

# STRATEGIC PLAN

20200





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# MESSAGE FROM THE PRESIDENT OF THE GENERAL COUNCIL

The Strategic Plan for 2020-2030 is the action document that outlines the mission of Nova University Lisbon (NOVA), its vision and strategic goals, and the major areas of intervention. It is therefore a key instrument to support NOVA's management and a roadmap towards building its future.

The present strategy does not represent a break with the path, but rather builds on the aspirations and remarkable achievements of the past to project new lines of development and explore opportunities, both emerging and future, by defining a new trajectory to successfully meet these challenges, which will naturally be reflected in the University's own activities.

These activities can and should have a positive and significant impact on society, nationally, globally, but also more and more at the local level, through the sustainable development of the metropolitan areas around the University campuses. In this Strategic Plan, the geographical distribution of NOVA's academic activities across multiple campuses in the Greater Lisbon region is viewed, rather than an opportunity, as an important strength and distinctive feature of this University that will be intensively explored in order to open up the various existing NOVA campuses to the cities and communities which they are part of.

This document provides a look into the future. A future in which, despite the greater or lesser emphasis that may be given to certain areas, in light of the needs of a changing society like ours, NOVA will continue to have young talent development as its core business, not just from a knowledge transfer point of view, but also from the perspective of knowledge production through research and value creation for society, based on innovation and entrepreneurship.

In that sense, it is imperative to offer 21st century education of excellence, perfectly adapted to the current and future demands of the market, where digital is an essential part, and where the focus on soft skills is increasingly higher. And it is imperative to have a gradually more collaborative and interdisciplinary research, which is not confined to fundamental research, but provides equal importance to applied research, and enables, among other things, the development of solutions that will help to achieve the Sustainable Development Goals set by the United Nations.

The positive impact on the economy and on society at large, as a result of connecting knowledge to technological and social innovation, will be the real value creation, and an essential requirement for any University of the Future which aims to be global and civic, inclusive and sustainable, bold and plural.

Nova University Lisbon emerged more than four decades ago as a differentiated and visionary academic project and this strategic document shows that this distinctive trademark is as alive now as it was back then. However, today's reality is no longer the same of that time, and never before have the promotion of meritocratic talent, interdisciplinarity and the values of equality, inclusion, and democracy been as important for NOVA's consolidation process as a strongly international and civic university as now.

The 2020-2030 Strategic Plan reflects all these concerns, but also the profound ambition of a University that, albeit still young, is already a national champion in several areas, has earned a well-deserved reputation in the international and very competitive space of higher education institutions, and intends to continue to stand out in Portugal and in the world.

This Plan is the result of several discussions involving members of different NOVA decision bodies and at different levels of influence, who have been called upon to participate in the development process of the strategy to follow over the next decade. Its success will depend very much on the active and proactive involvement of the entire University and on the ability of each of its members to work together. Nevertheless, it is comforting to know that this strategy is the result of a joint effort and already enjoys the support of the entire University.

As President of the General Council, I thank all of those who participated in the production of this strategy, which I consider to comprise excellent and ambitious proposals and which will certainly help to make NOVA a true University of the Future.

Estela Barbot
President of the General Council

# MESSAGE FROM THE RECTOR

To resist, even more than to persist, or to transform?

This is the inevitable dilemma that universities face today. A dilemma between conformism and risk-taking, between an incremental policy based on patch-up solutions and a policy of forward-looking transformations.

The choice for Nova University Lisbon is clear: its history and ambition require the second option in all areas. In other words, to face the world resolutely taking on the most important challenges for societies in the 21st century by training people and producing knowledge that rise up to these situations and problems, and contributing decisively to building a better future.

This is the ambition which is hereby presented in detail in the **Strategic Plan** for the next decade. And it is this **Plan** that, from now on, will frame our new projects.

We have a vision to make NOVA a real university of the 21<sup>st</sup> century, **global** - because its teaching and research are truly international regarding quality, agendas and partners - and **civic** - because it is deeply committed to the development of society, culture and economy of the Greater Lisbon region where NOVA is inserted, of the country, of Europe and also of the Portuguese-speaking countries, to which we are connected by centuries of common history.

The various initiatives contained in the Plan are aligned with the 17 Sustainable Development Goals (SDG) of the UN Agenda 2020-30 and, whenever possible, will be delivered through *missions* whose success will have a real and positive impact on society and people. Europe is the only region in the world, with the capacity of creating knowledge and innovation, that has taken on this strategic orientation, with which NOVA fully identifies itself.

Hence, we will have in our Strategic Plan initiatives and missions in the area of Health and Well-being (SDG 3), Equal Rights and Opportunities (SDG 5), Renewable and Affordable Energy (SDG 7), Industry, Innovation and Infrastructures (SDG 9), Inequality Reduction (SDG 10), Promotion of Sustainable Cities and Communities (SDG 11), and Climate Change (SDG 13), among others.

Effective participation in these missions requires joining forces. Firstly, within NOVA, among its various schools. Secondly, with our national and international partners, academic and non-academic - companies, social institutions, cultural institutions, municipalities, NGO and others. Only then will we bring together the necessary interdisciplinary skills and impact capacity for the success of the missions in which we will be involved.

In the process of carrying out these missions we will also address current and important topics such as: digital transformation at the service of people; lifelong learning and capacity building of people and institutions with new skills; technological innovation for the development of industry 4.0 and national competitiveness; social innovation and inclusion; the creation of collaborative laboratories with companies and social institutions aimed at useful innovation and territorial cohesion; health research going from the lab to the patient and to the populations; the interface between art and technology as a way of creating value and inclusion; and the interdisciplinary issues concerning the future of hospitality and tourism.

In this changing environment, the profound transformation of the campuses where NOVA is established and develops its activity is absolutely essential in order to adapt them to this ambitious Strategic Plan. The goal is to make these campuses international role models of the 21<sup>st</sup> century and, at the same time, to open them to the community, in order to perform the intended development and innovative impact in this common ground.

None of this can be done without people. In this context, it is crucial that NOVA continues and improves its policy of attracting, developing and retaining talent, both nationally and internationally. And recognizing and rewarding merit. And to do so at all levels: teachers, researchers, students and staff. We need each one of them and we count on everybody as one cohesive group.

This is how NOVA will continue to serve the country and society in general through knowledge, fulfilling its mission as the Portuguese public institution that it is proud to be.

João Sàágua Rector of Nova University Lisbon

#### **SUMMARY**

The present document aims to present the Strategic Plan of Nova University Lisbon for 2020-2030. This plan should serve as a reference for the main initiatives and programs to be developed over the next ten years and underpin strategic decision-making. Hence, its particular importance. The Strategic Plan is the result of an extensive process of discussions, contributions and suggestions from all those who have responsibility for guiding and implementing the strategy to be adopted: the Rector, the Rectorate team, Deans, and members of representative bodies of NOVA schools. Therefore, the Strategic Plan is very much revealing of the environment of diversity and inclusion, interdisciplinarity and free thinking that is in place at NOVA. However, this document is a work in progress, which is not complete upon its approval: it must continue to be developed and improved with the contribution and involvement of the entire NOVA community and in close interaction with the internal and external settings, and with the way they evolve, in order to be successful.

The exercise of articulating a vision that anticipates opportunities, challenges and trends over a ten-year timeframe is an ambitious exercise, but it gives continuity and coherence to NOVA's project as a **university of the future** and it helps to lead the way forward. This ten-year overview keeps the University true to its mission and identity, regardless of any changes in government leadership or other unforeseeable challenges that may require ad hoc corrections or even deeper revisions of the Strategic Plan. It is therefore a strategic guideline document that is clear in its ambition, objectives and general means, but context-sensitive, flexible and adaptable.

Much of NOVA's success is due to the culture of autonomy of its schools, which comprise a multitude of expectations and visions resulting from its different dimensions, resources and specific objectives. For this reason, the Strategic Plan reflects the overall strategy of the University, whereas the strategy of each school will be defined autonomously and specifically, but aligned with NOVA's global vision, without compromising its own specialized nature. In particular, we highlight in this document the common guidelines to provide, through knowledge, a public service at the highest level, which in this Strategic Plan corresponds to the ambition of making NOVA a University whose activity is, at the same time, truly international and deeply committed to the sustainable development of the areas where it is located, of the country, of Europe and, above all, committed to the great global challenges.

Under the motto "NOVA is a global and civic university", NOVA has the ambition to become an increasingly international and impactful university in the way it serves society, which is why it proudly promotes a culture that cherishes knowledge and value creation, inclusion and equal opportunities and respect for the European fundamental values.

Thus, considering the context of change that is anticipated for the next decade and the achievements already accomplished, in terms of quality and internationalization of teaching, scientific production and positioning in relation to competition, this Plan has defined seven strategic goals, namely:

- (1) **Smart Specialization**: to undertake a smart specialization movement that will enable NOVA to defines its strategic areas;
- (2) Talent: to attract and promote the best national and international talent;

- (3) **Community**: to develop the NOVA Community, which comprises current and former students, academics, staff and external partners, and is based on the values of active citizenship and humanism;
- (4) **Teaching:** to empower students with the knowledge and competencies (soft skills) to successfully build a career anywhere in the world;
- (5) **Research**: to have specialized and interdisciplinary research agendas aligned with the European Agenda for Knowledge and Innovation and the United Nations 2030 Agenda for Sustainable Development, in addition to its own initiatives;
- (6) **Value Creation**: to contribute significantly to the social and economic development of the country, paying special attention to the metropolitan areas in which the University is placed and to the south of the country.
- (7) **Management and Financing**: to promote a new governance model common to all schools, which could be financially sustainable and have greater strategic alignment, and capable of ensuring the provision of a quality public service.

Following these strategic goals, several cross-cutting programs have been designed and will be implemented in the coming years. Many of these programs require the active commitment of all NOVA schools and the corresponding mobilization of human, financial, logistical and other resources allocated to them.

The first program presented in this Plan, NOVA Campi 21, is part of NOVA's strategy to develop a university increasingly open to society, which means that NOVA will become a university without external borders between itself and the communities where it is located, and without internal borders between NOVA schools and the different disciplinary areas. This ambition involves a new urban and social framework for each of the campuses, without visible barriers, open to residents and serving as a platform for business initiatives. It also involves the definition of 4 major concentrations of knowledge (Engineering and Technology; Economics, Business and Law; Medicine, Health and Life Sciences; and Arts and Social and Human Sciences) which, over a 10-year horizon, should be distributed across the campuses of Almada, Campolide and Carcavelos/Oeiras. And it assumes that these campuses shall be increasingly interconnected, physically or virtually, in order to promote interdisciplinarity, innovation and incubation, and contribute to the social, economic, cultural and urban development of the municipalities where NOVA lives and operates.

The second initiative is the development of the *Talent@NOVA* program. Since "people" are University's most valuable resource and since the University is a knowledge-based community, talent has a fundamental value for NOVA. In that sense, a set of **18 subprograms** dedicated to the various sectors of the NOVA Community was developed to attract, retain, train and advance individuals of great talent and high potential.

The third program, Learning@NOVA, concerns NOVA's training offer. This is a Program that shall be created and kept permanently by the schools in order to ensure the provision of a quality public service and to respond appropriately to training needs in the future. Through Learning@NOVA, the core curriculum will be enriched with complementary training and will include employability and entrepreneurship-oriented credits. All cycles of studies will have a strong international dimension and a stronger connection to research, using the latest technological innovations, and lifelong training for capacity building will be offered.

The fourth program, NOVA Digital, aims to support the challenge of digital transformation at NOVA by capitalizing on the many initiatives that already exist in NOVA schools and enhancing opportunities for interdisciplinary collaboration across the University. In particular,

teaching and learning will be gradually digitized through the provision of curricular units with a strong digital component, through the creation of an online catalog of equipment and services to support the digital transformation of teaching, and through the preparation of open online courses. The NOVA Digital Forum will be created to foster collaboration between researchers from various fields of knowledge around multidisciplinary projects with a strong digital component. The NOVA Smart Campus Living Lab program will also be created to enhance the digital experience of NOVA campuses and to serve as a space for experimenting with new projects in this area proposed by students and academics. Finally, information systems will be implemented to extract relevant information for decision-making at various management levels and increase the quality and efficiency of administrative processes.

The fifth program is called NOVA Impact and consists of creating an interface institution dedicated to knowledge transfer and social innovation based on the link between university, businesses and social sectors, with a special focus on industry 4.0, life and health sciences and on the social challenges that exist in large urban spaces. For that reason, NOVA Impact will have collaborative initiatives with the Community, such as the technology-based social innovation hub called NOVA Social Innovation, and initiatives with companies through collaborative laboratories - CoLabs -, interface institutions that link knowledge to the need for business innovation, and Science & Technology, Incubation and Acceleration parks.

The sixth and final program, Living@NOVA, intends to increase the quality of life in NOVA campuses, and turn them into places where people inside and outside the NOVA Community interact with each other and participate in cultural, sports and solidarity activities, making university life more complete and enriching. A coordinated digital platform will be created with all of NOVA's volunteering initiatives and various artistic and sports initiatives will be promoted with the Community, as a result of NOVA's deep commitment to the social, economic but also cultural development of the municipalities to which it belongs.

However, many of our society's current challenges require a more interdisciplinary response and the design of projects that can bring together different areas of knowledge, which is why NOVA 4 the Globe was created. It supports NOVA's internationalization strategy by becoming a permanent international platform across the University, where groups from NOVA and other universities will work collaboratively to produce knowledge and impact that support the goals in the 2030 Agenda at global level. In academic terms, NOVA 4 the Globe will aggregate all the knowledge with impact developed at NOVA. In institutional terms, it will reflect all the initiatives aligned with the Sustainability Agenda and will monitor NOVA's performance at that level.

Another important interdisciplinary area is NOVA Saúde, through which NOVA intends to respond to concrete health problems at national and global levels. This platform allows the aggregation and enhancement of the many skills that NOVA has in this area and that can be further developed through strategic collaborations with the industry and society. In addition to the collaborative research thematic groups and the Value4Health.CoLAB, the NOVA Institute for Precision Medicine (IPM) will be established, with the purpose of developing collaborative and interdisciplinary research in the field of biology and health sciences, and making the transition of that research into practical, clinical and global health applications.

To address the absence of a center for artistic creation in the Greater Lisbon region, which could be both of technology valorization and transfer linked to the Arts, the NOVA Institute for Art & Technology (NOVA IA&T) will be created from a consortium between the NOVA School of Sciences and Technology and the NOVA School of Social Sciences and Humanities. Located in the region of Almada, NOVA IA&T aims to establish itself as an internationally renowned School of Arts and Technology with high impact on the local society and on the

economy of the country, with the support of a number of international partners of great strategic importance. NOVA IA&T will contribute to social harmony and inclusion by promoting intercultural dialogue between different social groups, especially, but not exclusively, in the Almada area and among the young population.

And to address the lack of training and innovation in Portugal in the area of Hospitality and Tourism, with the appropriate internationalization dimension and the interdisciplinary approach that is required, a new platform called NOVA Hospitality Futures Platform (HFP) will be created. NOVA HFP will offer advanced training activities, provide an innovation platform through hot-spot research labs focused on industry-linked multidisciplinary research, and offer incubation services in research labs for A level start-ups.

Lastly, accomplishing NOVA's Vision and Strategic Goals requires a permanent commitment to two areas considered instrumental in this process: high quality, both in the fundamental areas of the University and in the areas of support, and internal and external communication with greater strategic alignment.



# MISSION, VALUES AND CULTURE

# **MISSION**

As a public institution of higher education, NOVA has the mission to serve society through knowledge, locally and globally, by developing teaching and research of excellence that create significant social and economic value.

The fulfilment of its triple mission - Teaching, Research and Value Creation - requires:

- An academic environment that embraces equality, inclusion and free thinking to attract the best students from a wide range of cultural backgrounds and into the most diverse fields of knowledge, enabling them to discover their potential and develop their individual talent, with a strong sense of active citizenship, democracy and justice;
- High-quality teaching with a strong international setting in all cycles of studies, student-centered and delivered by leading academics who are able to provide students with the necessary skills and knowledge to successfully develop a career anywhere in the world;
- A collaborative research within the University and with highly specialized and interdisciplinary strategic partner institutions of international relevance, aimed at creating innovative results with recognized academic impact and value potential;
- A knowledge-based and high-impact value creation activity, developed in collaboration with society and the economy, which promotes sustainable development at the economic, technological, cultural, social and health levels, not only across the nation, but also globally, with particular attention to the European and Portuguese speaking regions.

# **VALUES**

Our values include, first and foremost, respect for human dignity, freedom, democracy, equality, the rule of law, and human rights in general, including the rights of people belonging to any minority, who often tend to be forgotten in times of crisis or paradigm shift.

In developing its activity, NOVA's values also include honesty, integrity and accountability for all actions, transparency and knowledge sharing with society, sense of justice and independence regarding interests unrelated to the goals set out by the University.

In that sense, the **commitment to inclusion and diversity** are indispensable conditions for the accomplishment of NOVA's mission. This means: to recognize and value the uniqueness, talent and effort of each person; to eliminate any practice that may act as a barrier to a diverse and inclusive environment; to promote communication, understanding and collaboration among all.

Last but not least, NOVA is proud to be **committed to public service**: practicing and promoting equal opportunities, a culture of merit and solidarity, leaving no one behind and contributing distinctively to a better society.

Therefore, Nova University Lisbon is devoted to including in its academic and institutional practice, as an integral part of its identity, the continuous respect and promotion of these values, which are also the founding values of the European Union and will be reflected in all the initiatives developed under this Strategic Plan.

By setting the example and implementing best practices in teaching, research and institutional activities, NOVA will continue to provide a positive contribution to change in society, making it more **cohesive**, **harmonious**, **supportive** and **plural**.

This is the **free**, **inclusive** and **democratic** society that we want to help build and we are certain that this is the right University at the moment to do so.

#### **CULTURE**

NOVA's culture is based on five fundamental actions: learning, being bold, innovating, rewarding excellence and building a sustainable world.

#### Learning

NOVA promotes a culture of learning and skills acquisition in an international, diverse and inclusive environment, based on the excellence of a student-centered education designed to develop successful professionals and, most importantly, entrepreneurial, committed and compassionate citizens, capable of making a difference in a changing global society.

#### **Being Bold**

At NOVA, students, academics and staff are encouraged to undertake the University's overall goals and values, but breaking free from traditional paradigms, in search of alternative and innovative ways of achieving their own goals - given that in a globalized and evolving world sometimes to do better, you have to do it differently.

# **Innovating**

Innovating is key to the growth of any country's economy, to the improvement of society, and particularly to the success of NOVA's mission in serving society due to the ability to successfully respond to today's challenges. At NOVA, the aptitude to innovate stems from the combination of being bold and assuming a scientific spirit, widely promoted in research, teaching, and learning, that encourages curiosity, creativity, the use of evidence, critical reflection and free discussion.

#### Rewarding Excellence

Recognizing and rewarding merit and excellence in all areas of activity guarantees that no talented student will be left out of NOVA or have their academic performance undermined by financial difficulties or special needs, and that all teachers, researchers and other staff will have equal access to training and career advancement, based on merit, and incentives that reward their achievements and motivate them to perform their best.

#### **Building a Sustainable World**

NOVA, as a whole, and the members of the NOVA Community - students, academics, staff - aim to contribute significantly to building a better future by engraving their institutional and individual project in this future. Its contribution will be based on the excellence of the knowledge and skills produced and passed on at NOVA, on the resulting potential for innovation, on the values of active and civic citizenship that NOVA shares and promotes, on the quality of its national and international strategic partnerships, and on the collaboration with society, locally and globally, around the UN 2030 Agenda for Sustainable Development.



# VISION AND STRATEGIC GOALS

# VISION AND STRATEGIC GOALS

NOVA's vision is to be a **global and civic university** in the 21st century. NOVA will be a **global** university because, in its strategic areas, its teaching and research will be carried out in genuinely international environments. And it will be a **civic** university because all its strategic activities will be deeply committed to the development of the area where it operates, of the country and of Europe. The accomplishment of NOVA's Vision involves the pursuit of **7** strategic goals!:

#### 1. SMART SPECIALIZATION

To carry out a smart specialization movement whereby NOVA defines its *strategic areas* and flags down: key cycles of studies; excellent research areas with international recognition (specialized and interdisciplinary); areas of innovation; and foreign universities and non-academic institutions that may become strategic partners.

#### 2. TALENT

To attract and promote the best national and international talent - students, academics and staff.

#### 3. COMMUNITY

To develop the NOVA Community, which will be made up of students, academics, collaborators, and external partners. The NOVA Community will share the humanist values of active and inclusive citizenship and stand out as being competent, creative, autonomous, supportive, entrepreneurial, and globally disseminated. This community will take, over the years, several initiatives aimed at strengthening the sense of belonging, benefiting both society and the University.

#### 4. TEACHING

To empower students with knowledge and skills that will enable them to successfully build a career anywhere in the world.

#### 5. RESEARCH

To have specialized and interdisciplinary research agendas aligned with both the EU and Global agendas for Knowledge, Innovation and Sustainability, and to participate in the best international Research Networks.

#### 6. VALUE CREATION

To contribute significantly to the social and economic development of the country, particularly the metropolitan areas around the campuses and the south of Portugal.

#### 7. GOVERNANCE AND FINANCING

To strengthen the University's strategic alignment regarding statutes, critical procedures and strategy implementation in order to consolidate the changes that began with the transformation of NOVA into a Foundation, and give rise to a new governance model, financially sustainable and less bureaucratic, capable of ensuring the increase of own revenues and the provision of a quality public service.

<sup>&</sup>lt;sup>1</sup> These strategic goals will be achieved through concrete initiatives (programs and platforms) and instruments that will support their fulfilment, as described in the following sections. These goals will be reevaluated if there is a fundamental change in circumstances over the timeframe to which this Plan concerns.



# CROSS-CUTTING PROGRAMS

# **NOVA CAMPI 21**

#### A STRATEGY FOR THE UNIVERSITY CAMPUSES

NOVA's strategy is grounded in the development of a global and civic university. These two founding ideas of the strategic plan imply, among other things, that NOVA wants to be a university of the world and for the world, namely:

- Without external borders between NOVA and the surrounding communities, and
- Without internal borders between NOVA schools and the different disciplinary areas.

This ambition unfolds in a 10-year project, starting right now and capitalizing on the good examples that, fortunately, already exist at the University. This future "NOVA without borders" has a double impact on the design and development of its campuses: physical and epistemological.

From a physical point of view, it implies a new urban and social framework of each of its campuses, taking as an example the NOVA SBE campus: without visible barriers, open to residents and serving as a platform for multiple initiatives by companies and organizations. Naturally, this model cannot be applied literally to pre-existing campuses, but it should serve as an ever-present inspiration both in modernizing existing infrastructure and equipment, in implementing socially, environmentally and financially sustainable solutions, or even in creating clear zones that foster inwards openness (e.g., buildings of convergence of knowledge and communities on each campus) and outwards openness (buildings or mingling zones between NOVA communities and the surrounding or even distant society). NOVA thus assumes a clear commitment to the social, economic, cultural and urban development of the municipalities where it belongs and operates.

From the epistemological point of view, that is, the distribution of NOVA's knowledge among its campuses, it implies:

- to recognize and assume the digital area, broad sense, as 'interdisciplinary cement' of other areas of knowledge, besides being itself an area of knowledge in fast development;
- the promotion, by campus, of large concentrations of resources (human and infrastructural) in strategic areas, assuring the existence of critical masses that allow smart specialization and, if applicable, hyperspecialization;
- the definition of 'communication and academic articulation channels' between the various campuses;
- the assumption of interdisciplinary global agendas for knowledge, particularly aligned with the UN Sustainable Development Goals;
- guiding teaching, research and innovation towards missions stemming from both disciplinary hyperspecialization and interdisciplinarity - NOVA's activity will thus be problem-based and guided by mission-oriented projects;
- to recognize that these missions will be developed in an open way, in cooperation with companies, organizations and other leading universities.

#### **CURRENT SITUATION**

For historical reasons, NOVA is distributed across multiple campuses in the Greater Lisbon region, located between the municipalities of Lisbon (with sites in Campolide, Junqueira, Campo de Santana, Av. Berna and Lumiar), Almada, Carcavelos and Oeiras. This heritage is vast and valuable, but it also presents four types of fundamental inadequacies:

- 1. The existence of assets whose adequacy is not the best for teaching activities (such as, for example, the current facilities of NOVA School of Social Sciences and Humanities and NOVA Medical School) and, in some cases, which are unable to provide students with experiences at the same level as national and international competitors. Some campuses have buildings that are very degraded, namely NOVA School of Sciences and Technology; others, although reasonably adequate, have capacity constraints (such as NOVA School of Law and NOVA Information Management School).
- The location of academic activities has a historical basis that lacks strategic coherence, which makes it difficult to explore synergies and to promote multidisciplinarity (it is worth mentioning the pulverization of laboratories in the large area of life sciences across the campuses of Santana, Junqueira, Almada and Oeiras);
- The existence of assets without foreseeable academic use and which could be monetized (such as, for example, the roughly 30 hectares in an allotment north of NOVA School of Sciences and Technology in Monte da Caparica);
- 4. Most UNL campuses do not actively promote their engagement with the cities and communities where they are located.

#### MID-TERM IMPLICATIONS

From these considerations, there are five major options that take full advantage of particularly favourable opportunities that directly relate to the physical and conceptual architecture of NOVA's campuses.

- 1. Definition of 4 major knowledge concentrations,
- Engineering and Technology
- Economics, Business and Law
- Medicine, Health and Life Sciences
- Arts and Social and Human Sciences)

that within the next 10 years would be distributed across 3 campuses, namely:

- Almada (headquarters of NOVA School of Sciences and Technology and the upcoming Institute of Arts and Technology)
- Campolide (headquarters of NOVA School of Social Sciences and Humanities, NOVA Information Management School and the Social Innovation Hub); and
- Carcavelos/Oeiras with 2 clusters:
  - o NOVA School of Business and Economics and NOVA School of Law
  - ONOVA Medical School, NOVA Institute of Chemical and Biological Technology and associated laboratories, as well as the upcoming Graduate Medical School and Institute of Precision Medicine. NOVA Institute of Hygiene and Tropical Medicine and NOVA National School of Public Health currently have adequate infrastructure which means that the future of their facilities will be analyzed over this period of time.

- 2. Inclusion in all of these campuses of a strong digital and data science component that is appropriate to the specific activities of each campus;
- 3. Development of ways of linking the campuses, physically or virtually, through interdisciplinary activities that enable the movement across the campuses of specialists in the digital field, among others, and the coordination of academic activities;
- 4. Active promotion on each campus (and therefore in different areas of knowledge) of interdisciplinarity, innovation and incubation;
- 5. Existence on all campuses of clear forms, also physical, of openness to the outside world, thus establishing platforms that connect the University to companies and society.

But the strategic implications must take into account the actual conditions (in some cases requiring urgent intervention) of many of the facilities, namely of three of the largest NOVA schools:

- NOVA School of Social Sciences and Humanities, a well-known case of improper facilities with a long-promised relocation to Campolide;
- The NOVA School of Sciences and Technology, because the buildings are old, numerous, need major repairs and have laboratories that are either in a state that needs urgent intervention (Chemical Engineering laboratories), or are outdated, and still lack labs (e.g., Civil Engineering);
- NOVA Medical School, accommodated in an iconic building, but very old and unfit for modern medical science education.

The order in which the investment plan's priorities were established considered the importance to the University's strategy, the urgency of the investment and the seizing of opportunities.

Priority 1 (high importance and urgency):

- Relocation of NOVA School of Social Sciences and Humanities;
- Relocation of NOVA School of Law, in the vicinity of NOVA School of Business and Economics;
- Renovation of some of the building of NOVA School of Sciences and Technology.

#### Priority 2 (high importance and low urgency):

- Investment in a Medical Graduate School;
- Participation in the project to build a student residence in Portas de Benfica;
- Construction of NOVA Medical School in Carcavelos. Important note: this action relies heavily on the construction area and financing (largely from fundraising).

# TALENT@NOVA

#### **MISSION**

To attract, retain, train and advance individuals of great talent and high potential at NOVA.

#### **OBJECTIVES**

- To support the fulfilment of NOVA's responsibility towards its students;
- To contribute to teaching, research and innovation of excellence and international relevance;
- To contribute to an efficient, innovative and motivated management of the University, adopting the best international practices.

#### APPROACH;

#### For Students

1. Pre-University Semester

Program developed for non-EU students who have just completed upper secondary education and who wish to apply for higher education in Portugal. It assists students in adapting to the European higher education system, levelling their technical knowledge and providing, when necessary, language skills to start their studies in one of NOVA schools.

2. Young Talent@NOVA

Every year the best students in the 1st year of NOVA's Bachelor and Integrated Master Degrees receive a Young Talent Prize, which is equivalent to the tuition fee.

3. Master Degree Awards

Each year NOVA's top Master Degree students receive Talent Awards from NOVA schools. These awards may have an honourable and pecuniary nature, or take the form of professional internships, scholarships or others.

4. NOVA Doctoral School

NOVA Doctoral School is aimed at PhD students and their supervisors and intends to contribute to the excellence of doctoral training at NOVA by offering complementary and transversal training.

- 5. Entrepreneurship Development among Students
- a. Exposure of Students to the theme of entrepreneurship. NOVA's teaching already comprises in most of its schools a set of credits (ECTS), compulsory or optional, that introduce students to entrepreneurship.
- b. Starters Academy: Course aimed at stimulating the entrepreneurial spirit of NOVA's best students by providing them with the basic tools for creating a start-up. It covers students from various NOVA schools and from different nationalities to encourage multidisciplinary teams that will work on case studies and develop business plans.
- c. NOVA Idea Competition: Internal competition of business plans to enhance innovative ideas presented by NOVA students. It promotes an entrepreneurial culture and multidisciplinary work through teams of students from at least two different NOVA schools.

d. European Innovation Academy (EIA) and other initiatives: The EIA is a 3-week intensive program aimed at promoting entrepreneurial projects of students from around the world in the field of digital technologies.

6. ObipNOVA and 'Jobs of the Future' Forum

Within the framework of the Observatory for Labor Market Insertion (OBIPNOVA), a Council entitled 'Talent, Future Jobs and Digital Transformation' will be set up with the presence of a reputable international panel and the participation of teachers and students from NOVA, that will prepare an annual report with concrete suggestions for initiatives that NOVA should take in the educational area.

#### For Academics

7. Development Program in Pedagogical Skills

This course aims to contribute to the professional development of teachers and to promote the improvement of teaching quality at NOVA, enabling teachers to design and plan their pedagogical activity, as well as to select the pedagogical format and forms of assessment most appropriate to the target audience and to the end goals.

8. Development Program in Pedagogical Coordination Skills

This course aims to empower course coordinators with skills that will enable them to perform their duties more effectively.

9. Development Program in Supervisory Skills

This course focuses on the dimensions of student-supervisor interaction, with the aim to provide participants with a conceptual framework for supervisory activity, particularly regarding student-supervisor interaction issues. The course seeks to highlight the relevance of dimensions such as leadership, motivation and self-awareness in the supervisory process and to facilitate the identification of the most common problems that may arise during supervision, improving conflict management skills.

- 10. Entrepreneurship Development among Academics
- a. Exposure of Academics to the theme of entrepreneurship. A 12-hour regular course will be created and will take place at least every six months, introducing NOVA scholars to the entrepreneurship theme.
- b. Techpreneur: Practical training in entrepreneurship based on technology and knowledge, aimed at teachers and researchers wishing to start a new spin-off.
  - 11. Training in the Preparation of Applications for European Projects
- a. Preparing for my ERC Grant Application' (PEGA): Preparation course for the application to ERC grants, which are the most competitive and well-paid grants in Europe and were designed to support outstanding academics to pursue their cutting-edge research.
- b. 'Preparing for Horizon Europe Projects' (PHEP): Preparation course for the application to European projects with a special focus on impact.
  - 12. Promotion of Interdisciplinarity and Science Communication
- a. Santander/NOVA Award: Collaborative research award which aims to distinguish research projects to be developed by junior researchers from at least two NOVA schools.
- b. Science Day@NOVA: NOVA's annual Science Meeting brings together faculty, researchers and PhD students and includes a showcase of the research work conducted by research units and collaborative laboratories.

c. NOVA Science Magazine: Annual publication that covers all scientific activities that occur at NOVA and shares them with the NOVA Community and its national and international partners.

13. Merit Reward

Implementation of merit reward measures which may take the form of salary compensation, career advancement, praises and honourable mentions, or awards.

14. HR Development and Individual Contracting Regulations

General policy of concentrating on strategic areas, rejuvenating the faculty, hiring HR and, in particular, Academics, with an international profile, and attracting, rewarding and retaining talent; it must include career progressions and new hires. In this context, hiring under NOVA's institutional application for scientific employment is particularly relevant.

#### For Staff

15. Specialized Training at National Level

Approval of a three-year training plan, tailored to the needs of non-teaching staff, that takes into account the training needs identified in performance appraisal, as well as the need to strengthen skills particularly relevant within the framework of this Strategic Plan.

16. Specialized Training at International Level

International mobility processes will be maintained to ensure attendance of specialized training courses in an international environment, including the use of Erasmus+ grants for staff.

17. Merit and Productivity Awards

Performance appraisal awards will be implemented and three merit and productivity awards will be created and delivered each year, two awards for each of the following areas: Teamwork, Administrative Modernization; Social Involvement / Sustainability.

#### For the NOVA Community

18. NOVA Community in the World

As part of the University's internationalization strategy, the NOVA Community in the World (composed by current and former students, scholars, collaborators, NOVA partners from academia, business sector and civil society) emerges as an important tool to better understand the dynamics of alumni career paths, support more efficient placement of new talent in the labor market and broaden the range of collaborations.

# **LEARNING@NOVA**

#### **MISSION**

To support NOVA in adopting a diversified but coordinated policy that will ensure that its educational provision is kept in the forefront of European universities, guarantee a top public service provision and make the best possible use of the opportunities created by the growing need for university education that adequately responds to the challenges of the 21st century job market.

#### **OBJECTIVES**

- To conduct an evaluation of NOVA's training offer every four years, considering six key components (listed below), as well as English language teaching policy, financial sustainability of that training offer and new learning opportunities;
- To define a set of initiatives to be implemented as a result of that evaluation, as well as the necessary resources and the timetable for their implementation;
- To support NOVA schools in the implementation of those initiatives.

#### **APPROACH**

While the Talent@NOVA Program has a component regarding training that focuses on the acquisition of skills, either on the student side or on the teacher side, the Learning@NOVA Program is no so much focused on the actors in the training process (teachers and students), but rather on NOVA's *training offer*, its cycles of studies (1st, 2nd or 3rd Cycles) and non-degree training (particularly lifelong learning).

In today's world, where knowledge content and training needs are constantly changing, maintaining the level of excellence of training offer requires constant attention to the performance of various components of that offer and, equally important, the ability to innovate.

In this context, it is fair to assume that a 21st century training offer delivered in the European Union, where the so-called 'Bologna Process' is fully implemented, has to consider six components:

#### 1. Pedagogical innovation

It refers to the use of the latest technological innovations and aims to provide students with an enriching and progressively hybrid learning experience (blended learning), combining classroom interaction with increasingly wider access to digital content, such as the flipped classroom method, in which the contents to be transmitted/discussed are previously known by the student. One way to tailor classroom interaction to the characteristics of today's generation of students, 'always on the web', is to conciliate the *Bring Your Own Device* approach with the use of clicker platforms (eg Webclicker, Quora, Slido). ). This model of pedagogical innovation will progressively come into existence as a distinctive element of NOVA's teaching offer in all its strategic cycles of studies and, where appropriate, in non-degree training.

#### 2. Internationalization of the core curriculum

It concerns the course content and must be present in all cycles of studies, since it is a necessary condition for the European and even global reading of any curriculum offer. But in the case of NOVA, it also requires a supplementary policy regarding the language in which the cycle of studies will be taught (Portuguese and/or English), with particular emphasis on increasing the number of courses offered in English language.

#### 3. Presence of complementary training in addition to core curriculum

It refers to the existence of training in the 1st cycles of studies (the current undergraduate degrees) that provides a comprehensive knowledge, and both culturally and historically sensitive, of contemporaneity and its great challenges. The 1st cycles 'of Bologna' must have a broad profile and do not seek merely, not even primarily, the employability of their graduates, unlike the former educational system (pre-Bologna).

#### 4. Presence of credits aimed at fostering employability and entrepreneurship

It refers to the existence of complementary training in the 2nd cycles of studies (the current Master's degrees) aimed at promoting entry into working life; unlike the pre-Bologna Master's degrees, which aimed to provide a first step towards specialized and autonomous research.

#### 5. Connection to Research

It means that the 3rd cycles of studies (the current PhDs) will be focused on *specialized and autonomous* scientific research, but increasingly linked to the business sector and to the economy. The current 3rd cycles cannot, and should not, be intended to provide employment at the University. Firstly, because it is simply impossible to 'absorb' all new Ph.D. graduates as University resources. Secondly, because it is part of NOVA's excellence to have a resolutely non-endogamous policy regarding the hiring of human resources and, equally important, it is part of the excellence of its activity to 'produce' Ph.D. graduates who will be absorbed by companies, by the public service and by the economic fabric in general, for example, by creating their own business themselves. Certainly, there will always be a number of Ph.D. graduates who will be integrated into the University, but this will not be the general rule.

#### 6. Lifelong Learning: (re)training of skills

Lifelong learning is currently a must-have in any leading university and it is an integral and central part of the European Union's policy for Higher Education. Nowadays, employment is global and mobile, if not precarious; and digital transformation has made several activities within a job become obsolete or even the job itself. At the same time, the exponential evolution of knowledge and technology creates the need for recertification of skills or acquisition of new skills. And all this new lifelong learning must be centred on the users' interests, ensuring as much as possible that they do not have to give up their job to do so. Therefore, this training must be very focused and rigorous, but also very flexible and mobile, reaching the students when they need it and wherever they are, without compromising its quality. Distance learning or the combination of distance learning and classroom learning are fundamental here.

# **NOVA DIGITAL**

#### **MISSION**

To embrace the challenge of digital transformation at NOVA as part of its mission to serve society through knowledge and value creation, without prejudice to its values of freedom, pluralism, responsibility and to the impact that digital transformation can have on those values.

#### **OBJECTIVES**

- To develop the digital area at NOVA, in broad sense, as an 'interdisciplinary cement' of all areas of knowledge, including digital, which is an area of knowledge in accelerated development;
- To include a strong digital and data science component that is tailored to the specific activities of each campus and supports the smart specialization of the activities taking place there;
- To create ways of connecting the campuses, physically or virtually, that allow the circulation of digital experts among them and the coordination of academic activities.

#### **APPROACH**

# A. Digital Transformation of Teaching and Learning Goal:

To have a network of equipment and services, spread across the various campuses, and open to the entire NOVA community, that allows easy access to digital teaching and learning resources.

#### **Activities:**

- Assessment of the existing equipment and services that support the digital transformation of NOVA's teaching, and of services and equipment that may be used by NOVA;
- Contracting of shared services in which each school contracts with the Rectorate what it receives in return to make its services available to the entire University;
- Teacher support in the development of pedagogical methods using digital technologies;
- Creation of a competition of teachers with good pedagogical practices based on the use of digital technologies;
- Dissemination across NOVA of good practices, together with the use of the equipment and services catalog.

#### **B. NOVA Digital Forum**

#### Goal:

Interdisciplinary forum that will foster collaboration between researchers from various fields of knowledge and from various NOVA schools, and increasingly affirm NOVA as a leading player at national level, and internationally relevant, in the production of knowledge for the digital transformation of society.

#### **Activities:**

- Organize a workshop on 'Artificial intelligence, big data and impact on society', with the participation of researchers from various NOVA schools working in these areas and of a prestigious international scholar;
- Establish a working group, with members from all NOVA schools, to define interdisciplinary themes and challenges for NOVA researchers, aimed at organizing one or two more workshops and following up the forum;
- Organize workshops on 'Digital Research in Biotechnology', 'Digital Research in Finance and Law', 'Digital Research for Social Innovation', 'Digital Research in Humanities', with the participation of NOVA researchers interested in these areas and of three prestigious international scholars.

#### C. NOVA Smart Campus Living Lab

#### Goal:

Increase the digital experience of NOVA campuses and make them more efficient, serving as a testing ground for new projects in this area proposed by students and academics, which will leverage value creation initiatives in society.

#### **Activities:**

- Define the operating model of the program and, together with the Entrepreneurship office, define the intellectual property model of what will be produced;
- Seek business partnerships for the program;
- Create, at least in one campus (Campolide), a Smart Campus infrastructure that will enable the development of experimental projects;
- Promote idea contests and project contests that support value creation.

#### **D.** Information Systems

#### Goal:

Develop NOVA's information systems in order to dematerialize administrative processes and integrate the different operating support systems, enabling the extraction of knowledge relevant to decision making at various management levels and increasing the quality and efficiency of administrative processes.

#### **Activities:**

- Acquire and implement a new document management system throughout NOVA;
- Implement the electronic invoicing system, integrated with ERP and other systems, namely the academic management system;
- Put all ERP components into full operation and develop management support maps;
- Define the data integration model of the various academic management systems and develop a system for extraction and visualization of indicators based on these data;
- Implement an aggregating academic management system that collects data from the systems of the various NOVA schools and which in time could eventually be used as an academic system for interaction with students and faculty by those who wish to do so.

# **NOVA IMPACT**

#### MISSION

Contribute to the social and economic development of the country, with the least possible ecological footprint, by supporting and developing initiatives that add value, whether it is social or economic value, based on the knowledge produced at NOVA.

#### **OBJECTIVES**

- Develop an interface institution dedicated to knowledge transfer and social innovation founded on the link between university, industry and social sectors, and based on the intensive use of digital and other relevant technologies;
- Consolidate NOVA's capacity and potential to link knowledge with the country's welfare and social and economic development through various collaborative initiatives.
- Ensure a physical existence scattered across NOVA campuses, the Greater Lisbon region and towards the South, and a virtual existence through the 'NOVA Value Creation' digital platform which includes all of NOVA's value creation hubs.

#### **APPROACH**

#### NOVA Social Innovation

Centre for the Valuation and Transfer of Social Innovation Technology, which aims to establish a differentiated and permanent relation, but equally flexible and dynamic, between institutions that produce social knowledge (NOVA) and social sector entities (local companies, NGOs, municipalities, non-profit associations, among others) in order to develop, create and improve social structures and processes and contribute to the development and social harmony of the population.

It will be a technology-based social innovation hub, based on the Campolide campus (NOVA School of Social Sciences and Humanities and NOVA Information and Management School), with a hub at the Carcavelos campus (NOVA School of Business and Economics, NOVA School of Law). It will include the participation of the remaining schools and may create more hubs at other NOVA campuses towards the south.

The impact of **NOVA Social Innovation** will be, prima facie, in the Greater Lisbon area, where NOVA has its various campuses, but it may be extended further to the south.

#### CoLabs

Associations of research units, higher education institutions, companies, intermediate and interface institutions, technology centres, business associations and partners in the productive, social and cultural sectors. In addition to coordinating InnovPlantProtect and Value4Health, NOVA also participates in 8 more collaborative laboratories and foresees the creation of additional CoLabs.

#### Interface Institutions

Institutions that bridge the gap between knowledge and the need for business innovation.

#### Science and Technology Parks, Incubation Centres and Acceleration Centres

Their mission is to facilitate the incubation and development of innovative ideas and concepts and to accelerate the commercialization process of these projects. The creation of the Biotechnology and Life Sciences (Oeiras) and Industry 4.0 (Almada) parks is expected soon.

**NOVA** *Impact* also intends to develop the following activity segments, some of which will require the existence of permanently dedicated spaces:

- Promotion of applied research activities, where groups of researchers from various disciplines develop interdisciplinary approaches to urgent issues in the collaborative agendas designed with the industry and social sectors. This will give rise to pilot solutions to business or social problems;
- Support for the protection of Intellectual Property and knowledge produced at NOVA and its economic and social enhancement, which includes promoting the creation of spin-off companies and transferring technology to established companies;
- Incubation of start-ups and co-work in the area of technological or social innovation;
- Acceleration of technological or social innovation start-ups;
- Training and capacity building in technological innovation or technology-based social innovation for companies, public sectors, social services, NGOs or citizens;
- Showcasing of the initiatives and results of technological or social innovation, or presentation of anchor projects for future activities.

# LIVING@NOVA

#### **MISSION**

To make NOVA campuses become open, functional but also enjoyable knowledge sharing spaces where people inside and outside the NOVA Community can interact with each other and participate in cultural, physical and compassionate activities, making university life more complete and enriching.

#### **OBJETIVE**

The challenges of university life make it necessary to invest in the comfort and well-being of all those who are part of the NOVA Community, particularly the students, who are the reason why this University exists, in order to enhance the existing talent and the value created in this innovation ecosystem.

#### **APPROACH**

Social Welfare Services have a decisive and transversal role in the quality of life of NOVA campuses, and intervene particularly in 6 areas of activity: Sports, Culture, Special Funding, Human Development, Accommodation and Food.

#### **SPORTS**

**Mission**: Create enabling conditions for sports at Campolide, Caparica and Carcavelos campuses, supporting student athletes, and promoting physical activity, leisure, and a healthier lifestyle.

#### **CULTURE**

**Mission**: Organize cultural activities aimed at NOVA students and additional student populations, as well as other activities that open up the university to the municipalities where it is located, promoting its image within the community, as well as consolidating relations with NOVA academics, Student Associations, Student Centres and Resident Committees, to support their own initiatives.

#### **SPECIAL FUNDING**

*Mission*: Manage and apply the Social Support Fund by identifying NOVA students in need of other educational support ('NOVA Solidarity' grant), and make NOVA campuses more 'Family Friendly' by promoting staff and student access to nurseries through the construction of adequate facilities or negotiation of protocols in the various municipalities where NOVA is located.

#### **HUMAN DEVELOPMENT**

#### Volunteer Work

**Mission:** Promote student collaboration within the framework of a social accountability policy, promote partnerships and protocols with public and private institutions in order to boost a 'Volunteer Bank', providing students with extracurricular activities that can be used for education in citizenship.

#### Welcome and Integration

**Mission**: Promote welcoming and integration policies for NOVA students, especially displaced students and students with Special Educational Needs.

#### Health Promotion

*Mission*: Ensure students (first and foremost to all displaced students) psychiatric appointments, psychological support and nutrition consultations; ensure referral for family planning consultation under existing collaboration protocols; collaborate with preventive health programs and campaigns aimed at improving health conditions and personal development; promote cooperation protocols with health facilities that allow student access to health care under advantageous conditions.

#### **ACCOMMODATION**

**Mission:** Ensure students with scholarships full access to housing through the following measures: granting the three existing residences to private entities, by means of a financial contribution, guaranteeing room reservation for NOVA students with scholarships; building a new residence in partnership with ISCTE in order to provide housing for the remaining NOVA students seeking accommodation; and moving forward with the 2nd phase of the 'Frausto da Silva' Student Residence.

#### **FOOD**

*Mission*: Promote access to food for NOVA students and staff through canteens, cafeterias and bars, in particular by re-evaluating the situation regarding the existing canteens.



# INTERDISCIPLINARY PLATFORMS

# **SUSTAINABLE DEVELOPMENT | NOVA 4 the Globe**

#### **RATIONAL**

#### The Importance of the Sustainable Development Goals

In 2015, the United Nations unanimously approved the 2030 Agenda for Sustainable Development containing 17 goals. The SDG address the global challenges we face nowadays, including those related to poverty, inequality, climate change and environmental degradation, prosperity and peace and justice. Each SDG includes several targets which are interconnected to support each other. In order not to leave anyone behind, it is important to reach each target by 2030. Formulated as real challenges to policy making, planning and concerted chain reaction, the SDG also depend crucially on advances in knowledge, innovation and training. It is in this context that Universities are called upon to focus their triple mission also regarding the SDG. Due to the gigantism of its dimension, it is obvious that this is a task that can only be done collaboratively, involving partners of multiple natures, each contributing only very partially to the SDG.

#### The SDG and NOVA's Internationalization

Research with an impact on the SDG can be an important catalyst for NOVA's internationalization, whether by sharing knowledge and technology with other institutions, establishing international strategic partnerships, or by influencing policy makers, companies, and consumers through knowledge. NOVA's commitment to the SDG is also beneficial for its internationalization strategy by increasing international visibility, enhancing the international profile, creating networking opportunities and improving curricula.

#### NOVA 4 the Globe

At NOVA, 'sustainability' means seeking solutions to the main challenges regarding individual, social and institutional development. These solutions must be economically viable, environmentally friendly and socially fair so that current and future generations can accomplish their projects and have a better future. NOVA already has diverse and scattered academic groups that are involved in interdisciplinary projects guided by the 2030 Agenda. It is therefore urgent to capitalize on these existing assets, support them and develop them in the right direction. On the other hand, several NOVA institutional practices already promote many of the SDG. It was by combining these two aspects, impact research and institutional practice, that NOVA 4 the Globe was born: a permanent and cross-sectional international platform where groups from NOVA and other universities will work collaboratively to produce knowledge and impact that support the goals of the 2030 Agenda globally, with a particular focus on the Portuguese-speaking countries.

NOVA 4 the Globe will have a triple existence: physical and scattered across NOVA schools (since that is where research groups are) with or without dedicated 'aggregating spaces'; physical and 'outside the walls' of NOVA, in Portugal or in other regions where NOVA groups are involved in projects with impact on the SDG; virtual, through a digital platform that aggregates all interdisciplinary projects and ensures the external communication of the activities that promote NOVA as a **Sustainable University**.

#### **MISSION**

Bringing together NOVA's 'strong areas' in an interdisciplinary approach focused on the SDG and guided by concrete missions.

#### **OBJECTIVE**

To become part of a network of European universities and global partnerships that develop interdisciplinary research with high social and economic impact. And to become, at the national level, the leading university in the commitment to sustainable development.

#### **APPROACH**

#### Teaching

Doctorates, Masters, Advanced Training Courses, Capacity Building Activities. All with interdisciplinary scope, whether it is based on training already available in NOVA's portfolio, or on new training programs;

#### Research

Centered on the 2030 Agenda, mission-oriented (in compliance with the Horizon Europe framework) and project-based. Interdisciplinary, collaborative and developed in international networks;

#### Value Creation

Includes: knowledge and technology transfer, capacity building of institutions and people, studies and dissemination activities, through collaboration with national and international universities, companies and NGO. The value creation activity will have a special emphasis on Europe and on Portuguese-speaking countries.

NOVA 4 the Globe will have a double focus:

- Academic Practice, which will reflect all knowledge with impact produced by NOVA. Under the Horizon 2020 and Horizon Europe frameworks, NOVA participates in projects that have an impact on almost all SDG, but particularly on SDG3 Good Health and Well-Being, SDG5 Gender Equality, SDG6 Clean Water and Sanitation, SDG7 Affordable and Clean Energy, SDG9 Industry, Innovation and Infrastructure and SDG11 Sustainable Cities and Communities.
- Institutional Practice, which will be articulated through official NOVA policies and echo in initiatives aligned with the SDG which will be regularly monitored. The following goals are currently targeted: SDG3 Good Health and Well-Being, SDG4 Quality Education, SDG9 Industry, Innovation and Infrastructure, SDG11 Sustainable Cities and Communities, SDG13 Climate Action and SDG16 Peace, Justice and Strong Institutions.

It is particularly worth mentioning NOVA's participation in **SDG 5 - Gender Equality** through a Horizon 2020 project (<a href="https://gender-spear.eu/">https://gender-spear.eu/</a>). It aims to develop institutional changes to increase women's participation in Research and Innovation, and also to improve their career prospects, with particular emphasis on Higher Education, based on the implementation of Gender Equality Plans. As in many reputable universities, the goal is to create an **Equal Opportunities Office** to implement equal opportunity promotion plans in all NOVA schools.

# **NOVA HEALTH**

#### RATIONAL

The issues regarding 'more and better health and well-being' are some of the most important challenges for the 21st century, not only at national level, but also EU level and even globally - the third goal of the UN' 2030 Agenda is precisely 'to ensure healthy lives and promote well-being for all at all ages'. The NOVA Health Platform was created to aggregate and enhance the many strengths that NOVA has in the health area, in several of its schools, which can be further developed through strategic collaborations focused on missions that create value for society.

#### **MISSION**

To create health value through scientific production, knowledge dissemination and implementation of innovative solutions that are useful for the health of populations. It will be particularly strategic for the accomplishment of this mission to promote research collaborations between NOVA's academic units, as well as to establish partnerships with industry and society, focused on research missions, with a clear purpose of addressing concrete problems.

#### **OBJECTIVE**

NOVA must become an even more relevant partner in the Health area, increasing its impact on research and on health solutions at national, European and global level.

#### **APPROACH**

#### **COLLABORATIVE RESEARCH GROUPS**

#### AGEING

It aims to increase research, knowledge and innovation in the field of ageing and related conditions to promote an active and healthy ageing. Therefore, it relies on the knowledge and skills of different partners, involving them in initiatives of knowledge and experience sharing, as well as involving other stakeholders in innovative projects. The purpose is to promote a healthy living among the elderly through innovative projects and research of excellence with local, national and international impact.

#### NUTRITION

It aims to model the obesogenic environment, integrating the knowledge produced in academia, from a multidisciplinary perspective (health sciences, social sciences, legal sciences, environmental sciences, economic sciences, food sciences and communication sciences), and outlining strategies to promote healthy eating with the aim to prevent some diseases related to nutritional deviations and improve the nutritional profile of the population.

#### CHRONIC DISEASE AND INFECTION

It aims to foster scientific, academic and social discussion of cross-cutting issues related to chronic diseases and infection, at the frontiers of science and global health, by contributing to the SDG. The research challenge will be to contribute to a better understanding of the strengths and dynamics between infection and chronic diseases in order to develop better and more sustainable solutions to these problems through science-based and evidence-based knowledge.

#### VALUE IMPROVEMENT IN HEALTH AND CARE

It aims to study the science of value creation in health, finding solutions with practical application. It requires the assessment of health outcomes and associated costs, the improvement of health literacy, and the use of remote data monitoring and transmission solutions, making it possible to follow patients' clinical situation from a distance, for instance in their homes.

#### CLIMATE CHANGE IMPACT ON PUBLIC HEALTH

Visa investigar a relação entre as mudanças climáticas e a globalização da economia e a saúde das populações, bem como os respetivos determinantes da doença.

#### TROPICAL HEALTH

It aims to promote the training, research and clinical practice of tropical diseases, including neglected tropical diseases, (re)emerging infections, diagnostic innovation and therapeutic innovation, and molecular epidemiology.

#### HEALTHCARE DYNAMICS

This strategic area incorporates the following subdivisions: (). Esta área estratégica incorpora as seguintes subdivisões:

- Integrated Care (create and disseminate research activities on the implementation of integrated, transdisciplinary and innovative solutions that have an impact on the health of populations and individuals);
- Migration and Health (promote collaborative research and knowledge to address the challenges of human mobility and migratory flows regarding health conditions, disease prevalence and health care systems);
- Quality Improvement and Patient Safety (develop research, knowledge and innovation in the field of healthcare quality and safety, and related areas);
- Health Systems and Policies (promote health policy research, especially in Portugal, Europe and in Portuguese-speaking countries, through a rigorous analysis of health systems in several countries, and by working in partnership with research centres and international organizations, in particular the European Observatory on Health Systems and Policies of the World Health Organization).

#### **NOVA INSTITUTE FOR PRECISION MEDICINE**

#### **MISSION**

It aims to develop collaborative and interdisciplinary research in the field of biology and health sciences, with practical, clinical and global health applications, including biomedical engineering, thus improving citizens' lives and quality of life. It also aims to group NOVA's research efforts in the area of precision biomedicine to reduce overlaps and enhance synergies, and guide research towards well-defined missions.

#### **OBJECTIVES**

- Boost NOVA's role at the forefront of technological innovation in the intersection of life sciences, nanotechnology, nanomaterials and medical research of high translational impact into clinical practice;
- Promote innovative research strategies and their application in promoting healthy aging

- Support and update scientific, human and physical resources to reinforce NOVA's prominent role in expanding fundamental knowledge in medical and life sciences;
- Increase NOVA's national leadership and international networking capacity to promote the well-being of the population;
- Strengthen and support NOVA's team of scientists in raising the necessary funding for the development of cutting-edge research;
- Improve NOVA's responsiveness to the critical challenges of our Society in the field of precision medicine;
- Sustain a creative and entrepreneurial environment that promotes value creation and ensures high return on research investment;
- Promote the highest level of scientific integrity, public accountability and social responsibility in the conduct of biomedical science.

#### **RESEARCH AREAS**

NOVA Institute for Precision Medicine will focus on six key research areas:

- Physical and cognitive disability
- Metabolic and inflammatory dysfunction
- (Re)Emerging infections
- Diagnostic innovation
- Therapeutic Innovation
- Precision Public Health

#### **COLLABORATIVE LABORATORY: VALUE4HEALTH.COLAB**

#### **MISSION**

The founding partnership of this CoLAB is an applied research institution led by Nova University Lisbon in partnership with José de Mello Saúde, Vodafone and Fraunhofer, and with the support of the Central Lisbon Hospital Center and the International Consortium for Health Outcomes Measurement. Its mission is to develop and implement Valued-Based Healthcare (VBH) methodologies that are expected to address health challenges, mostly related to ageing, chronic disease, innovation and cost spiraling in health care.

#### **OBJECTIVES**

- Create transdisciplinary knowledge focused on VBH development;
- Stimulate the implementation of VBH methodologies at the level of the main disease trajectories identified for the European context, and demonstrate their social and economic impact;
- Develop and validate monitoring technologies (to be explored in the market) aimed at disseminating VBH practices;
- Create scientific employment in the health sector (notably at industry level) through the exploration of services and products that will be developed in the CoLAB.

# INSTITUTE FOR ART AND TECHNOLOGY

#### **RATIONAL**

In the Greater Lisbon region there is no center of artistic creation dedicated to both valorization and transfer of technology linked to the Arts. In Portugal there are other art-related research centers, but they do not really have either a solid technology base or an international dimension. The NOVA Institute for Art & Technology (NOVA IA&T) will address this gap by presenting its own scientific and pedagogical program, guided by the great issues of the 21st century and their connection to art and technology: environment; urban space; equality; health and ageing; fake-news; inclusion; race; becoming vs. belonging; coloniality; hearing impairment studies; empowerment; the libidinal and sex; the post-humans; the animality; among others.

Located in the former Trafaria Prison, which will be completely remodelled and adapted for this purpose, NOVA IA&T will have its initiatives in close and permanent interaction with the population of Trafaria and Almada, and in alignment with the objectives of the Almada municipal government. It will be a space open for the inclusion of the various local communities and an ecosystem for the qualification of the population and of the surrounding area, capable of driving the social development and the economy of the region.

In order to carry out its institutional project in the best possible conditions, NOVA IA&T will take the collaborative form of a consortium, promoted and directed by NOVA, through NOVA School of Sciences and Technology and NOVA School of Social Sciences and Humanities, with the contribution of various academic, business, institutional and international partners. Most consortium partners will have a physical presence on campus, which will be adjusted to their participation in the activities to be developed. The sustainability of NOVA IA&T's activity will depend on the contribution of its various partners, as well as on the results of the various activities developed there.

#### MISSION

Develop, through training, research, innovation and service delivery, in an international context of excellence, the artistic creation of products and services that incorporate an aesthetic or design dimension based on technology in all its forms. Serving this mission means to consider the innovative ways in which art, in its interface with technology, has faced and enhanced the challenges and problems of the contemporary world, namely those concerning social justice, ecological sustainability and economic development. It also means to underline the importance of the dynamic relation between the social sciences, art, culture and technology to find solutions and overcome such problems.

#### **OBJECTIVE**

To become an internationally renowned School of Arts and Technology with high impact on local society and on the national economy. NOVA IA&T will be focused on promoting cutting-edge teaching and experimentation; curricular mobility; teacher and student heterogeneity; visiting artists; widespread sustainability; internationalization and start-up companies.

NOVA IA&T will promote intercultural dialogue between different social groups, especially, but not exclusively, in the Almada area and among the youth population. The remodeling of the Trafaria Prison should provide an inspiring environment for training and transformative research and benefit the local community.

#### **APPROACH**

NOVA IA&T will focus on qualified training and laboratorial research (problem-based & project driven), oriented towards the development of research, design and production projects, in different artistic areas and integrating a strong technological component. Thus, the main areas of activity of NOVA IA&T are:

**Training:** advanced, intermediate and initial training courses, which might be converted into credits for cycles of studies at NOVA and other partner universities, and creation of a master's and doctoral degrees that will serve as an anchor to the cross-cutting activity.

**Research**: focused on design and experimentation projects and therefore based on technological and artistic laboratories such as the Cinema and Visual Arts Lab, Digital Arts Lab, Fashion and Design Lab, Performance and Performing Arts Lab, Sound and Musical Arts Lab, Heritage and Urban Studies Lab, Critical Studies Lab, and the 'Street Lab'. The 'Street Lab' results from the confluence of the other Labs and serves as an interface with the wider community, particularly the local youngsters, by supporting them in their art and technology projects or promoting their training and capacity building.

**Innovation**: focused on creating value at the product, service and environmental levels and aligned with the needs of national and foreign companies and various social sectors, which will build the 'innovation agenda'.

**Service Delivery**: to the surrounding community and society at large through the organization of events (festivals, exhibitions, conferences, thematic cycles); consultancy; customization of products, among other services.

#### INTERNATIONAL NETWORK

Collaboration protocols with international partners of great strategic relevance: University of the Arts London, University of Texas at Austin, University of Art and Design (Austria), New York University, 'T-Factor' consortium, UNICA - Network of Universities from the Capitals of Europe and partnerships in Central and South America.

In addition to these partnerships, NOVA IA&T is already developing contacts with the Universidad Nacional Autónoma de México and the Universidad de Guadalajara (Mexico), the Universidad Nacional de las Artes (Argentina), and several Brazilian institutions, including the Fundação Roberto Marinho and Rede Globo. The aim is to position NOVA IA&T and NOVA as relevant actors in the North-South artistic dialogue, and to make Trafaria, as well as the surrounding region, become a multicultural and broadminded meeting point.

#### **COMMUNITY**

NOVA IA&T will be a diverse, inclusive and creative international community that includes:

- Resident teams of academics (mainly young teachers and researchers);
- Resident students;
- Temporary Resident Artists
- Visiting academic students (domestic and foreign);
- Visiting students in training;
- Technology-based artistic start-ups;
- Permanent hubs of artistic associations and companies (national and foreign)
- Other rotating groups, permanent or visiting, involved in research or innovation projects.

# NOVA HOSPITALITY FUTURES PLATFORM

#### **RATIONAL**

When it comes to 'hospitality' we think mainly of tourism-related industries and their great and growing importance in the national and global economy. This is undoubtedly a very relevant perspective. But in modern times, 'hospitality' has a broader sense of 'consumer experience' or 'consumer centrality', which cuts across multiple industries, from retail to automotive, to arts and, of course, to tourism.

Portugal aims to stand out in the world of tourism and hospitality, where there has been an increasingly growing demand. Tourism accounts for 12.5% of the Portuguese GDP. The official policy of Portugal's Agency for Tourism is to make tourism become a hub of economic, social and environmental development throughout the territory, placing Portugal as one of the most competitive and sustainable world destinations.

However, existing training and innovation in Portugal in the field of Hospitality and Tourism is not compatible with this ambition and, in particular, does not have the appropriate internationalization dimension, nor the interdisciplinary approach that is required.

On the other hand, NOVA is a Portuguese public university with particularly high international profile and interdisciplinary capacity. In addition, NOVA's strategy includes two key aspects: to federate dispersed scientific knowledge into its various schools, focusing it on projects of major academic and public interest; and to promote innovation with significant economic relevance and social impact.

Recently, NOVA signed an important consortium protocol for the establishment of a Tourism Excellence Centre, based in Estoril, in which participate, besides NOVA, another higher education institution, polytechnic (Estoril Higher Institute for Tourism and Hotel Studies) and a newly created research centre (CITUR), among non-academic institutions, such as Turismo de Portugal, Grupo Pestana, VIP Hotels, Porto Bay, Vila Galé, Hilton Group, SANA Group, Estoril Sol, NAU Hotels & Resorts, Delta Café, and many others.

In addition, several NOVA schools have a development strategy that includes, to a certain extent, the area of hospitality, almost always focusing on tourism. As a result, new hiring, financing and training development in those areas have been initiated.

Thus, the idea of creating a platform on hospitality and tourism took shape. The goal of this platform is to aggregate the activity of each NOVA school in these areas, coordinate these initiatives and, above all, develop its own initiatives that articulate interdisciplinary projects within the University, bringing together NOVA schools and both national and international partners. These initiatives could be in the area of **training** as well as in **research** and **innovation**. More than just having specific training in tourism and hospitality, NOVA wants to step into the hospitality and tourism areas by taking full advantage of its many skills in disciplines that support the most innovative initiatives in these areas, from digital to health, from heritage to management, including various others.

#### **MISSION**

The **NOVA Hospitality Futures Platform** (HFP) will be a platform that brings together several knowledge areas of NOVA - from management, to data and computing, health, culture and the arts - to create and disseminate knowledge and foster innovation on hospitality, in its many forms.

#### **OBJECTIVES**

- 1. Offer a space for training and creativity at the service of the community in the area of hospitality, in its various terms;
- 2. Develop partnerships with industry, government institutions and national and international academic institutions that enable NOVA HFP to play a relevant role in transforming society through innovation, dialogue and knowledge;
- 3. Contribute, as a centre of excellence, to the development of the local, regional and global economic fabric.

#### **APPROACH**

NOVA HFP will carry out three types of activities:

- Advanced Training: Multidisciplinary training focused on innovation aimed at individuals or organizations. This training may be degree-awarding, at the master or doctorate level, or take the form of executive programs.
- **Innovation Platform:** Hot-spot research labs focused on multidisciplinary research, with a strong connection to Industry, that promote innovation, creativity and R&D for the tourism and hospitality industry in general.
- Incubation Platform: Incubation services for Level A start-ups, based on research laboratories.

These activities will be developed in close association with companies and organizations, with Turismo de Portugal and will be supported by leading international partners such as the École Hôtelière de Lausanne and the Fraunhofer Foundation, as well as the Estoril Higher Institute for Tourism and Hotel Studies, among others.



# STRATEGIC INSTRUMENTS

The accomplishment of NOVA's Vision and Strategic Goals requires a permanent commitment to two areas considered instrumental in this process: high quality, both in the University's fundamental areas, as in the areas of support, and internal and external communication with greater strategic alignment:

# **NOVA SIMAQ**

#### **MISSION**

Design and implement NOVA's Internal Quality Monitoring and Evaluation System (NOVA SIMAQ).

#### **OBJETIVES**

- Contribute to the continuous quality improvement at NOVA by monitoring its activities;
- Address the legal requirement established by the Higher Education Evaluation and Accreditation Agency for higher education institutions to establish their own certifiable quality assurance systems.

## **NATURE**

NOVA SIMAQ is structured in several areas, covering:

- the areas that correspond to the fundamental domains of the system: Teaching and Learning; Research and Development; Inter-institutional and Community Collaboration; and Internationalization, which is extended across the other domains;
- the support areas for the previous domains, corresponding to activities carried out at the Departments, Research and Development Centers, Services and Partner Entities.

This system will be developed in close collaboration with NOVA schools, the Rectorate and the Social Welfare Services.

# **NOVA COMMUNICATION**

#### **RATIONAL**

NOVA is a comprehensive university, home to a great diversity of knowledge, points of view and scientific cultures across its nine schools. These schools enjoy great scientific, pedagogical and administrative autonomy, which has contributed to the success of the institution as a whole.

In this context, it is of great importance to improve the internal and external communication of all the activities, accomplishments and success stories that, somehow, elevate NOVA's reputation and bring its Community closer together, motivating it to pursue the University Mission.

Internally, this communication will strengthen the ever-present and ever-growing 'collective spirit' of the University and the articulation between the various NOVA schools, which in turn will enhance the activity and efforts of each one of them and, overall, NOVA's success.

Externally, this communication will serve as an eye witness to NOVA's responsibility towards society, and to the country in general, and will enable NOVA to disseminate its activity and successes nationally and internationally, thereby enhancing its prestige.

#### **MISSION**

Promote NOVA nationally and internationally, in a way that clearly reflects the identity of the University, and bring it closer to the main target audiences, students, academics, companies and society, through a communicational approach that highlights the strengths of its main areas of excellence, the relations established with strategic partners, the confidence in its quality and also NOVA's competitive positioning.

## **OBJECTIVES**

- Position NOVA among the various stakeholders as a University of the Future: Global, Civic and Sustainable;
- Coordinate NOVA's positioning strategy between the Rectorate and NOVA schools;
- Strengthen the national and international visibility of the NOVA brand in order to attract talent (students, academics and staff), promote graduate employability and leverage fundraising initiatives;
- Create a smooth and effective system of internal communication that increases a sense of belonging regarding NOVA and boosts all the main university activities;
- Listen to national and foreign students on a regular basis, involving them in University projects;
- Contribute to the enhancement of the NOVA brand at national and international level.



# NOVA IN NUMBERS

# **NOVA IN NUMBERS**

#### 9 Schools

- NOVA School of Sciences and Technology
- NOVA School of Social Sciences and Humanities
- NOVA School of Business and Economics
- NOVA Medical School
- NOVA School of Law
- NOVA Institute of Hygiene and Tropical Medicine
- NOVA Information and Management School
- NOVA Institute of Chemical and Biological Technology António Xavier
- NOVA National School of Public Health

#### 226 accredited courses

#### 20.496 enrolled students<sup>2</sup>

■ 50,8% are female

#### 3.061 international students

Brazil (1.091), Germany (310), Italy (210), Angola (178), Cape Verde (151)

#### +530 international mobility partnerships

1.065 incoming students and 749 outgoing students

#### 39 Research Units

- 87% rated 'Excellent' or 'Very Good'
- **4.278** publications (2017)
- 50% of indexed scientific publications are international collaborations
- 20 European Research Council Grants (worth +30M euros in funding)
- 97 projects funded by Horizon 2020 (48M euros)
- Participates in 10 collaborative labs and coordinates two of them

#### 143,9M euros of Total Revenues (2018)

48% of General Revenues; 31% of Own Revenues; 10% of European Funding; and 12% of Government Budget for Research

#### 1.982 Faculty members and 697 Staff personnel

#### 55% of Human Resources are female

- 48% of Faculty;
- **73**% of General Staff;
- 25% of Technical Assistants.

<sup>&</sup>lt;sup>2</sup> Academic Year 2017/2018

