

STRATEGIC PLAN 2018 – 2022

KEY NOTES

Gulbenkian Science - Discoveries with Global Impact

MISSION, VISION AND VALUES

Our Mission, Vision and Values are fully aligned with Gulbenkian Foundation principles and objectives (*Build a sustainable society that provides equal opportunities; Philanthropic institution open to the world; Independence, integrity, transparency, responsibility*)



Our Mission

Meeting science global challenges: making ground-breaking discoveries in Life Sciences, innovating in training, incubating the next generation of future leaders and placing science at the heart of society.

Our Vision

To become a world leading research institution where individuals pursue the most original discovery driven scientific questions in a multidisciplinary, international and collaborative environment, fostering open discovery towards the benefit of mankind, aligned with Gulbenkian Foundation vision.

Our Values

GULBENKIAN science aims to spread to society the values it promotes and practices

- ***Independence, integrity and ethics***
- ***Excellence (impact and reproducibility)***
- ***Plurality and Cooperation (disciplines, approaches, nationalities)***
- ***Generosity and Responsibility (open knowledge, responsibility towards society and the planet)***

STRATEGIC GOALS 2018-2022

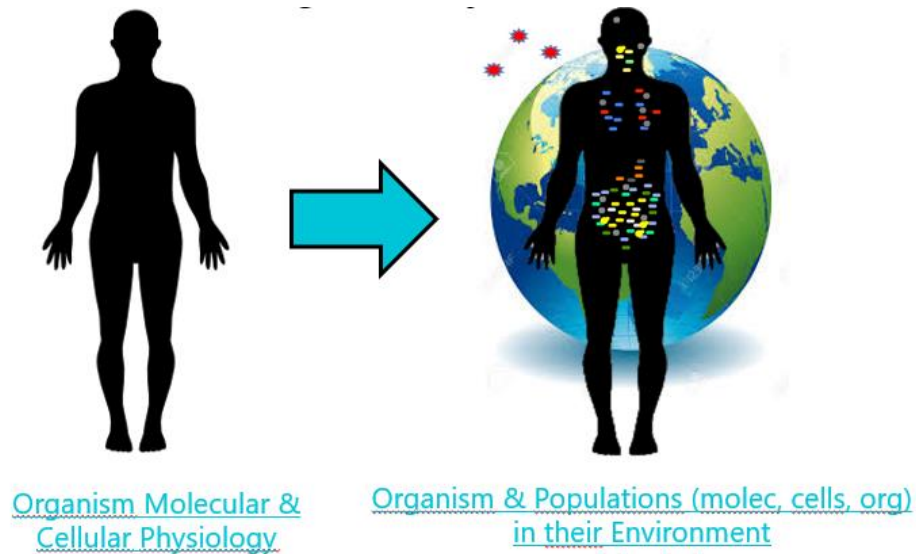
At IGC we aim at a deep understanding of living systems, how they are formed, how they function, as well as how they adapt to and shape their environments over different space and time scales. The future of biology, and of our health, lies on the understanding of genome, cell and organism's constraints in the light of ecological scales. The IGC has focused on organism-centred research in the past and will continue to excel on this front. It's time to extend IGC's ambition by seeking to further explain the interactions between organisms, their communities and environment (biological, physical and social). In order to do this the IGC will strengthen its cross disciplinary approaches, in particular regarding data analysis, promoting computational, quantitative and theoretical approaches.

The IGC strategy plan will embrace the key aspects of Responsible Research and Innovation (RRI): research integrity, open science, gender, transparency, science governance and public engagement. Having signed the endorsement letter to the HRS4R certification the IGC is strongly committed to enhance the professional development of its researchers by promoting research freedom, advocating ethical principles, innovating in research and its relevance to society, providing adequate training amongst other principles that are the basis for a successful development of both early stage as well as experienced researchers working at the IGC.

1. EXCEL IN RESEARCH

Organism Communities Within their Biological, Physical and Social Environment

At IGC we aim at a **deep understanding of living systems**, how they are formed, how they function, as well as how they adapt to and shape their environments over different space and time scales. The IGC has focused on organism-centred research in the past and will continue to excel on this front. It's now time to extend IGC's ambition by seeking to explain the interactions between organisms, their communities and environment.



Artificially we can divide our research in three levels of growing complexity:

- **The organism** - the motivation is to discover the fundamental principles that rule development, homeostasis and proliferation of living organisms, from microbes to humans. In simpler terms, how is a healthy organism formed and maintained?
- **Organism interactions** - the motivation is to understand how animals, plants and microbes react, adapt and interact, to and with the environment (physical, biological and social).
- **Communities/Populations** - the motivation is to understand how ecosystems are built and evolve (e.g. gut microbiota; cancer cell niche; Madagascar lemures). What are the rules by which populations in those ecosystems interact?

GULBENKIAN unexpected discoveries are per se a critical contribution to human knowledge, but at the same time suggest new ways to interfere with societal problems, including ageing, obesity, cancer, infectious diseases, antibiotic resistance, agricultural sustainability and food security, amongst others.

2. COLLABORATE AND INTERNATIONALIZE

Gulbenkian at the centre of global science

- **The International Collaborative Centre: an International, Collaborative and Interdisciplinary Science Ecosystem.**

IGC will establish a visitor's program that also comprises laboratory space, where research groups from everywhere in the world can work together to do ground breaking work.

First of its kind in Europe, this centre will mix fundamental research with proof-of concept work. The IGC will refurbish existing infrastructure to attract world leading research groups and companies to interact with each other and with local and national groups in a "pre-competitive" space; host sabbaticals, courses, workshops, small conferences (e.g. FASEB, EMBO, European Gordon), summer schools, postgraduate education.

- **Partnerships with local hospitals** for collaborations, joint activities and possibilities of further education such as an MD-PhD program in collaboration with other national and international research Institutes.
- **Gulbenkian Partnerships with national/international Universities and research Institutes** to strengthen research capacity and enlarge its scope (eg. Lisbon Institutes and Universities, EU LIFE community, EU Widening Programmes with a variety of Institutions).
- Promote **Gulbenkian collaborative technological facilities**, both nationally and internationally (eg. Local ITQB, IMM, Champalimaud, CEDOC, national and international infrastructure grants). A state-of-the-art infrastructure ("service") is absolutely essential to be maintained and possibly extended in the years to come. It is crucial to provide scientists with access to cutting edge technology in order to stay internationally competitive and to continue attracting international grants (such as EU grants) to the IGC.
- **Gulbenkian Science For Development Program:** Take science to Africa and bring *African scientists to Gulbenkian*. Initiatives with African countries such as offering specific faculty-TRAINING workshops on experimental education.

3. IMPACT SOCIETY

Spreading Gulbenkian values – Science from all for all

- Strengthening and supporting our **Alumni network** (*circa* 1,000), who communicates the values of GULBENKIAN, is spread throughout the world: directors of Institutes, of University Departments, of communication at CERN, company CEOs, at the European

Patent Office, and many research departments all over Europe, in the USA, Australia, South America, and Africa.

- **Knowledge transfer** by hiring a local joint technology transfer office (TTO) with ITQB/NOVA for intellectual property assessment and management, to value exploratory translational work, build partnerships with companies, and to fund and mentor proof-of-concept activities.

Given the importance and relevance of fundamental, breakthrough research, IGC researchers find it is essential, to create conditions to promote the application of specific findings for societal good (see “Impact Society”).

- **Open science** to society, using citizen science and being INCLUSIVE, taking science and advocating fundamental research and GULBENKIAN values to hospitals, schools, parliament and media.
- **When adequate, partnerships with regional and national governments, international organizations and other philanthropic institutions** that share the same values to extend the reach of our activities (e.g. UNESCO, Oeiras City Council- Oeiras Valley, Volkswagen Foundation, Merck Foundation, Welcome Trust, Howard Hughes).