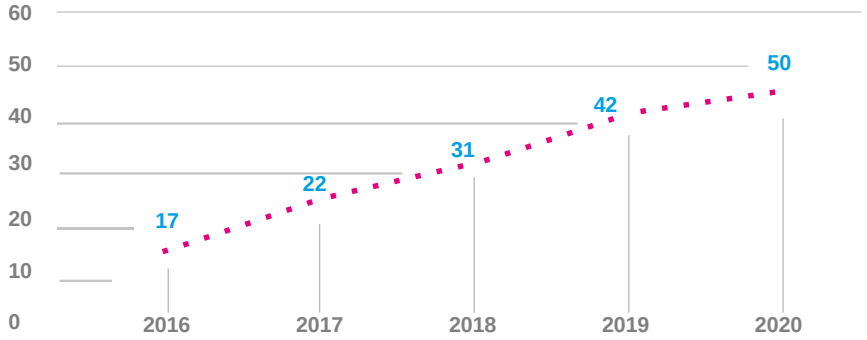
There has also been a notable growth in clinical studies, although it is worth noting the firm commitment that must be made to attract early-phase studies. Phase II and Phase III studies have consolidated their position as the main attractors within the distribution of trials by phase, as shown in the graph below.



Graph: Commercial trials achieved by year and phase. Source: Own elaboration.

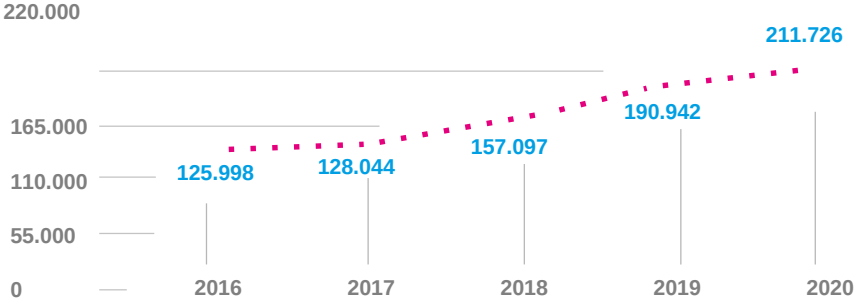
As a result of the above, and given that the strategic axis is focused on Solving Health Problems, we must highlight the increase in the number of patients recruited by all the studies, which in each year has exceeded the 5,000 patients.

Another asset of IMIBIC is the attraction and promotion of highly qualified and competitive human capital that allows the optimal development of the research career, correcting inequality situations between men and women, retaining and attracting talent, and facilitating the incorporation of researchers from outside our environment and especially international researchers and especially international researchers. The following graph shows the evolution of researchers funded by competitive calls.



Graph: Translational researchers funded in competitive calls. Source: Own elaboration.

Linked to fund raising for personnel, and given that most of the Human Resources calls for proposals foresee this, a very important effort has been made by IMIBIC to co-finance, through its Projas Plan, the contracts obtained, in particular from the Miguel Servet and Sara Borrell calls for proposals, among others.



Graph: Co-financing of competitive HR calls - Own Plan. Source: Own elaboration: Own elaboration.

One of the keys to IMIBIC's strategy is to foster, through its excellent research and the promotion of innovation, the economic and social development of the province of Cordoba. Through this impulse, the Institute would contribute to turn biomedicine into one of the driving sectors for the progress of the Andalusian region and the welfare of its population.

The new accreditation guide of the Carlos III Health Institute sets out very clear guidelines on the orientation of Health Research Institutes towards society and the responsibility that, as organizations, they have towards citizens' and patients' groups and movements, as well as towards each other. This RRI (Responsible Research and Innovation) strategy aim is not only to bring science to the potential beneficiaries as patients, but also to get the patients themselves and the actors surrounding the health sector to give their opinion on how they see our Institutes and the work we do, including the projects carried out in the institution.

For its part, the growth experienced in international fundraising has been significant in the period covered by the 2016-2020 Strategic Plan. Funding has been obtained for the P2MED-COFUND program, for Personalized and Precision Medicine, within the Marie Skłodowska-Curie COFUND Program, which has allowed the attraction of international talent (up to 7 postdoctoral researchers) to carry out 3-year research projects. On the other hand, during this period, more than 15 applications for funding have been submitted to EU MSCA-type HR calls for proposals.

The achievement of this EU Program has been facilitated by obtaining in 2017 the HR Excellence Seal HRS4R, which guarantees procedures of equality, merit and capacity in the HR calls promoted from the Institute.

With regard to Innovation and Translation, we should distinguish two well-differentiated paths. On the one hand, there is the attraction of financing for the development of innovation projects and, on the other, for the provision of services to private entities. Growth in both fields has been considerable. Not only has there been significant growth in the generation of private funds (agreements, donations, service contracts, etc.), but also the number of active projects in this area has increased almost threefold. For its part, in 2019 the development and strengthening of the UCAIB for Technological Innovation was promoted, led by engineering profiles, to support innovation in medical devices and care reorganization processes proposed by IMIBIC's reference hospital, the Reina Sofia University Hospital (HURS).

3. Analysis of the environment

3.1. The European Union

3.1.1 Horizon Europe

Horizon Europe (HE) is the European Union's Framework Program for Research and Innovation for the period 2021-2027 which is the main funding instrument for research and innovation at the European level. Its total budget is estimated at around 95.5 billion (M) euros (including 5.4 billion euros of NextGenerationEU catch-up funds and 4.5 billion euros of additional reinforcement funds). This represents an increase of approximately 30% of the total budget compared to the previous Horizon 2020 Framework Program (2014-2020). This increase is therefore an opportunity that should be taken into account for the Institute's internationalization strategy.

3.1.2 Other EU programs

3.2. National Institutions

3.2.1 State Plan for Scientific and Technical Research and Innovation (2021-2027)

This is the instrument on which the General State Administration relies to meet the objectives of the Spanish Strategy, the Europe 2020 Strategy and currently Horizon Europe (2021-2027), through the call for public state aid dedicated to Research, Development and Innovation.

The State Plan is made up of four Programs, in addition to three Strategic Actions:

- State Program for the Promotion of Talent and its Employability in R+D+I.
- State Program for Knowledge Generation and Scientific and Technological Strengthening of the R+D+I System.
- State Program for Business Leadership in R+D+I.
- State Program for R+D+I oriented to the Challenges of Society.

Within the strategic actions of the Spanish Strategy for Science, Technology and Innovation (EECTI), the **STRATEGIC ACTION ON HEALTH** stands out, which includes the scientific and technological objectives in health and the strengthening of the capacities of the National Health System, with the Carlos III Health Institute (ISCIII) being the managing body of the activities that are developed.

3.2.2 Strategic Plan of the Carlos III Health Institute (2021-2025)

The Strategic Plan 2021-2025 of the Carlos III Institute of Health (PEISCIII) has recently been published, which is presented as an opportunity to continue improving the efficiency and solvency of the system, and to address new challenges aimed at improving the health of citizens and combating disease. The PEISCIII aims to promote the improvement of the service that the Carlos III Institute of Health (ISCIII) provides to society, guaranteeing, from a public responsibility perspective, the mission entrusted to it.

The alignment of the IMIBIC Strategic Plan with the PEISCIII is evident. Although obviously the purpose of the plans is different, on the one hand because the ISCIII is an organization that, among other activities, dynamizes and coordinates the activity of the IIS, and on the other, because of its own nature as a funding entity, both plans outline relevant concepts such as internationalization, orientation towards society, transfer, innovation, digitalization, etc.

3.2.3 Regional: Andalusian R&D&I Strategy 2021-2027 and Andalusian Health Research and Innovation Strategy (2020-2023)

Andalusia R+D+I Strategy

The Andalusian Plan for Research, Development and Innovation (PAIDI2020) has recently been presented, which as of 2021 has been renamed the Andalusian R+D+i Strategy (EIDIA) and, given that it covers the period 2021-2027, is aligned with the EECTI. Coordinated by the Regional Ministry of Economic Transformation, Industry, Knowledge and Universities, EIDIA aims to achieve for Andalusia the highest levels of efficiency and competitiveness in terms of research and innovation and thus contribute to smart, sustainable and inclusive growth that achieves a knowledge-based economy.

The Andalusian R+D+i Strategy 2021-2027, as published in the Official Gazette of the Andalusian Regional Government (BOJA) on April 1, 2020, revolves around three guiding principles: participation, transparency and evaluability.

Andalusian Health Research and Innovation Strategy (2020-2023)

The Andalusian Health Research and Innovation Strategy (2020-2023) presented by the General Secretariat for Health Research, Development and Innovation of the Ministry of Health and Families of the Andalusian Regional Government in 2020, aims to be the guiding element that orients and orders the development and generation of biomedical and health knowledge within the APHS. Its aim is to articulate the actions necessary to promote the development of research and innovation in health, which will ultimately have an impact on the patient. The Andalusian Health Research Institutes (IIS), including the IMIBIC, are considered a key element in this Strategy. The Andalusian IIS, with the support and coordination offered by the Andalusian Public Foundation for Progress and Health (FPS), will implement the above strategy in actions that seek development and efficiency in the use of resources, public-private collaboration and the development of talent, in order to position Andalusia as a region of excellence in biomedical research oriented towards health results.

4.

4. Benchmark Analysis

The main objective of the benchmarking analysis carried out in the context of the new Strategic Plan has been to analyze organizations of the highest excellence similar to IMIBIC, in order to take them as a reference point for the development of this Plan. Therefore, this analysis covers aspects such as the organizational model of the Institutes analyzed, which institutions support them, how research is integrated with their reference hospital, their scientific production, funding model, and any other aspect that may be considered relevant

The Institutes selected for this study are the Vall d'Hebron Research Institute (Barcelona), associated with the Vall d'Hebron hospital, and the Berlin Institute of Health (Berlin, Germany), associated with the Charité - Universitätsmedizin Berlin Hospital.

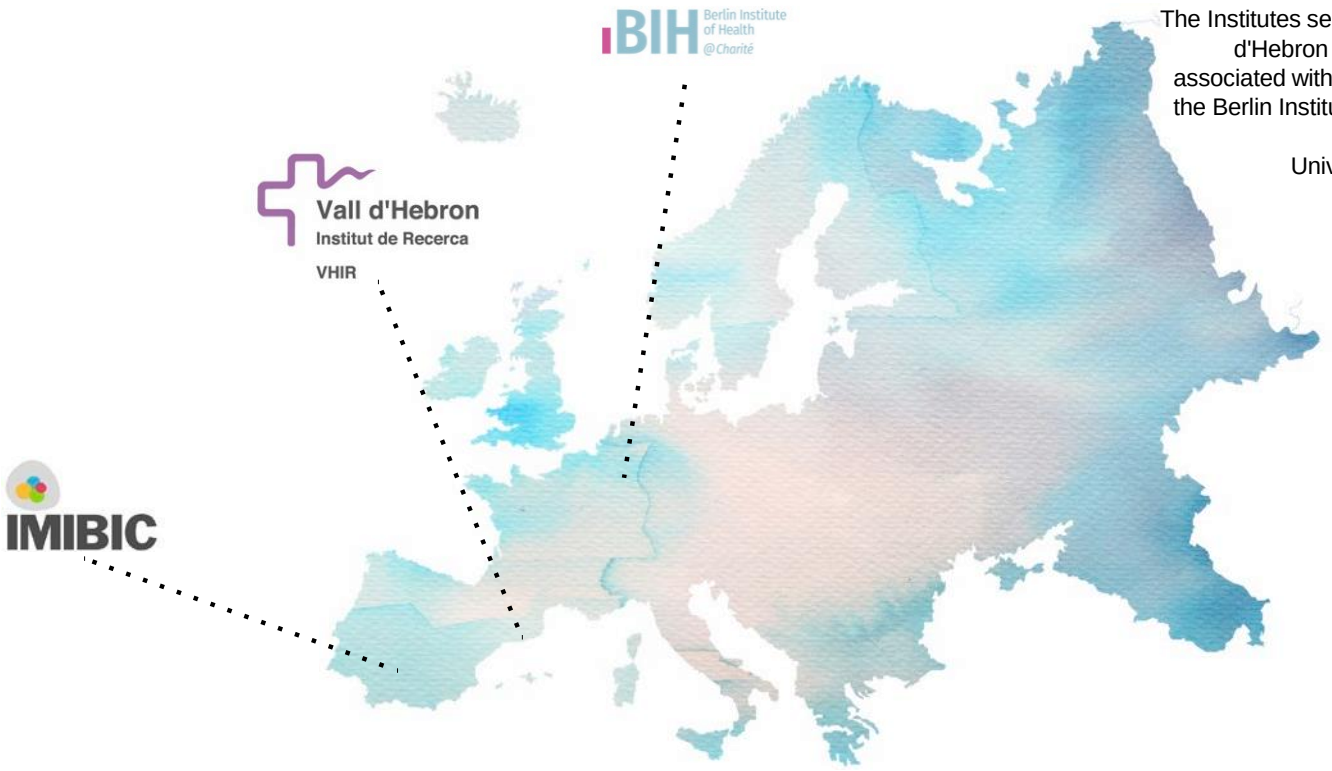


Image: Location Berlin Institute of Health, the Vall d'Hebron Research Institute (Barce- lona) and IMIBIC. Source: Ela- own calculation.

The following conclusions can be drawn from the analysis:

Regarding the organization, we must highlight the composition of the External Scientific Committee of both, especially the BIH, with scientists from the best international research centers. They also have representatives from technology companies (VW in the case of BIH) or publishing houses (The Lancet in the case of VHIR).

In both cases, the mission is also very clear: to solve health problems, from bench to bedside. The patient must therefore be the ultimate goal of a Health Research Institute.

In terms of funding, the strong component of the BIH's funding that comes from private donations is striking. In the VHIR, the budget, despite being balanced, depends heavily on the public section of the ISCIII funding, although it is true that it is quite atomized between different public and private agents.

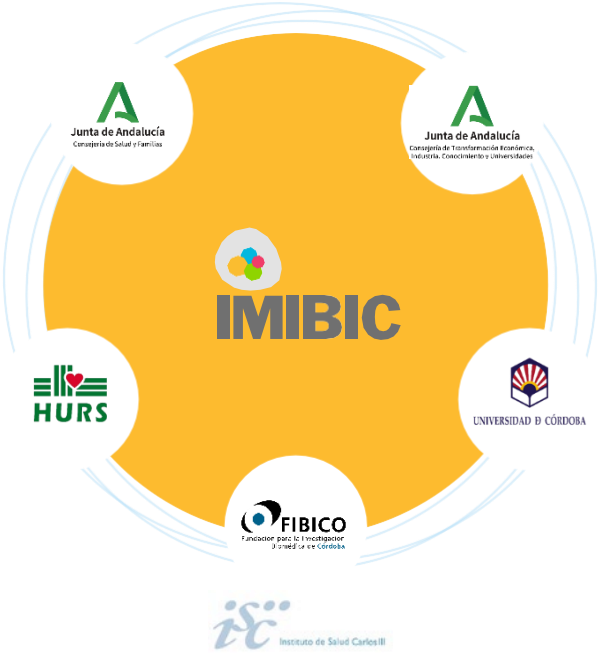
Likewise, in the economic section, it is worth mentioning the allocation of what we would call “Plan Propio”, supporting pre- and postdoctoral personnel contracts in a competitive way and also, in the case of VHIR, dedicating a specific part to researchers coming from abroad.

Innovation. We must emphasize the importance of having a good support structure that accompanies the research groups in this sense, even up to the proof of concept or prototype. This is the only way to make a good analysis of the idea and the market to which it can be directed. In addition, external mentoring actions are financed, especially in the BIH.

Infrastructures and Core Facilities. Both centers are immersed in the construction of new buildings. As in the case of IMIBIC, this improved provision will necessarily be accompanied by greater growth.

Internationalization. The selected Institutes have two very different realities. If in the case of the BIH (through one of its founding entities, Max Delbrück Center for Molecular Medicine in the Helmholtz Association, MDC) more than 50% of its researchers are foreigners, this is not the case at the VHIR. An active policy of talent attraction should be carried out that also favors the attraction of international funding.

5. IMIBIC Internal Analysis



Since 2011, IMIBIC is part of the Health Research Institutes accredited by the Carlos III Health Institute (ISCIII), obtaining in 2016 the appropriate reaccreditation, having applied for the new reaccreditation in March 2021.

5.1 Organizational model

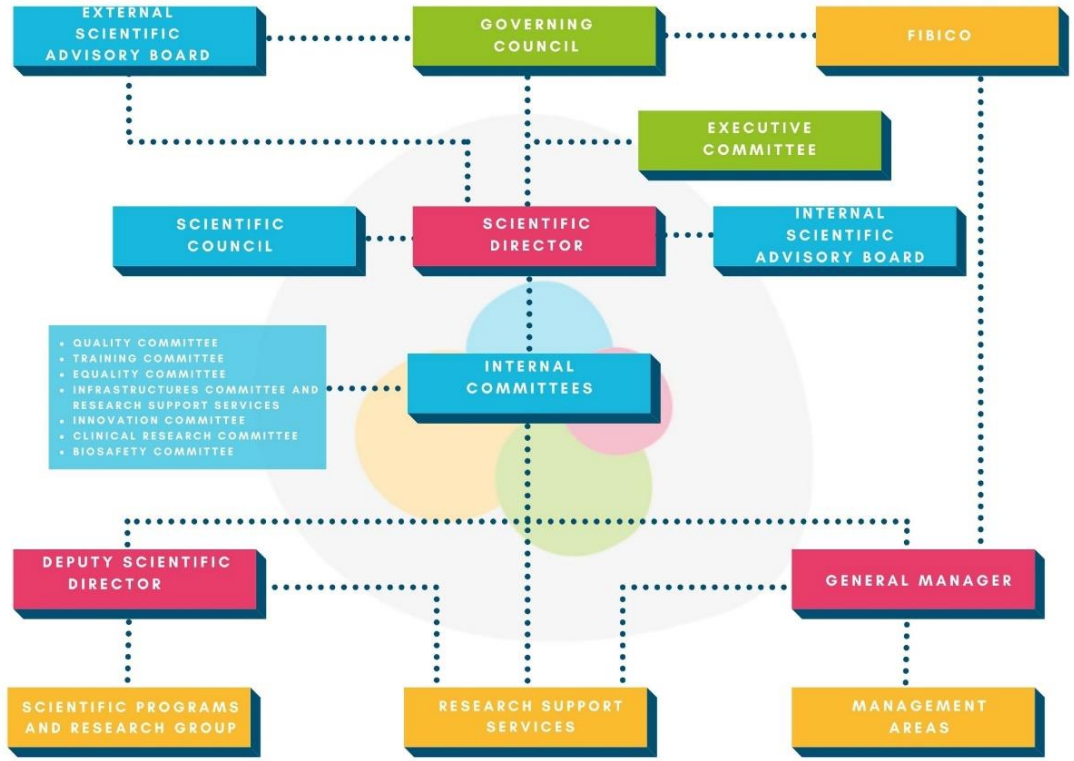


Image: IMIBIC's Organisation Chart

5.2. Scientific structure

5.2.1 Research programs and groups

At the end of the 2020 financial year, IMIBIC is made up of the following number of research groups:

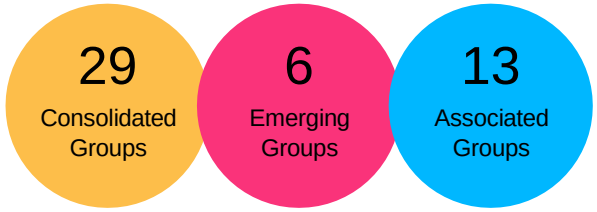


Image: Composition of IMIBIC Research Groups by category.

IMIBIC establishes a division of its main lines of research by programs, which are as follows:

1

Active aging and frailty
This programme aims to further our knowledge of the molecular and pathogenic basis of the ageing process and its relationship with quality of life, as well as to search for new patient care strategies.

2

Nutrition, endocrine and metabolic diseases.
This program is dedicated to investigating diseases of the metabolic and endocrine systems, with a special focus on the role of nutrition in the prevention and management of these processes at different stages of life. It also focuses on the study of repr

3

Infectious and Immunological Disseases and Organ Transplatation
This program studies diseases caused by different infectious agents, particularly infections in immunodepressed patients.

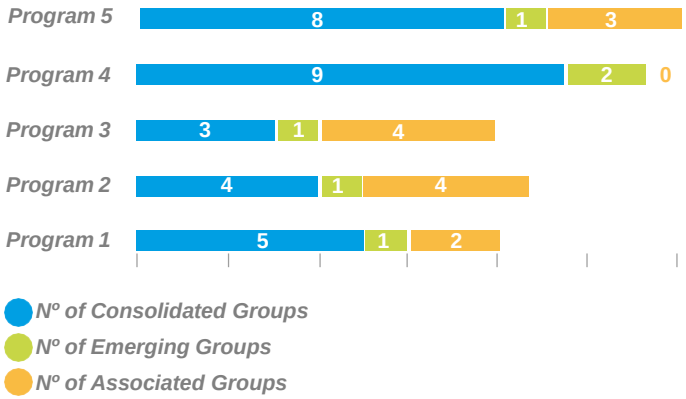
4

Cancer (Oncology and Oncohematology)
The research focus of this program is on neoplastic diseases, including both solid tumors and hematological malignancies.

5

Chronic and inflammatory diseases
The research focus of this program is on neoplastic diseases, including both solid tumors and hematological malignancies.

Distribution of the Institute's five research programs of the Institute:

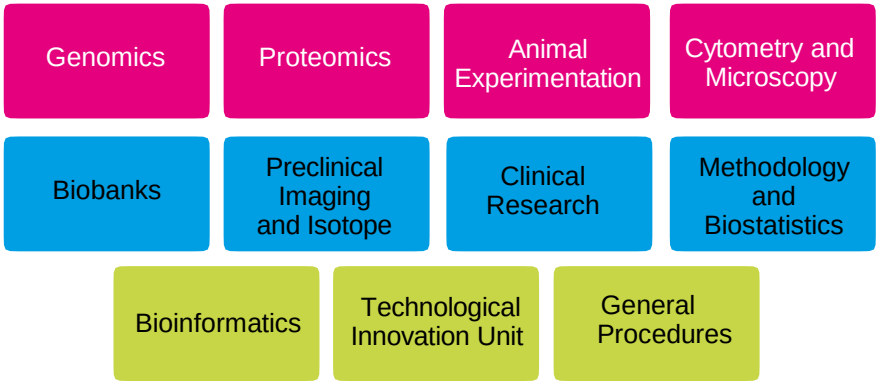


Graph: Distribution of groups by programs. Source: Own elaboration: Own elaboration.

On the other side, the Reina Sofia University Hospital is made up of 41 Clinical Management Units with healthcare activity. Of these, a total of 30 have their own research group integrated in the IMIBIC, which represents 73% of all the hospital units. In addition, another 9 clinical management units have professionals linked to IMIBIC research groups, but not led by them. These data show the existence of a critical research mass in practically 100% of the care units, which confirms the commitment of the Reina Sofia University Hospital of Cordoba to the Institute. In addition, we should highlight the presence of research groups in Primary Care, as well as the provision of space in this area of care.

5.2.2 Central Research Support Units (UCAIBs)

The UCAIBs are described in the Internal Operating Regulations and their structure and organization are approved by the Institute's Governing Council. The Units that make up the UCAIBs are the following:

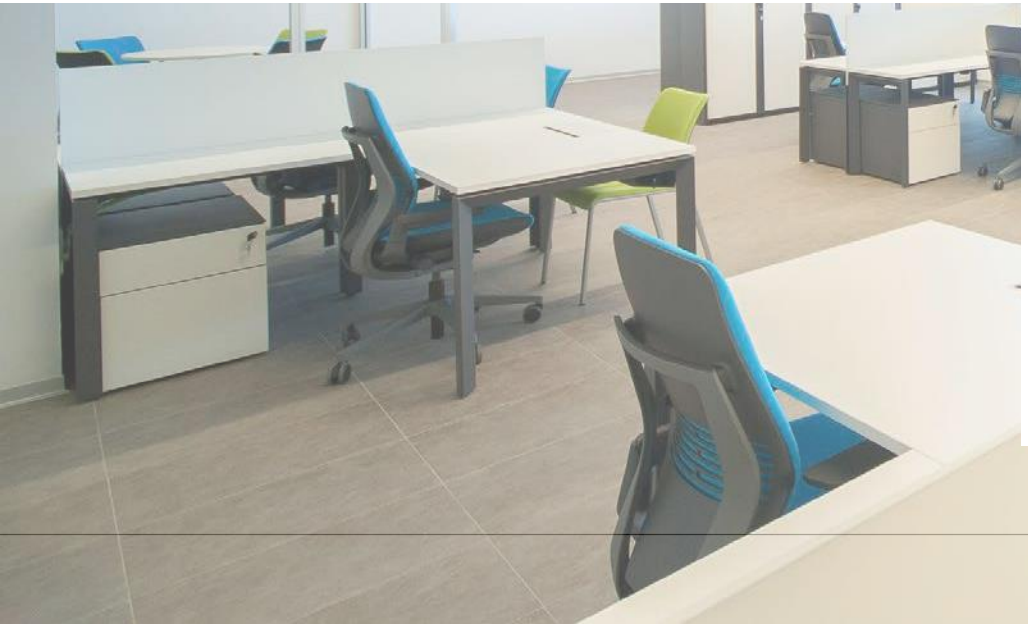


5.3. Research management and support model

The management and administrative support to research groups at IMIBIC is designed to effectively assist researchers in the necessary procedures for both funding applications and in the management of contracts for clinical studies, economic monitoring instead of economic management because it repeats the management of research projects, etc.

In this sense, IMIBIC has different management areas:

- R+D+I Management
- Economic and Resources Management
- Corporate Development
- Training
- Quality
- IT support service – ICT



5.4. Human Resources

At the end of 2020, IMIBIC had a staff of 992 people, including the staff of the research groups, management and UCAIBs; of these, 834 are researchers attached to the research groups. This data reflects a notable increase in the critical mass of researchers at the Institute, since in 2016, the number of researchers amounted to 589, which represents an increase in research personnel of around 40%. As highlighted below, in these years several new research groups have been attached to IMIBIC, and the development of Emerging to Consolidated Groups has also been favored, which has allowed their growth, and therefore, reaching more researchers.

In addition, IMIBIC has an Equality Commission and an Equality Plan which, among other functions, ensure that these precepts are complied with and promote actions such as proposals for work-life balance, leadership of female researchers, training in inclusive language, etc.

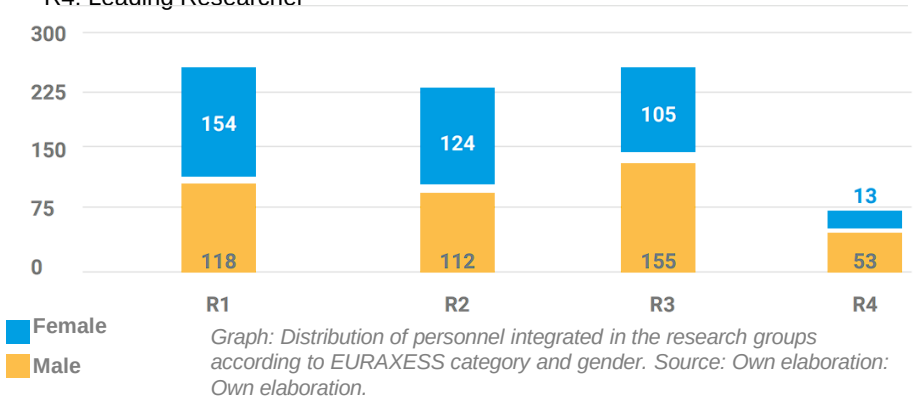
The staff of the research groups concentrate mainly on the groups consolidated. The IMIBIC classifies its personnel, based on the classification EURAXESS, distinguishing the following levels

R1: First Stage Researcher

R2: Recognized Researcher

R3: Established Researcher

R4: Leading Researcher



Graph: Distribution of personnel integrated in the research groups according to EURAXESS category and gender. Source: Own elaboration: Own elaboration.

5.5. Facilities and equipment

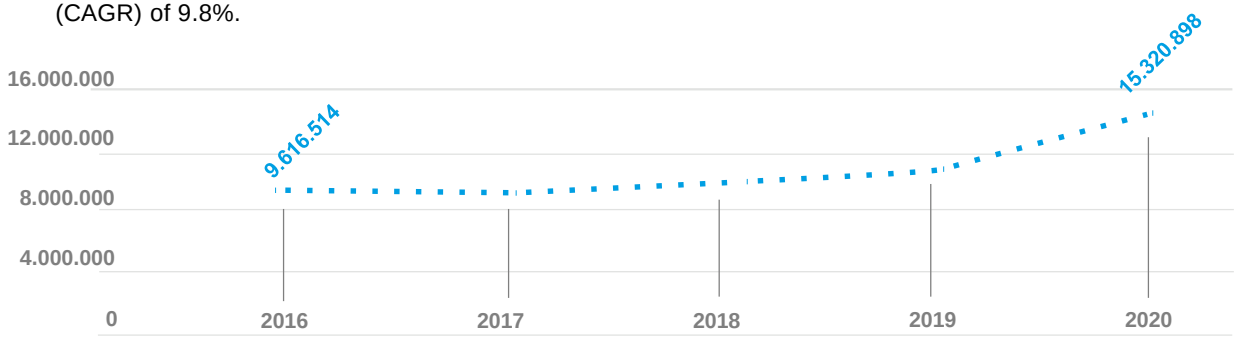
The IMIBIC has among its infrastructure different spaces intended for both research clinical as well as translational. These facilities are materialize in a translational research building of more than 10,000 m2, distributed over 6 floors. Likewise, the IMIBIC has spaces within the Reina Sofía Hospital Complex, intended primarily to carry out clinical research, including the Early Phases Unit, Biobank and clean room areas for carrying out projects of cell therapy. These spaces occupy more of 2,700 m2.

Images: Clinical Research and Technological Innovation Building and Early Phases Unit, IMIBIC (Cordoba, Spain).

5.6. Financing model

Development of the financing raised

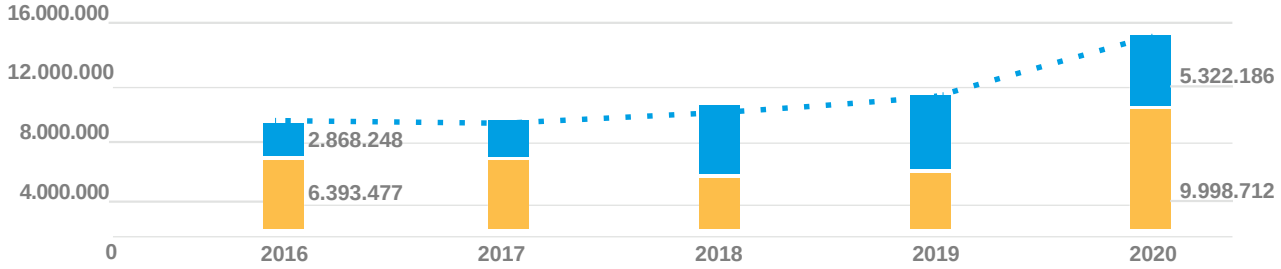
The trend in fundraising experienced by IMIBIC over the last five years, which have included the recently concluded Strategic Plan, is shown below. The graph shows a compound annual growth (CAGR) of 9.8%.



Graph: Evolution of total fund raising. Source: Own elaboration: Own elaboration.

Raising funds according to their origin.

The following chart shows the evolution in fundraising from public and private calls, donations, agreements, billing of clinical studies, Financing of Platforms, The Centre's main task is to provide training and support for research teams in the field of biomedical research. There is a clear trend towards the growth of private-sector capital.



Graph: Evolution of total fundraising according to origin. Source: Own elaboration: Own elaboration.

5.7. Quality

IMIBIC is an excellence-oriented institution that guarantees quality in relation to its scientific and management activities, based on the Institute's Quality Plan. The aim of this Plan is to contribute to the promotion of the quality of research and of the care and research and, therefore, of biomedical care and teaching in Cordoba, as well as to optimize the human and material resources available to achieve this objective. In this sense, for the design of its Quality Management System, the EFQM Model and the UNE-EN ISO 9001:2015 Standard have been taken as a reference, both oriented to satisfy the needs and expectations of its clients or stakeholders through process management and continuous improvement.

5.8. Science communication and outreach

In order to meet IMIBIC's objectives, as well as the Institute's RRI strategy, a deep reflection on the actions of scientific communication and dissemination is necessary. To this end, IMIBIC has a Communication and RRI Plan, which has among its main objectives:

- To position and enhance IMIBIC's image as a national reference center in excellent science.
- Establish the necessary protocols and tools to facilitate communication between the different agents that make up the Institute.
- To position communication and scientific dissemination as the principle and driving force of Responsible Research and Innovation (RRI).

6.

6. SWOT analysis

The SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) is a tool that allows to analyze the reality of an institution or company, brand or product in order to make strategic decisions. The SWOT analysis presented below is based on the external and internal analyses carried out in the preparation of this document.

For a better visualization, the analysis has been divided into three areas: Organizational model and internal capabilities (Facilities, HR, etc.), Scientific Excellence and Innovation, and Financing model.

6.1 Organizational model and internal capabilities (Facilities, HR, etc.)

WEAKNESSES

Low participation of social actors (citizens, companies, other institutions, etc.) in the governing and consultative bodies.

Limited presence of representatives of international centers in the External Scientific Committee.

Low critical mass of Primary Care in the configuration of research groups.

Low number of research personnel from international centers.

Lack of culture oriented towards participation in international networks.

THREATS

Increasing number of accredited health research institutes, which increases competition.

Unequal support depending on the Autonomous Community in which each Institute is located.

The generational replacement of research groups, which requires joint action between Hospital and University.

Stability and recognition of the research career.

Loss of attractiveness of the research career, especially in more clinical profiles.

Limitations in the proposal of salary or working conditions improvements to retain specialized research, technical and management personnel.

Low number of companies in the biosanitary sector in the Institute's field of action.

Lack of external funding for the work and development of scientific programs, especially to promote integrated projects between programs.

STRENGTHS

Strong institutional integration.

Alliance with the University of Cordoba for the development of the research career, highlighting key aspects such as teaching.

Recognition of management support to the groups.

Facilities and services made available for research (UCAIBs).

European Seal of Excellence in Human Resources (HRS4R).

Representation of the UGCs in the Institute's groups.

The size of the Institute allows a close accompaniment of the Management in terms of strategy and support to the groups.

The support offered by the Training Unit to the research groups, which in turn allows leading the PhD Program in Biomedicine and the Master in Translational Biomedical Research.

IMIBIC's internal advisory committees are made up of researchers of different levels (promoting gender balance and highlighting the participation of emerging researchers) and lines of research (translational, clinical, etc.).

OPPORTUNITIES

Identification of health as a key pillar within the Horizon Europe Strategy.

Alliances with other research centers: development of joint projects that allow access to international funding.

Commercial clinical research: necessary for the development of the Hospital and to offer patients innovative therapeutic alternatives.

The approach to society and other interest groups (patients' associations, business associations, etc.).

Relevant number of incorporations of young postdoctoral researchers that will allow both the implementation of new cutting-edge research lines and the promotion of pre-existing lines.

The generational change in the research groups will be key to IMIBIC's projection in the next 10 years.

6.2 Scientific Excellence and Innovation

WEAKNESSES

There is room for improvement in the transfer of the results of the Institute's research and innovation to patients and the productive sector.

The distribution of scientific production is unequal, with few groups generating a large number of articles.

Still limited number of in-house articles with an impact index >10.

The use of the affiliation policy by researchers could be improved.

THREATS

The culture of innovation and internationalization of the groups.

The need to establish alliances with powerful research centers, especially abroad.

The growing importance of publication in Open Science journals, also to increase bibliometric indicators (citations received, expected citations by area of knowledge, etc.), which entails a higher cost of publication.

Innovation is part of the leitmotiv of Health Research Institutes.

The loss of focus or the absence of results that can be transferred to clinical practice is a risk for the future of the Institute.

Need to approach companies for the development of medical devices.

Constant change in technology, which is an entry barrier to access to new techniques by some research groups.

STRENGTHS

Increase in the number of publications in recent years.

Increase in their quality, with more than 50% of publications in Q1 journals in recent years.

The affiliation policy designed favors institutional integration as well as the role of the Institute as a link between Hospital and University.

The policy recently implemented in the Own Plan for the recognition of the best publications in Open Access led by our groups.

The support and experience of the staff of the Innovation and

Technological Innovation Unit.

OPPORTUNITIES

Alliances with other research centers for the development of joint projects that can improve the impact and level of publications.

Innovation as a driving force for the development of IMIBIC, with a support configuration prepared for it through the Technological Innovation Unit.

Emerging and Associated groups will be key in the development of the scientific growth strategy.

Innovation as a point of attraction for groups a priori less interested in the classical research group model.

6.3 Financing model

WEAKNESSES

Scarce resources from international projects.

Excessive dependence on the invoicing of clinical studies promoted by the pharmaceutical industry.

Own plan to support groups very focused on HR co-financing and poorly aligned with the main strategic objectives.

Institutional funding to support the Institute has remained at the same level since its creation.

Income derived from the Institute's own developments (patents, licenses, etc.) is very low.

THREATS

Decrease in public investment in R+D+I in recent years.

Commercial clinical research activity is becoming increasingly professionalized and strategies for specialization and high level of recruitment must be considered in order to continue growing in the funding offered by clinical studies.

High competition in the research sector, which makes access to public-competitive funding increasingly difficult.

Development of the Institute's UCAIBs limited by the high level of investment required for equipment renewal and maintenance.

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STRENGTHS

Solvent budget: the budget balance is maintained.

Growing trend in attracting competitive funding, especially for the incorporation of human resources.

Consolidation of invoicing for UCAIBs own services.

The Infrastructures Committee maintains active policies to seek funding for technological renovation, as well as for the hiring of personnel for the UCAIBs.

Strong Own Plan in the area of HR support. The development of the groups has been guaranteed by the Institute's co-funding of all competitive contracts won, without compromising the groups' own funding.

Growth experienced in recent years in commercial clinical research turnover.

The close follow-up offered by the Management Department to the groups, which reduces the funds that are returned to the financing organizations due to threats of non-execution to a negligible amount.

OPPORTUNITIES

Alliances with other research centers: development of joint projects that allow access to international funding.

Maintaining accreditation as a Health Research Institute allows access to some specific calls within the Strategic Action in Health of the ISCIII.

Potential for growth in income from commercial clinical research.

The approach to society and other interest groups (patient associations, business associations, etc.) should make it possible to implement a powerful strategy for attracting private funding and to launch active fundraising policies.

7. Definition of IMIBIC's Strategy for the period 2021-2025

7.1 Mission, Vision and Values

MISSION

Our Mission is to develop a space for scientific excellence by promoting talent, collaboration, international research and innovation, and to solve health problems in a sustainable and socially responsible way and respecting equal rights.

VISION

Our Vision is to become a consolidated center of excellence for translational research and bio-sanitary innovation, with the aim to improve people's health and quality of life.

VALUES

The IMIBIC's values - sustained by shared ethical principles, beliefs and qualities – are the basis of our institutional culture. The values guiding our ethical and high-quality research are Scientific excellence, Quality, Talent, Innovation, Equal opportunities, Collaboration, Participation, and Sustainability. These principles will be shared and complied with by all members of the Institute.

Sustainability:

IMIBIC is committed to promote an efficient management of resources, with the minimum environmental impact, both in the usual management and in the development of research and innovation projects.

Scientific Excellence and Quality:

IMIBIC Staff will always seek the development of quality health research and innovation, aimed at solving health problems in our environment, in turn contributing to consolidate the leadership of the Institute.

Participation:

IMIBIC recognizes the public as the primary target of the results of its research, so it is essential to consolidate a system of participation and dissemination that takes into account the patients as the center of the entire research and innovation process.

Talent:

Recognizing and enhancing the development of the personnel that make up IMIBIC is configured as one of the main lines that will favor institutional and research group growth.

Collaboration:

IMIBIC will promote policies aimed at establishing alliances with centers of scientific excellence, as well as with the business environment to strengthen the lines of public/private collaboration.

Innovation:

IMIBIC will promote measures that allow the introduction of innovation elements in internal processes, both in its own management and in the SNS, considering digitalization as a differential factor of this measure.

Equality:

IMIBIC guarantees a policy of equality, merit and capacity for the access and development of its professionals.

7.2 Strategic axes and objectives

In accordance with the mission and vision, and in line with the values highlighted in the previous point, IMIBIC establishes several strategic axes on which its general objectives will be based. On these, actions will be developed for their optimal implementation, as detailed in the Action Plan that appears in each of the sub-plans that make up the Strategic Plan.

The 5 strategic axes identified, which revolve around two intrinsic concepts such as quality and sustainability, include:

Axis 1: Excellent Science
IMIBIC promotes the development of high quality, patient-oriented translational scientific activity that will enable it to achieve a relevant position in the international arena.

Axis 5: Responsibility
Aligned with the RRI Strategy (Responsible Science and Innovation), IMIBIC integrates this concept as a model of governance, by promoting gender equality, carrying out actions with an impact on citizens (scientific education and dissemination and citizen participation) and involving the scientific community in our developments (open access), all under ethical principles and values shared by IMIBIC staff and its Institutions.

Axis 2: Innovation/Translation
It is a priority for IMIBIC to bring the results of its research and innovations developed in the field of health to patients. All the Institute's developments must be directly oriented to solve health problems and to provide the National Health System with tools that allow a better provision of health care services.

Axis 4: Talent and Training
The development and recruitment of highly qualified professionals represents an exercise of responsibility and commitment, both for the research groups and for the Institutions that support IMIBIC. Reinforcing the principles of equality, merit and ability, as well as promoting actions to consolidate the research career and its professional recognition, constitute a clear objective of this axis.

Axis 3: Internationalization
Collaboration is fundamental in order to fulfill IMIBIC's mission and, in particular, in its International dimension, in terms of what this provides as a source of funding and professional and institutional development. It is a fundamental objective of IMIBIC to establish and consolidate alliances with international research centers that favor the exchange of resources, the permanent search for quality and the development of competencies that allow the growth of research groups, professionals and institutions that are part of the Institute.

These strategic axes constitute the integrating element of the Institute's strategic objectives, which, together, define what IMIBIC, with the launching of this Strategic Plan 2021-2025, intends to be and achieve. These strategic objectives are:

- **OE1**: To foster an environment of translational research and innovation that has patient health as its main focus. Science from the patient for the patient (Axes 1, 3 and 5).
- **OE2**. Increase the impact and quality of our scientific production, by active and open communication about our research and its results to both scientific audience and citizens. (Axes 1 and 5).
- **OE3**. Increase the level of internationalization by attracting talent from abroad and improving success in obtaining international funding. (Axis 1, 2 and 4).
- **OE4**. Integrate the concepts of equal rights, sustainability and quality in all IMIBIC research and management activities. (Axes 1, 2, 3, 4 and 5).
- **OE5**.Boost the consolidation of research and innovation careers in both basic and clinical research as a way to attract and maintain talent, improve professional career development, and facilitate generational change. (Axes 1, 4 and 5).
- **OE6**. Favour clinical research as a fundamental element in the promotion of health and as a motor of growth of research and innovation in the health care centers linked to IMIBIC (hospitals and primary care centers). (Axes 1, 3 and 5).
- **OE7**. Establish collaborations with different stakeholders that promote innovation and technology transfer in precision medicine. (Axes 1, 2, 3 and 5).

8. Balanced Scorecard

The following is the Balanced Scorecard for monitoring indicators. It is intended to be an effective tool to verify, in a synthesized way, the fulfillment of the specific objectives included in each of the sub-plans that make up the IMIBIC Strategic Plan for the time horizon covered by it, and which are aligned with the general strategic objectives included in it.

PLAN	STRATEGIC OBJETIVE	CODE	INDICATOR
Internationalization Plan	OE3	**PIN.I6**	Average international competitive financing raised (EU and non-EU) in the last 5 years.
Internationalization Plan	OE3 OE5	**PIN.I2**	Nº of proposals submitted with work package leadership.
Plan de Infraestructuras y UCAIB	OE4	**PIF.I2**	Improve the volume of billable services with respect to the immediately preceding fiscal year.
Infrastructure Plan and UCAIB	OE4 OE5	**PIF.I12**	Number of people linked to the UCAIB with associated competitive funding.
Innovation and Translation Plan	OE1	**PIT.I1**	Number of patents registered // licensed.
Innovation and Translation Plan	OE1 OE7	**PIT.I5**	Number of prototypes and developments supported by Technological Innovation.
Innovation and Translation Plan	OE1 OE7	**PIT.I11**	Number of agreements with companies for product development.
Clinical Research Plan	OE1 OE6	**PIC.I**1	Number of new independent clinical studies (clinical trials, observational studies and clinical research with medical devices) promoted by IMIBIC researchers.
Clinical Research Plan	OE1 OE6 OE4	**PIC.I**4	Nº of new Phase I/II trials.
Clinical Research Plan	OE6 OE4	**PIC.I**6	Annual billing for clinical studies.

PLAN	STRATEGIC OBJECTIVE	CODE	INDICATOR
Quality Plan	OE1 OE4	PCA.I3	Number of quality accreditations/reaccreditations achieved.
Talent Attraction and Professional Development Plan	OE3 OE4 OE5	PAT.I1	Percentage of job offers for R1 to R4 profiles, published in Euraxess and other R&D&I platforms.
Training Plan	OE5	PF.I1	Total number of training actions (face-to-face and online).
Training Plan	OE5	PF.I17	Number of training internships (master's, bachelor's, vocational training, etc.).
Communication Plan	OE1 OE2 OE4 OE7	PCR.I3	Sponsorship/RRI income received.
Communication Plan	OE1 OE2 OE4	PCR.I4	Number of visitors to the Institute.
Emerging Groups Guardianship Plan	OE5	PTU.I2	Nº. of emerging researchers promoted (including new emerging researchers).
Integration Plan	OE2 OE4 OE7	PI.I1	% Items correctly filiated.
Equality Plan	OE4 OE5	PIG.I1	% of personnel assigned to the IIS, segregated by gender.
Scientific Plan	OE1 OE2	PC.I2	% of articles and reviews in first quartile in JCR.
Scientific Plan	OE1 OE2	PC.I4	Cumulative impact factor of articles and reviews in JCR.
Scientific Plan	OE1 OE2	PC.I5	% of articles and reviews in JCR, with 1st author, last author or IIS correspondence.
Scientific Plan	OE1 OE2 OE5	PC.I6	IIS Primary Care and Nursing researchers reach, at least, a number of 30 researchers.
Scientific Plan	OE1 OE2 OE3 OE4 OE5 OE6 OE7	PC.I7	Total financing raised.
Shared Scientific Plan	OE1 OE2 OE7	PCC.I1	Number of collaborative publications between IMIBIC groups.

Executive Summary of the Strategic Plan

2021-2021

IMIBIC INSTITUTO MAIMÓNIDES DE INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA

UNIVERSIDAD D CÓRDOBA

Junta de Andalucía