

1 EXECUTIVE SUMMARY

This strategic plan has been developed in order to provide clarity of vision across IDIBAPS, FCRB, HCB and other key stakeholders of the future direction and organisation of research and translation activities managed by the Institute. It aims to serve as a blueprint for organisational changes and priority activities in the coming years, providing a logical and coherent base upon which managers at all levels can make decisions and prioritise resources.

Although this plan spans 2018-2022, it is the strong recommendation of the Director and senior management that an update of the plan be undertaken midway, in 2020. This is due to four key factors with significant uncertainties, two internal and two external, that are expected to resolve significantly over the next two years:

1. **The SUMA project to merge IDIBAPS and FCRB into one legal entity**, which is expected to materialise by 2020. The way in which this is implemented, which is not yet clearly resolved, will have significant impact on key aspects of organisational structure and HR policy.
2. **The alignment of recruiting policies with Hospital Clinic**. As described in detail in this plan, analysis has identified a major generational and structural issue that has developed that puts in doubt the mid/long-term viability of the historical figure of researcher-clinician that has been at the heart of IDIBAPS success. Changing external factors and funding priorities create a complex scenario that requires detailed discussions. Also, IDIBAPS has to align its recruiting policies with UB and IIBB-CSIC to attract excellent researchers to contribute to its translational research objectives.
3. **H2020 will end in 2020 and the new Framework programme will commence from 2021**. There is currently little certainty around the priorities and funding topics of the new programme, but these will be substantially finalised and public by the second half of 2020, allowing for more focussed and concrete planning for this very important source of funding.
4. **The political situation is currently very unstable at city, regional and state levels** creating huge uncertainties around funding levels and priorities for research. It is hoped that by 2020 some stability will have returned and an update of the strategic plan at this time will enable actions to be more aligned to the Catalan and Spanish research priorities.

This strategic plan puts an emphasis during the first two years to resolve the first two issues above, which are within the control of IDIBAPS management and patrons, and seeks to prepare IDIBAPS for the most likely scenarios of the last two issues, which although uncertain in outcome nevertheless have some indicating trends.

IDIBAPS Vision: Returning to the main purpose of this plan, which is to provide clarity of vision to all involved with the Institute, the vision for IDIBAPS (being an ambitious expression of what the Institute will become in 5-10 years) is that ***IDIBAPS contributes significantly to improve the health and quality of life of people through high impact research***, thereby delivering on the **Mission** as outlined in IDIBAPS constitution: *to develop research of excellence that integrates basic biomedical and clinical science on the health problems of our society*.

The key elements of this vision are **high impact research**, meaning the need to ***pursue excellence and focus resource on those lines of research with high potential for impact***, and **improve the health and quality of life of people**, meaning to ***ensure that translation occurs and that the scientific results are converted into treatments that are disseminated worldwide***.

This plan proposes to extend the three IDIBAPS key objectives in its constitution by the addition of two new ones:

- a) **To foster research and development related to the various specialties of the health sciences.**
- b) **To contribute to the resolution of healthcare problems.**
- c) **To promote the dissemination of knowledge by participating in teaching activities.**

New:

- d) **To promote the transfer of scientific knowledge into innovation.**
- e) **To operate with the highest level of scientific and managerial integrity, public accountability, and social responsibility.**

IDIBAPS Values: This Strategic Plan also seeks to promote and reinforce IDIBAPS values, which are:

- **Integrity**
- **Accountability**
- **Care**

IDIBAPS Values Statement is:

IDIBAPS should always place first the health and wellbeing of patients and the community above any economic or intellectual advancement. IDIBAPS should exemplify and promote the highest level of scientific integrity, public accountability, and social responsibility in the conduct of science.

These values will be integrated into internal communications and as criteria when making investment and promotion decisions.

Governance: The IDIBAPS values underpin the governance of the Institute. Especially during these unstable times, IDIBAPS is aligned with no tolerance of any form of misconduct, therefore the governance of IDIBAPS must be impeccable, ensuring that **care, integrity and accountability** are first and foremost in every decision, and that the focus remains firmly on the efficient use of public resources for scientific research and translation oriented to societal needs.

An extensive SWOT analysis has been developed, which identifies that the main strengths of IDIBAPS come from its **consolidated excellent research teams, world-class infrastructure, and strong reputation**. Weaknesses arise mainly from **institutional and internal organisational complexity** and the **aging profile of leading researchers**. The main threats are **potential failure to attract young, renovating talent** and **difficulties in maintaining funding levels**. The main opportunities are potential ways to address the aforementioned weaknesses and threats.

IDIBAPS has identified a number of **sustainable competitive advantages** that need to be maintained, promoted, and improved, particularly in a context of social and economic changes:

- **Campus Clinic:** The strong complementarity of the institutions in the Campus Clinic working in Health Sciences (Clinical assistance, Education and Research); the close association with Hospital Clinic and UB; the vast amount of information and biological samples generated in the Campus; the international experience and profile of clinicians and scientists in the Campus.

- **Catalonia as a Biomedical Research Hub:** Strategic alliances with local institutions (e.g. BSC, CNAG, ALBA, among others) have the potential to significantly enhance the research performance of IDIBAPS.

Considering IDIBAPS' overall Mission and Vision, the strategic direction of HCB, International and Spanish R&D priorities, the current context of institutional organisation and priorities of the Catalan government, **IDIBAPS' core strategic objectives** for the period of this plan are:

1. CONSOLIDATE EXCELLENCE IN TRANSLATIONAL BIOMEDICAL RESEARCH

To drive a culture of excellence throughout the organisation in order to achieve internationally recognised scientific impact and technology translation, with particular focus on effective organisation and management of people and resources, leadership in project consortia, optimisation of processes, and quality training of young scientists.

2. ATTRACT AND RETAIN TALENT IN ALLIANCE WITH HCB

To provide an internationally attractive and competitive work environment, creating an inspiring workplace with a strong sense of community, that offers recognition and career advancement for achievement in both research and translational activities and thereby attracts and retains talent at a global level. To work on long-term strategies with HCB to recruit best clinician scientist and with UB and IIBB-CSIC to recruit best biomedical researchers, to achieve a sustainable and stable profile of researcher cohort, with particular regards to age, experience and gender.

3. ACHIEVE IMPACT IN CLINICAL PRACTICE THROUGH INNOVATION AND TECHNOLOGY TRANSFER

To foster a culture of innovation, in particular as regards to improving clinical practice, to achieve positive impacts in healthcare both locally and worldwide. To create an operational environment that facilitates innovation and technology transfer, including reducing administrative barriers for licensing and spinoff activities, and extending collaborations with leading companies.

4. CONSOLIDATE AND STABILISE RESOURCES AND INFRASTRUCTURES

To extend and stabilise funding sources to facilitate long term planning for human resources and technical infrastructures, in particular through securing longer-term structural funding commitments and diversifying funding sources, including donations and untapped funding strategies. In parallel, to optimise internal processes, organisational structures and the allocation of resources to improve productivity and support the achievement of other objectives.

5. INCREASE THE PROFILE OF IDIBAPS

To grow and consolidate the IDIBAPS-HCB profile locally, nationally and internationally, proactively developing strategic alliances with relevant complementary reference centres and taking leadership roles in national and international fora, thereby establishing IDIBAPS' authority as a reference for cutting-edge advancements and information on health technologies.

6. PLAN AND IMPLEMENT THE MERGER WITH FCRB (SUMA)

To agree, plan and implement the organisational merger of IDIBAPS and FCRB in a positive atmosphere that drives improved staff moral and performance across the two entities and with minimal disruption to ongoing activities.

The above objectives will be achieved by implementing the following actions, in broad order of priority. The last action, related to the merger between FCRB and IDIBAPS, will be progressed with priority at the political level in parallel with the other actions. The total additional financial resources required for these actions are shown in Table 1 (aspirational budget) at the end of this executive summary.

1. Drive Excellence in Research

The challenge for IDIBAPS is to improve research and its reflection in **key scientific indicators** and to **consolidate its scientific leadership in national and international fora**, both of which are crucial to accessing national and international resources, whilst fostering strong multidisciplinary and translational characteristics in its research activities. This directly addresses *Objective 1 – Consolidate Excellence in Translational Biomedical Research* and contributes to all the other objectives.

There is no one simple action that will on its own deliver these outcomes. This plan sets out a series of actions that in the mid-term should drive towards strong improvements in these key areas:

- a. Recognise and Reward Excellence
- b. Promote Scientific Leadership
- c. Promote Multidisciplinary and Basic-Applied Connections
- d. Optimise Research Organisational Structures
- e. Attain the HSR4R accreditation
- f. Improve Excellence in Scientific Publications

2. Develop Human Resources

As identified in the SWOT, the key challenges around HR are to continue to attract and retain talent from around the world in a very competitive environment with limited ability to match international salaries (especially northern Europe and non-EU OECD countries) and to correct the skewed age and gender profiles of the IDIBAPS researcher cohort.

Recognising that most IDIBAPS researchers are contractually employed by HCB, any and all actions must be coordinated with HCB

The following actions are designed to directly achieve *Objective 2 – Attract and Retain Talent in Alliance with HCB*, as well as contribute to Objectives 1, 3 and 5.

- a. Ensure Talent Promotion and Retention
- b. Promotion and Funding of Sabbatical Stays
- c. Ensure Talent Attraction and Identify Alternate Funding Mechanisms
- d. Ensure Generational Turnover in Scientific Leadership
- e. Update the Researcher Career Strategy
- f. Develop and Implement Career Support Mechanisms for Female Researchers
- g. Implement and Open, Transparent and Merit-Based Recruitment (OTM-r) Policy
- h. Evaluate Alternative Mechanisms to Secure Talent
- i. Support to other actions

3. Drive Innovation, Valorisation and Transfer of Technology

In order to improve the innovation culture at IDIBAPS it is necessary for more researchers be engaged in Technology Transfer (TT) activities and in particular to disclose their discoveries to the KTT office. We do

not expect that every researcher or even every group become active in TT, but those with inclination should have access to training and resources to do so, and be recognised and rewarded for success. Therefore, a general basic level of knowledge is required throughout the whole organisation, and pockets of specialised expertise must be fostered.

There are several activities and courses on TT already implemented by other entities in Barcelona, so IDIBAPS could leverage its position to secure training modules and other resources quickly and cheaply via one or more strategic alliances.

The following actions are designed to help achieve *Objective 3 – Achieve Impact in Clinical Practice through Innovation and Technology Transfer*, as well as contribute to Objectives 4 and 5.

- a. Establish a Training Programme in Innovation and Technology Transfer
- b. Recognise and Reward Innovation
- c. Promote Innovation in Internal Communications
- d. Promote Interaction with the Innovation Community
- e. Facilitate Technology Transfer Activities
- f. Strengthen the Capacities of the IDIBAPS KTT Office
- g. Develop Institutional Relationships with Industry

4. Consolidate and Optimise Technical Infrastructures and Services

To continue driving excellence in research, and to develop new activities in innovation and technology translation, demands will continuously arise for IDIBAPS to renew or acquire new equipment and services and to dedicate additional space for new activities. It is expected that IDIBAPS will acquire some new spaces in the Escola Industrial near its current buildings, that will allow limited growth within the near future. The activities that will benefit from these new spaces will be selected based on very strict criteria of excellence and multidisciplinary as defined in this strategic plan. Finally, IDIBAPS' financial incomes are not expected to increase significantly in the next 5 years so the budget associated with this plan is conservative in respect of growth.

Therefore, the strategy of IDIBAPS to address the aforementioned needs is to carefully optimise current spaces and resources and drive collaboration with its partners, specially with UB with which there is a cooperation agreement to complement the scientific equipments on campus, as well as with other entities in the ecosystem to access spare capacities in their infrastructures and/or collectively invest in new infrastructures that need not be physically located at IDIBAPS.

The following actions are therefore designed to help achieve *Objective 4 – Consolidate and Stabilise Resources and Infrastructures*, as well as contribute strongly to Objectives 1, 2 and 3:

- a. Develop the Infrastructure Roadmap
- b. Pro-actively leverage local institutional relations to gain access to their facilities
- c. Identify and lead community initiatives for Shared infrastructures
- d. Identify and pursue all available infrastructure funding opportunities
- e. Foster a culture of continuous improvement and innovation

5. Grow Communication and Outreach

Whilst IDIBAPS communications have developed significantly over recent years, the SWOT clearly identified weaknesses in both internal and external communications. Currently IDIBAPS lacks an effective intranet and internal communication channels are weak and not well subscribed. Negative effects include inefficiencies and duplications due to lack of knowledge about what other researchers and departments are doing, weak alignment with institutional goals and priorities due to lack of awareness, and reduced motivation as there is very little recognition of progress and successes.

Externally, the IDIBAPS name is virtually unknown outside of academic biomedical circles, although Hospital Clinic Barcelona is a fairly strong brand associated with quality and excellence. IDIBAPS achievements are not well promoted and despite being the largest hospital biomedical centre in Barcelona, it is not a strong reference in the public sphere, with negative effects on talent recruitment and fundraising from donors. In the context of this strategic plan, IDIBAPS has initiated a project to develop a new web page that will help to address this problem.

This strategic action is transversal in that improved internal and external communications to staff, stakeholders and the general public is critical to support all strategic objectives, but in particular, the actions here are expected to help to achieve *Objective 5 – Increase the profile of IDIBAPS*:

- a. Improve internal communication
- b. Be a prestigious brand nationally and internationally
- c. Be a reference in Scientific Outreach

6. Cultivate Institutional and International Links

*“Doing good is unfortunately not enough, to be valued one also must be **seen** to do good.”* IDIBAPS has a need to be visible at Catalan, Spanish and EU levels in academic, political and societal circles. A stronger visibility gives IDIBAPS influence with institutions that determine funding policies and topics, facilitates collaborations with industry and medical centres of repute, and boosts IDIBAPS objectives for talent recruitment and societal impact. It also supports stability and continuity in the face of political and societal uncertainties.

Such visibility requires not only strong communication actions in the press and online, but also direct participation by senior academic and management staff at relevant fora, and pro-active development of institutional and international relations.

One major issue for IDIBAPS is that its brand is overshadowed by that of HCB and is not well recognised outside of academic circles. The issue of branding of both HCB and IDIBAPS is currently the subject of analysis by an external consultancy.

The following actions are designed to help achieve *Objective 5 – Increase the Profile of IDIBAPS*, as well as support generally the other strategic objectives:

- a. Grow the international profile of IDIBAPS and its lead researchers
- b. Promote collaborations with international entities of repute
- c. Develop communications and events that support internationalisation
- d. Secure a voice in key local and international fora of influence
- e. Secure longer-term institutional support through alignment of objectives

A number of these actions are supported via existing funding and resources allocated in other areas such as Communication and Outreach, Excellence in Research, etc.

7. Grow Management and Operational Capacity

IDIBAPS has grown exponentially since its foundation and the managerial structure has organically adapted to this growth without clear planning of current and future needs. Furthermore, reporting and implementation requirements from funding agencies undergo constant change and create increased complexity. The SWOT analysis clearly identified significant opportunities for improvement in organisation, processes and support tools, particularly IT systems.

IDIBAPS must therefore identify current and future management needs and adapt the managerial organisation and operational processes to those needs. This may include reviewing the managerial positions and the required profiles and skills, and selecting and implementing new IT systems to increase productivity and facilitate continued growth in research activity without concurrently growing the management infrastructure.

The SUMA merger of the legal entities of IDIBAPS and FCRB will help reduce some of the underlying systemic complexity, but will not in and of itself address the management organisation issues. These must be dealt with in parallel.

The following actions are designed to help achieve *Objective 4 – Consolidate and stabilise resources and infrastructures*, as well as contribute to Objectives 1 and 2 by increasing operational capacity for research and translation activities:

- a. Optimise the organisation of management and administration departments
- b. Introduce periodic evaluations of IDIBAPS management
- c. Enhance the management information technology systems

8. Implement Merger with FCRB (SUMA)

In 2016, with financial support from the Generalitat de Catalonia, a legal study was performed to analyse possible legal formulae to merge IDIBAPS (a public consortium) with FCRB (a foundation). This was followed in 2017 with a detailed study to analyse the scientific and economic impact of such a merger between IDIBAPS and FCRB. The conclusions of both studies were presented and discussed with the General Direction of HCB and then also with the General Directors of Research from the Catalan Health Department and the Catalan Business and Knowledge Department, as well as with the Director of CERCA. Due to the political instabilities of recent times, the proposal did not reach the corresponding ministries and was therefore never approved. IDIBAPS and FCRB must review and update the documents and restart the negotiation process with the current Catalan government. The objective is to reach agreement within the next two years and implement the merger during the period of this Strategic Plan.

Strategic Actions Budget Summary: IDIBAPS management have made a detailed forecast of future expected earnings and expenses and key balance sheet figures, based on IDIBAPS current operational model and how this will be affected by the proposed SUMA merger with FCRB. This viability plan for the

period 2019-2022 has still to be approved in order to fulfil the requirements of the SUMA programme and for the merger itself to be approved and implemented.

Indicators: As with all research institutions, the time taken for the full impact of any significant policy or operational action to materialise is typically in the 5-10 year timescale. This makes it somewhat difficult to evaluate in real time the success (or not) of the implementation of many of the actions detailed in this Strategic Plan. Nevertheless, there are quantitative and qualitative indicators that can be used to monitor progress along the path to achieving the strategic objectives.

An initial indicative scoreboard is presented below, which will be refined with more detail in the full Strategic Plan and serve to monitor and evaluate the effectiveness and impact of the Plan's implementation.

Action	Indicators
Drive Excellence in Research	Median Impact Factor >5,6; number of Top Decile original articles >30%/year; International co-authorship; Median Citations/article >15; number of highly cited researchers/year > 6; achieve 80% open access publications
Develop Human Resources	Level of alignment in recruitment with HCB; Correction of age and gender profiles; ERCs and ICREAs; quality and number of applicants for open positions; maintain HRS4R logo
Drive Innovation, Valorisation and Transfer of Technology	Number of Spanish and international Clinical Guidelines; number of active (recruiting) Clinical Trials; Patents and licenses; Spin-Offs; Number of staff trained in TT; number of ideas presented to KTT for consideration
Implement Merger with FCRB (SUMA)	Approval by Government; Implementation
Consolidate and Optimise Technical Infrastructures and Services	Roadmap developed; Success in infrastructure funding calls; Access agreements signed with other centres; Leader in developing a singular proposal for the Barcelona area
Grow Communication and Outreach	Press mentions; online followers; citizens engaged; number of staff involved in Outreach; improved internal evaluations of internal communications; new web site
Cultivate Institutional and International Links	Increased number of fora attended; new local and international collaborations; leadership of local initiatives
Grow Management and Operational Capacity	Management restructure presented, approved, implemented. Evaluation process designed and implemented; New IT system scoped and implemented.