HUMAN TECHNOPOLE

Integrated Report 2020

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LETTER TO OUR STAKEHOLDERS

Dear Stakeholders,
we are pleased to present the first edition of our Integrated Report, providing all Stakeholders with a unified view of the many elements of Human Technopole.
We decided to voluntarily produce this report, as the first research institution to make such an effort, to embark on a path of transparency, to increase our Stakeholders' knowledge of us and to promote trust in our work. And we chose the Integrated Report because it is the most innovative and effective tool of communication to highlight the links between our Foundation's strategy, governance, value creation model, overall performance and prospects.

The ultimate goal of our efforts can be summed up as the striving for sustainable growth over time, accompanied by the creation of value in a broad and widespread sense for all our Stakeholders. These declarations of intent are fully reflected in the short history of our Foundation.
The Human Technopole project was launched in 2016 at the behest of the Italian Government: the project was based on the intuition of the need to create a new centre of excellence in Italy in the field of life sciences, capable of ensuring the highest standards of quality through a multidisciplinary and integrated approach to the study of human biology.

It is also characterised as a centre 'open' to the entire national scientific community, contributing to the provision of know-how and infrastructural facilities to researchers, combined with the promotion of scientific dissemination and technology transfer policies aimed at the realisation of tangible applications for the benefit of patients and society in general.
The same values and principles of innovation and cultural openness, which distinguish the relationship with the external community, are also "breathed" within the Foundation. In particular, Human Technopole promotes policies of inclusion and enhancement of resources, including by the provision of training and the promotion of professional development.

All this is summed up in the Human Technopole logo, in which the open lines recall the values of interaction, openness and sharing of knowledge, and where the colours blue and green ideally represent life, nature, sustainability and science.

The values expressed above are central to the achievement of the objective of creating sustainable value by Human Technopole, in a virtuous interaction between the available capitals, financial, human, infrastructural, intellectual and relational, and the Stakeholders. Our people, our science and the things we discover are intended to make the world a better place: these are our values, and this report aims to share them with you.
Over time, the Integrated Report will also transparently document our progress in fulfilling the UN's 2030 Agenda and its Sustainable Development Goals, by ensuring a constant and open dialogue with all our Stakeholders.

Marco Simoni **Iain Mattaj**

PRESIDENT
MARCO SIMONI

DIRECTOR
IAIN MATTAJ

"Our biggest challenge in this new century is to adopt an idea that seems abstract - sustainable development"

Kofi Annan - UN Secretary-General 1996-2006

A GUIDE TO READING THIS REPORT

ABOUT THIS REPORT

The Integrated Report is the information tool meant to describe how Human Technopole creates sustainable and long-term value. This document aims at representing and assessing the resources used and reinvested to achieve the strategic goals. The Integrated Report is not just a reporting tool, but rather a way to facilitate the coordination of the internal units in collecting and organising information in order to make informed decisions (which we call Integrated Thinking).

REFERENCES

The IIRC (International Integrated Reporting Council) Framework is the reference document for the Integrated Report and the sustainability indicators (KPI's) here disclosed are also mainly reported according to the GRI (Global Reporting Institute) Standards.

TYPES OF CAPITAL

According to IIRC guidelines Human Technopole creates value over time by utilising its resources, represented by the five types of «capitals» below.

Financial the financial resources, guaranteed by public and private funds, available to HT for its operations;

Infrastructure owned or leased real estate, facilities, infrastructures, machinery and equipment;

Intellectual scientific knowledge and operational processes and procedures intended to ensure the quality of the activities;

Human assets; the competencies, skills and knowledge of scientific and non scientific staff;

Relational relationships with key stakeholders and collaborations with the other scientific Institutions.

STRATEGIC ISSUES

The eight pillars of Human Technopole's strategy are the following:

Generate **Innovation and quality of research**

Develop and provision of **infra-structures, innovative research methods and instruments**

Attract and train **research talents**, share research outputs

Generate **scientific reputation** and promote **dissemination**

Promote **innovation through research**

Contribute to **sustainability (environmental, social and economic)**

Building **partnerships, networking** and promoting **Stakeholder engagement**

Achieve **effectiveness and efficiency of operational processes**

SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Human Technopole strategy is also inspired by the UN 2030 Agenda's sustainable development goals. The goals which are considered as most relevant to HT activities are then matched with the strategic issues in order to highlight their specific relations.

GRI

Sustainability information is mainly reported in accordance with the GRI Standards. A reference number will tell you which indicators refer to GRI.

METHODOLOGICAL NOTE

This document represents our first Integrated Report. Human Technopole is going through a start-up and rapid evolution phase, but we have nevertheless decided it is worth the effort, in order to promote transparency, to increase our Stakeholders' knowledge of us and to promote trust in our work. Our Integrated Report shows our activities performed in 2020 but also includes some references to the first half of 2021 as well as our future outlook. This document has been produced with the collaboration of: **Anna Pistoni**, Associated Professor in Planning and Control, Department of Economics, Università degli Studi dell'Insubria and **Lucrezia Songini**, Full Professor in Management, Department of Economics and Business, Università del Piemonte Orientale.

<IR> is a journey and it will take more than one reporting cycle to get there. As businesses start to use <IR> as a tool to better understand the connections between key resources and relationships that contribute to their success, and as a result make more informed decisions, the real value of integrated thinking and the integrated repot will be realized (IIRC, 2015).

CHAPTER 1

About us

1.1 HT MISSION, VISION AND VALUES

Human Technopole is Italy's new research institute for life sciences.

After representing and celebrating Italian excellence with the millions who visited EXPO Milan 2015, the Italian Government decided to continue the EXPO legacy by creating an open research centre to foster collaboration and bring added value to the scientific research ecosystem across Italy and Europe.

Today "Palazzo Italia", the former Italian pavilion at EXPO Milan 2015, has been refurbished and is the institutional headquarters of Human Technopole. Through an interdisciplinary approach based on the creation and sharing of knowledge, Human Technopole promotes innovation in the healthcare sector and aims at improving human health and well-being.

Once fully operational the institute will employ roughly 1.500 people, 67% of who will be scientists active in a range of fields: biology, bioinformatics, chemistry, engineering, mathematics and computer science working in more than 35.000 square metres of laboratory space to collaborate on research activities of biomedical relevance.

Human Technopole aims to increase public and private investments in scientific research and to be actively involved in the promotion of scientific knowledge by strengthening the message that science is a global public good.

Human Technopole is a private law foundation established pursuant to Law 232 of 11th December 2016, which mandated that the purpose of the Foundation was to create a multidisciplinary scientific and research complex of national importance integrated in the health, genomic and data and decision-making science sectors to realise the scientific and research project named Human Technopole. The founding members of Human Technopole are the **Ministry of Economy and Finance, the Ministry of Health, and the Ministry of Education, University and Research (now MUR)**, which are responsible for supervision of the Foundation.

OUR MISSION
IMPROVE HUMAN HEALTH AND WELL-BEING, INCLUDING A FOCUS ON HEALTHY AGING.

Setting up and operating scientific services and facilities to be made available to external scientists, responding to the needs of the national and international life sciences research communities.

Carrying out frontier research in the life sciences, aimed at developing innovative approaches for personalized and preventive medicine.

Organizing and offering development and career opportunities to the next generation of scientists.

Driving innovation and progress by promoting technology transfer and by engaging in relations with industry, to foster the transformation of scientific discoveries into tangible applications for the benefit of patients and society.

Disseminating scientific activities and achievements to reinforce the message that science is a public good.

OUR VISION

Scientific excellence is the guiding principle for all HT activities.

The HT vision is the one of an internationally competitive research institute, applying the highest standards in biomedical research. HT staff is and will be recruited through international, open calls and stringent, strictly meritocratic selection procedures carried out by internal as well as external experts in the relevant fields. The aim is to attract top scientific talents and provide them an optimal environment to pursue their research interests. Most scientists will be offered fixed-term contracts. This contributes to maintaining a dynamic, constantly changing, scientific environment and allows for the ongoing renewal of HT's expertise and scientific profile. At the same time, it generates a pool of highly trained researchers that, after their time at HT, will flow into and enrich the national scientific community, exerting a long-term beneficial cascade effect on the country' s research system. Different models for biomedical institutes exist at the European and international level, including top-level research centres where scientists are offered world-class facilities and other that provide access to national or intergovernmental research infrastructures, where cutting-edge instrumentation and expertise are made available to the community. HT will represent a mix of both these models, combining an internationally competitive research institute with the wish to serve the wider community by providing access to technological platforms and by offering top-level training opportunities, as well as through research collaborations and coordination in specific areas. Moreover, the vision for Human Technopole's research is based on a mix of fundamental and translational research. HT will host extensive core expertise in basic research in areas relevant for the understanding of human biology and physiology. Translational and more medically oriented research, on the other hand, will be conducted largely in collaboration with external organisations, including clinical research and industry partners.

The development and use of, as well as provision of access to, cutting-edge research infrastructures, instruments and methods is also a cornerstone of the HT strategic vision. HT was created to enrich and contribute to advancing the national system, acting as a reference point for the Italian academic life science community through its combined missions. At the same time, HT's aim to achieve high standards (both in research and at the organisational and management level), in addition to providing a model for other similar centres, will make it an ideal partner for excellent European and international institutes and collaborative initiatives. By forging scientific connections with relevant international partners and networks, **HT will gain visibility for and help raise the profile of Italian biomedical research**.

OUR VALUES

Internationality, Diversity and Collaboration
We believe that highly diverse teams yield the best and most innovative results. Our working environment is international, friendly and inclusive. We pursue all our activities in an open and collaborative way, by involving academics, clinicals, industry and other relevant Stakeholders to promote life science research and innovation.

Service to the research community
We engage in outward-facing scientific activities aimed at benefiting the national and international research community

Scientific Excellence
We are an internationally competitive research institute. We recruit the best scientific talents through open international calls and meritocratic selection procedures.

Interdisciplinarity
Our scientists work together across disciplines on research topics of biomedical relevance, leveraging synergies between their diverse skillsets and methodological approaches.

The values described above find their practical implementation in the principles of conduct that are included in the HT Code of Ethics. The general ethical principles of HT constitute the core values of the operational procedures designed to realise its institutional purpose. These general principles are:

Legality	Compliance with istitutional procedures	Transparency	Fairness in the event of potential conflicts of interest
Compliance with the system of power of attorney and the mandate	Privacy	Diligence	Impartiality and non-discrimination
Protection of the integrity and development of human resources	Opposition to racism and xenophobia	Applying to the performance of scientific activities	Internal controls
Health, safety and environmental protection	Protection of institutional assets	Proper use of the information system and copyright protection	Repudiation of criminal organisations
Anti-corruption and anti-money laundering compliance	Careful management of the financial resources, preparation of the Financial Statements and other institutional communications	Repudation of terrorism and subversion of the democratic system	Relationships with Supervising Ministries, Public Supervisory Authorities, Control Bodies and Public Institutions in general
Tax compliance			

1.2 HOW WE OPERATE

Improved health and wellbeing are the ultimate goal of research in the biomedical sciences. This is especially important today, when societies are aging rapidly as a result of increased life expectancy, declining fertility rates and rapid social and economic development. Many people live longer, but not all live well or in good health, and major efforts are needed to prevent and manage diseases so that people of all ages can enjoy better quality of life and be productive members of society.

Health, aging, and quality of life are affected in a complex way by a combination of intrinsic factors, primarily related to the genetics of each person, and extrinsic factors, such as lifestyle and environment. Traditional disease classification and approaches, symptom-based and organ-centred, are no longer considered sufficient, due to recognition of the complexity of disease and the effect of shared biological mechanisms. Against this background, a new approach to health research is developing. It is based on causative pathways that include genes, environment and lifestyle, and increasingly translates into treatments according to disease etiology.

Major technological advances over the last decade and the advent of high-throughput methods, in particular, have paved the way for the global, systematic interrogation of the human genome (the complete DNA sequence of an individual) as well as other aspects of human biology. These include the epigenome (modifications to the genome that often occur in response to the environment and alter gene expression and function), the transcriptome (all the RNAs transcribed from the genome), the proteome (all the proteins made from RNAs) and the metabolome (all the metabolites present in a cell, organ, tissue or organism). In parallel, digital technologies and advanced computational analysis generate comprehensive datasets that cover a multitude of information types on many individuals and the methods required for their analysis. As a result, we are witnessing an era in biomedical research in which important biological questions directly related to human health can – at least in part – be tackled by directly by studying human subjects as well as, where necessary, still using model organisms and other simpler systems.

Integrating and harnessing information from these massive amounts of biological data has boosted possibilities for scientists to develop stratified approaches and ultimately improved, more targeted, strategies to fight or prevent disease in a "personalised" or "stratified" approach to health – where information on the genetic makeup of individuals or of their diseased tissue is used to select the most appropriate interventions. A number of such personalised treatments are already in use in areas such as cancer, cystic fibrosis and inherited forms of blindness.

The development of these treatments depends not only on knowing the specific DNA or protein sequence of the "disease gene (or genes)"in the patient, but also a deep understanding of how a genetic change in that gene or protein can give rise to a disease state. It is widely believed that stratified or personalised approaches will change the way many illnesses are treated, to the extent that many countries, including prominently the United Kingdom, Finland, Iceland and the USA are undertaking very large-scale genomic sequencing studies as part of the analysis of cohorts of individuals whose health and wellbeing status are monitored over many years.

On the other hand, and in parallel, other types of large-scale data from heterogeneous sources, for example clinical or socioeconomic data, can be exploited in a similar way to develop novel strategies for public health or to improve the management of healthcare systems, also maximising human health and wellbeing. Clearly, the current context of health-related research, as described above, calls for a holistic and multi-scale approach and for the further development of novel disciplines.

In view of the current, unprecedented opportunities for health research, building an Italian centre for human biology at the scale envisioned for Human Technopole appears extremely timely. Because of the common requirement for the analysis of "Big Data", the use of these methods goes hand in hand with investment in computational methods, including statistics, bioinformatics, modelling and machine learning/artificial intelligence. HT will therefore also promote major initiatives in computation focussed on biomedicine.

HT chooses to establish Research Centres that are broadly based, in disciplines or fields applicable to many different topic areas in the context of human health and disease. The rationale behind this strategic decision is on the one hand to enhance possibilities to recruit outstanding research leaders, independent of the specific field of application of their work, and on the other to maximise opportunities for interdisciplinary collaboration within and beyond HT, that can encompass a wide variety of biological and health problems.

OUR RESEARCH

HT's research is based on a combination of fundamental and translational research.
We will host extensive core expertise in basic research in areas relevant for the understanding of human biology and physiology.

Translational and more medically oriented research, on the other hand, will be conducted largely in collaboration with external organisations, including clinical research and industrial partners. Our contribution to human health is a comprehensive and interdisciplinary approach to the study of human biology, aimed at understanding the basic mechanisms that regulate physiology and disease, to help tackle some of the most relevant challenges to human health.

Collectively, HT's research work will advance our understanding and help develop novel therapeutic strategies for various disease groups, including some chronic and degenerative diseases.

Five broad, complementary and highly relevant areas for biomedical and health-related research have been selected to form the basis for HT's research strategy in the upcoming years: **Genomics**, **Neurogenomics**, **Structural Biology**, **Computational Biology** and a focus on public health and healthcare systems with the **Health Data Science Centre**, a joint collaboration with Politecnico of Milan.

RESEARCH CENTRES

A dedicated research centre has been set up for each identified research area

Piero Carninci
Head of Genomics Research Centre - Functional Genomics

Nicole Soranzo
Head of Genomics Research Centre - Population & Medical Genomics

GENOMICS

The Research Centre for Genomics pursues research aimed at uncovering the complex mechanisms governing gene expression and how heritable genetic information translates into phenotypic traits. Applied to humans, and in the context of precision medicine, this type of research can identify molecular targets and markers for disease prevention, early detection, and personalised treatment. In addition to carrying out genetic and genomic studies with a focus on (but not limited to) disease-associated mechanisms, the Centre for Genomics promotes and help implement large-scale genomic screening projects for patient stratification.

Giuseppe Testa
Head of Neurogenomics Research Centre

NEUROGENOMICS

The Neurogenomics Research Centre investigates the mechanisms of human neuropsychiatric and neurological diseases, ranging from neurodevelopmental to neurodegenerative disorders, combining basic and translational research through different experimental systems and computational approaches (from brain organoids to animal models to epidemiological cohorts) to probe the structure, function and development of the nervous system at multiple scales of resolution.

Alessandro Vannini
Head of Structural Biology Research Centre

Gaia Pigino
Associate Head of Structural Biology Research Centre

STRUCTURAL BIOLOGY

How do molecular machines work, interact and harmonize their activities to give rise to a fully functional cell? How are these processes regulated and how are they compromised in human disease? The Structural Biology Research Centre aims at answering these questions by gaining precise knowledge of the structure of macromolecules and macromolecular complexes, which is essential to understand how they function. The Structural Biology Research Centre is underpinned by a state-of-the-art cryo-EM facility, employing both single particle analysis (SPA) and cryo-electron tomography (ET) to obtain high-resolution structures of macromolecular structures both in isolation and in the cellular context. The centre additionally employs complementary approaches, such as x-ray crystallography, single-molecule fluorescence microscopy, native and cross-linking mass spectrometry as well as a plethora of biophysical tools to obtain mechanistic details of the function of the macromolecules under study.

Andrea Sottoriva
Head of Computational Biology Research Centre

COMPUTATIONAL BIOLOGY

The Centre for Computational Biology has the goal of developing new mathematical and computational approaches for the analysis and interpretation of medical and biological data. Computational biology at HT is not just about developing new methods for data analysis, but also and more importantly, about asking fundamental questions about biology and human health that can only be addressed using computational approaches, from mathematical modelling of dynamical systems to machine learning and artificial intelligence. One of the many research aims of the Centre is to identify mechanisms of cancer drug resistance, to predict the evolution of tumours and intervene early and effectively in each patient. The Centre will also be involved in designing methods for the discovery and repurposing of cancer drugs, using functional genomics data from cancer vulnerability screenings and in vitro models. In addition to the analysis of genetic data from patients and model systems, the activities of the Centre also focus on single-cell and multiomics data analyses, as well as on the processing of medical and microscopy images using artificial intelligence.

Emanuele Di Angelantonio
Head of Health Data Science Centre

HEALTH DATA SCIENCE

The Centre Health Data Science represents a novel and highly interesting feature of Human Technopole. Though considerably different in nature from the other Human Technopole Research Centres, it shares equally with them a strong focus on human biology at the molecular scale.

A joint project with the Politecnico of Milan, the Centre for Health Data Science will operate using advanced (big) data analysis techniques, including statistical and artificial intelligence methods, to analyse and integrate large-scale data deriving from heterogeneous sources (both internal to HT and external), such as clinical data and socioeconomic data, mainly in the areas of precision medicine, healthcare and health economics. The Centre aims to create value from this knowledge by providing analysis and advice to different Stakeholders, but in particular policymakers, as the design and implementation of models to aid in the evaluation of precision medicine and the socio-economic impact it has on the national health system and thus to support policy design.

FACILITIES

The HT campus features state-of-the-art infrastructure and facilities. Our facilities are open and available to HT scientists and researchers as well as the external scientific community who are able to access them through open selection procedures based on merit. We are currently setting up six research facilities:

DATA CENTRE
Research activity requires a considerable storage capacity to manage and analyse a huge amount of clinical information, biological data, images etc. Our campus is therefore equipped with a data centre with a high storage and computing capacity. In addition, our campus is also served by an ultra-broadband network connection.

CRYO-ELECTRON MICROSCOPY FACILITY
Every biological process, including physiologic and pathological events, is precisely orchestrated by active and reactive biological macromolecules. The function, organisation and activity of these molecules strictly depend on both their three-dimensional (3D) structure and the cellular environment in which they operate.
The Cryo-Electron Microscopy (Cryo-EM) Core Facility at HT aims at identifying, visualising and characterising these biological players in isolation and in their cellular compartment.

The facility is designed to efficiently combine SPA (single-particle analysis), ET (electron tomography) and CLEM (correlative light electron microscopy) workflows to study in detail the structure of single macromolecules as well as whole cellular compartments.

THE FACILITY BENEFITS FROM STATE-OF-ART EQUIPMENT INCLUDING:

a Thermo Scientific Titan Krios G4i 300kV TEM equipped with Thermo Scientific Falcon 4 direct electron detector, Thermo Scientific Selectris X energy filter, Thermo Scientific CETA 16M and Volta phase-plate;

a Thermo Scientific Spectra 300kV STEM equipped with a Thermo Scientific CETA 16M with speed enhancement fully dedicated to electron tomography workflows;

a Thermo Scientific Glacios 200kV TEM equipped with Thermo Scientific Falcon 4 and CETA 16M and Volta phase-plate;

a Thermo Scientific Talos L120C 120kV TEM equipped with Thermo Scientific CETA 16M to allow both room temperature and cryogenic imaging (by Gatan ELSA cryo-holder);

a Thermo Scientific Aquilos 2 DualBeam cryo-FIB system.

Ancillary equipment includes fluorescence microscopes with a cryo-stage for CLEM applications (Leica Stellaris and Leica Thunder), plunge freezing devices (manual plunger, Leica EM GP2 and Thermo Scientific Vitrobot Mk IV), glow discharger units (Quorum GloQube Plus and Pelco EasyGlow), plasma cleaners (Gatan Solarus II and Diener PICO), carbon coating system (Leica EM ACE600), and other sample preparation tools for high-pressure freezing (Leica EM ICE), freeze substitution (Leica AFS2) and ultramicrotomy (Leica FC7-UC7) of resin embedded and vitrified samples. The mission of HT's Cryo-EM Facility is to provide access to a highly productive, world-class scientific hub, capable of visualing and modelling at high resolution, from tissues to amino acid side-chains providing input to answering the many questions faced by contemporary life science.

LIGHT IMAGING FACILITY

Optical microscopy is a more traditional microscopy technique that enables observation of samples with the magnification of a lens with visible light. The facility will focus on 3D imaging to respond to the growing demand to visualise rare, dynamic and constantly evolving processes.

IMAGE ANALYSIS FACILITY

Modern imaging techniques in light and electron microscopy and computational approaches are changing the way biomedical research is conducted. Solutions for image restoration, (semi-) automated downstream processing, smart microscopy or real-time image analysis, big data management and big data visualisation are key to the success of imaging and imaging-centric research. Much of this expertise is provided by the image analysis core facility of HT. Our users can focus on their research and profit from centrally provided, cutting-edge methods, tools, and services. The central mission of the image analysis facility is to serve as knowledge incubator. Acknowledging that for most scientific staff turnover is rather rapid, the setup of the image analysis facility addresses the following question: how can HT conserve knowledge about complex bio-image analysis workflows for its scientific community? Our strategy keeps workflows and tools alive, even after their respective inventor, architect, or developer has left HT (or has never been a part of it). Next to this technical core support, the image analysis facility also offers teaching events for scientific staff across all backgrounds and career stages. While it is important to keep the community educated and informed, new concepts for knowledge exchange are employed. Key to our mission is to build bridges between all research centres at HT and the research communities in Italy and beyond. The image analysis facility is designed to be a place for scientists to meet, exchange ideas and experiences, and naturally also a place to be supported by the facility staff. Due to this 'direct access' to the internal and external user-community, and the overview of frequently occurring analysis problems which the facility naturally gains, the identification of required solutions, and consequently, the act of making new technologies available when they are needed, are key contributions to the scientific work of all our users.

GENOMICS FACILITY

HT will have a large-scale DNA/RNA sequencing infrastructure with the ability to deliver high-throughput, next generation sequencing. The facility will allow us to conduct population studies and support national screening initiatives.

AUTOMATED STEM CELL AND ORGANOID FACILITY

The Automated Stem Cell and Organoid Facility constitutes a particularly innovative endeavour and is aimed at streamlining, via dedicated automation pipelines, the key rate-limiting steps in disease modelling based on human cells and tissues, i.e., cell reprogramming, genome editing and longitudinal organoid culture. In addition to these, further technological platforms and core facilities will be available to Human Technopole's scientists, including Fluorescence Activated Cell Sorting service, Protein Expression and Purification, Crystallisation and Biophysics, Proteomics, Metabolomics, Reprogramming, Editing and Organoid Culture, Animal Research Facility and Transgenic Facility.

1.3 HT AT A GLANCE

HIGHLIGHTS

5 RESEARCH CENTRES

51.000 SQM OF SPACES;
59.9M OF NET INVESTMENTS IN 2020

70 PEOPLE HIRED IN 2020
AND CA. **500** PEOPLE HIRED BY 2024

27 PUBLICATIONS

10M OF CONTRIBUTION (CITT)

SUSTAINABILITY IN MIND DEVELOPMENT

>20 INSTITUTIONAL INITIATIVES AND EVENTS

NEW ERP SYSTEM

ROADMAP

2015 / 2020

OCT / NOV 2015
End of EXPO Milan 2015, start of discussions for the future usage of the area. Italian government gives mandate to IIT for development and execution of HT project in the area of ex EXPO Milan 2015

SEPT / DEC 2016
Approval of the HT project by a government decree

MAR / JUL 2017
The Project structure and the Coordination Committee approves the plan for the HT campus. The search for the 1st Human Technopole Director is launched.

SEPT 2017
The renovation works for Palazzo Italia begin.

DEC 2017
The 4th floor of Palazzo Italia is operational and a 1st round of HT staff takes office in the building.

MAR 2018
The Statute of HT Foundation is approved by decree of the President of the Council of Ministers.

MAY 2018
The 1st members of HTs superviory board, including the President Prof. Marco Simoni, are nominated.

JUN 2018
The supervisory board nominates Prof. Iain Mattaj as 1st Human Technopole Director.

OCT 2018
The supervisory board appoints the 4 members of the Management Committee.

JAN 2019
Director Mattaj takes office at Palazzo Italia together with the 1st administrative managers, including the Head of Operations and the Head of Strategy and Scientific Affairs.

MAY 2019
The call for tenders for the design of the HT building, the HQ of the Institute's laboratories is announced

OCT 2019
HT announces the 1st seven scientists who will lead the 1st research center: 5 Italians and 2 international

NOV 2019
At the presence of Italian Prime Minister Giuseppe Conte, Palazzo Italia is officially inaugurated as the Institutional HQ of Human Technopole

NOV 2019
The Scientific Advisory Board responsible for the valuation of the Foundation's Scientific Activity is nominated. The Chair of the Board is Gualtiero Ricciardi.

JAN 2020
HT has a new logo and a new corporate identity which symbolise the Foundation's mission and values.

MAR 2020
To tackle the global health emergency, HT accelerates its research activities by launching projects and collaborations with some of Italy's main scientific research institutes and contribute to fight against Covid-19.

APR 2020
Winning project of the design of the new HT building presented: 10 floors high, over 16,500 square meters for scientific research and 3,000 square meters of terraces and green spaces

JUN 2020
HT opens its doors virtually to representatives of the scientific community: over 200 Italian actors in the scientific field, including representatives of Italian universities, IRCCS the main research centers and institutes. Minister of University and Research, prof. Gaetano Manfredi gives a keynote speech.

OCT 2020
HT, in collaboration with the MUR, launches the 1st edition of the Early Career Fellowship Programme: in order to allow 5 young researchers to compete for a grant worth 200.000€ per year for 5 years, for an overall investment of 5 million euros.

NOV 2020
HT announces the two leaders of the Genomics Research Centre. The joint appointment represents HT's strategic approach to develop dual research programs in Population & Medical Genomics and Functional

2021 / 2026

FEB 2021

Construction works for the incubator labs are completed

SEPT 2021

The Cryo-EM facility is operational

OCT 2021

The 1st experimental laboratories open within the incubator labs built in the area near to the Tree of Life

DEC 2021

The recruitment of scientific and administrative staff continues by the end of 2021, approximately 230 people will work for HT

2026

Construction of South Building is complete and around 500 people hired

OUR 2020 - WHAT WE DID

GOVERNANCE ACTIVITIES

- Consolidation Supervisory Board
- New Founding Agreement with Ministries
- Organisational Model D. Lgs 231/2001
- Creation Compliance, Internal Audit, HSE functions

SCIENTIFIC ACTIVITIES

- Partnerships with universities of Naples and Turin
- Early Career Fellowship Programme
- COVID: project with Padua University, IEO, Sacco (LifeTime FET and COVID-19 Host Genetic)
- PhD agreements with SEMM and Politecnico of Milan
- Organisation of "Open HT"
- Additional activities and relationships with the national and international scientific community

PROCUREMENT ACTIVITIES

- Closed EU Tenders for data storage, high performance computing, laboratory furniture
- Consolidation in the use of Sintel platform made available by Aria Spa
- Use, where possible, of Consip Convention

DIRECTORATE & OPS ACTIVITIES

- Strategic Plan of scientific activity 2020 – 2024
- Placement of top profile Research Center and consolidation Ops
- Development of ERP system
- Launching of a preliminary reporting system to support HT management in monitoring ongoing operational activities and results
- Commercial Activity start-up
- CITT (Center Innovation and Tecnology Transfer) start-up and management
- Creation of a new brand identity and website renovation
- Hiring of new people for scientific and non-scientific area

CAMPUS ACTIVITIES

- Purchase of Palazzo Italia
- Conclusion of urban planning agreement with Galeazzi, Statale, Arexpo, Lendlease, Rho and Milan municipalities
- Presentation of the project for HT new building
- Leasing agreement for areas where incubator labs are being built
- Construction works for the incubators labs
- Start of renovation North & South Pavillions
- Installation of GARR network

1.4 HT GOVERNANCE AND ORGANISATION

The purpose of Human Technopole, as indicated in art.1, c. 116 of the Law 232/2016, is the creation of a multidisciplinary scientific and research infrastructure of national interest, integrated in the fields of health, genomics, nutrition, data and decision science and in the implementation of the Human Technopole scientific and research project ("HT Project").
The Statute and the Regulations of the Human Technopole Foundation provide for a governance system structured according to a two-level model.

In particular, **the Supervisory Board**, chaired by **the President** of the Foundation, is the body responsible for the general direction and control of the Foundation's activities, while the **Management Committee**, chaired by **the Director** of the Foundation, is the administrative body and has the competence in carrying out the activities necessary to guarantee the ordinary progress and achievement of the Foundation's purpose.

THE PRESIDENT

The president is the legal representative of the foundation and serves as chairman of the supervisory board. He is responsible for approving strategic directions proposed by management, manages institutional and public relations and promotes dissemination activities concerning the social and economic impact of the foundation's scientific research and public engagement. **Marco Simoni is the first President of the Foundation, nominated on 16 May 2018 with a decree of the Prime Minister of the Italian Government**.
Marco Simoni is a political economist with experience in government and academia. He holds a degree in Political Science from La Sapienza University in Rome and a PhD in Political Economy from the London School of Economics. He is an Adjunct Professor at Luiss University in Rome where he teaches European and International Political Economy. From 2007 to 2016, he was a faculty member at the London School of Economics, where he taught and researched in the same field, up to the title of Associate Professor. He interrupted his academic activity to serve, between 2014 and 2018, as Advisor to the Prime Minister of Italy – first Matteo Renzi and then Paolo Gentiloni – on International Economic relations and Industrial Policy.

CONSIGLIO DI SORVEGLIANZA-SUPERVISORY BOARD

The Supervisory Board ensures the excellence of the Foundation and compliance with the rules on the appointment of its bodies, verifies the use of resources, oversees the general coordination of internal control functions, manages the process of scientific evaluation of the Foundation's activities and carries out general activities of direction and control.

The Supervisory Board is composed of thirteen members, including the President, appointed:

A seven by decree of the President of the Council of Ministers, of which two are designated by the Minister of Economy and Finance, one by the Minister of Health and one by the Minister of Education, University and Research;

B the remaininder by decree of the President of the Council of Ministers, having consulted the Ministers for the Economy and Finance, Health and Education, Universities and Research, designated:

1. one, in agreement between the Municipality of Milan and the Lombardy Region;
2. one, by agreement between the Participants, provided that, even in association with each other, they pay at least three percent of the annual contribution provided by the State;
3. one, from the Conference of Italian Rectors and Universities - CRUI;
4. one, from the Consulta dei Presidenti degli enti pubblici di ricerca;
5. two, by the Supervisory Board among scientists in disciplines related to the Human Technopole project and among international experts in public health, who carry out their activities mainly abroad.

Each member of the Supervisory Board remains in office for four years and until new members are appointed. Each member may be confirmed once. The Supervisory Board meets approximately every 45 days and extraordinarily if necessary.

As of December 31, 2020, the Supervisory Board of the Human Technopole Foundation, is composed of 11 members, including the Chairman, 7 of whom were appointed by the DPCM of May 16, 2018 and 4 appointed by the DPCM of January 29, 2020.

THE CURRENT COMPOSITION OF THE SUPERVISORY BOARD IS HIGHLIGHTED BELOW:

Marco Simoni	President of the Foundation, Adjunct Professor of European and International Political Economy at Luiss University
Daniele Franco	Former Director of Banca d'Italia, resigned on 13th February 2021 and now Minister of Economy and Finance (resigned from the Supervisory Board in 2021)
Massimo Inguscio	Full Prof. of Physics at the Campus Bio-Medico University, Rome
Marco Mancini	Deputy Rector for Organisational Autonomy, Administrative Innovation & Resource Planning, Prof. "Glottology and Linguistics", Department of Modern Literature and Culture, "La Sapienza" University, Rome
Mauro Marè	Professor of Public Economics, Luiss University, Rome
Marcella Panucci	Chief of Staff Minister for Public Administration
Maria Grazia Roncarolo	Director Centre for Definitive and Curative Medicine and Professor Pediatrics and Medicine at Stanford University
Donatella Sciuto	Executive deputy Rector, Politecnico of Milan
Roberta Siliquini	Dean School of Public Health, Torino Italy, former President of the National Health Council, Ministry of Health
Gianluca Vago	President of Fondazione CNAO, former Rector University of Milan
Alessandro Vespignani	Physics professor at Northeastern University, founding Director of Northeastern Network Science Institute in Boston

THE DIRECTOR

The Director of the Foundation is responsible for the development and implementation of the multi-year strategic plan and chairs the Management Committee. **Iain Mattaj is the first Director of the Foundation, nominated on 18th June 2018 by the Supervisory Board on the outcome of an international competition**.

An internationally renowned scientist, Professor Mattaj's research over the years has made relevant contributions in the field of ribonucleoprotein (RNP) particles that function in the processing of messenger RNA precursors and other fields. From 2005 to 2018, he was the Director General of the European Molecular Biology Laboratory (EMBL, Heidelberg), the European flagship laboratory for the life sciences, world-renowned for its outstanding research in molecular biology and for hosting a significant number of Nobel Prize winners over the last twenty years, including the Nobel Prize in Chemistry in 2017 for the cryo-EM.

COMITATO DI GESTIONE-MANAGEMENT COMMITTEE

The Management Committee is responsible for carrying out the activities necessary to ensure the orderly development and achievement of the Foundation's purpose. The Committee is made up of five members, including the Director, who presides over it. Each member of the Management Committee remains in office for four years and until the new members are appointed. Each member can be confirmed once.

THE MEMBERS OF THE MANAGEMENT COMMITTEE ARE NOMINATED BY THE SUPERVISORY BOARD:

Iain Mattaj	Director of the Foundation, Formerly Director of EMBL European Molecular Biology Laboratory (2005- 2018)
Irene Bozzoni	Full Professor of molecular biology at "La Sapienza" University, Rome
Nando Minnella	Former Head of Technical Department of Ministry of Education, Universities and Research (MIUR) 2018-2019, Economist and Director General Italian Institute of Nuclear Physics,
Stefano Piccolo	Full Professor of Molecular Biology at University of Padua
Fabio Terragni	President M4 S.p.A.

ORGANISMO DI CONSULTAZIONE SCIENTIFICA-SCIENTIFIC ADVISORY BOARD

In order to ensure the efficiency, effectiveness and cost-effectiveness of the Foundation's action, the Supervisory Board decided to proceed in 2019 with the establishment of a Scientific Advisory Board which, during the phase of implementation of the laboratories and completion of the recruitment of scientific personnel to carry out, through its own activities, on a temporary basis and, in any case, no later than 1 January 2022, the statutory functions and powers of the Scientific Committee, whose high operating costs would not have been consistent with the concrete activities it would have been called upon to perform in the initial phase.

During 2020, the Scientific Committee carried out an advisory and evaluation activity for the benefit of the Supervisory Board and the Management Committee with regard to the 2020-2024 Strategic Plan, the appointment of committees for the selection of scientific staff and the purchase of scientific equipment.

Gualtiero Ricciardi	Professor of Hygiene and Public Health at the Università Cattolica del Sacro Cuore, Rome and Head of Woman and Child Health and Public Health of Fondazione Policlinico Universitario Agostino Gemelli IRCSS	*SAB Coordinator*
Geneviève Almouzni	Director of research exceptional class at the CNRS	*SAB Member*
Margaret McMahon	Data Science and Services Team in Diagnostics Information Solutions in Roche	*SAB Member*
Gennaro Melino	Professor of Biochemistry & Director of Centre "Torvergata Oncoscience Research"	*SAB Member*
Giulio Superti – Furga	Scientific Director of CeMM	*SAB Member*

COLLEGIO DEI REVISORI- BOARD OF AUDITORS

The Board of Auditors is made up of three full members and three alternates. They are appointed from among those included in the register of legal auditors by decree of the President of the Council of Ministers, at the proposal of the Ministry of Economy and Finance and after designation by the Founding Ministries. Each Founder chooses one full member and one alternate. The members of the Board of Auditors remain in office for three years.

The Board of Auditors monitors the administration and accounting of the Foundation, carries out cash checks, prepares reports on the final balance, which it submits to the Supervisory Board.

THE CURRENT COMPOSITION OF THE BOARD OF AUDITORS IS EXPLAINED BELOW:

Fabrizio Valenza	President of BoA
Claudia Mezzabotta	Member of BoA
Martino Vincenti	Member of BoA

ORGANISMO DI VIGILANZA- SUPERVISORY BODY

Acknowledging the dictates of Decree 231/2001, the Foundation has set up a Supervisory Committee with autonomous powers of initiative and control. The "Supervisory Body" of the Foundation has approved the "Statute of the OdV", which regulates its activities. HT opted for an OdV made up of three members.
More in details, the OdV is:

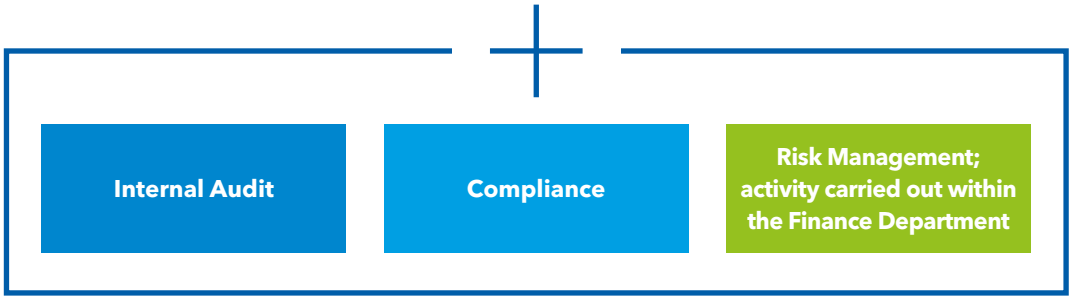
- **Autonomous and independent**: these prerequisites are fundamental for the OdV not to be directly involved in the operating activities that constitute the object of its control activity. Therefore, the hierarchical independence of the OdV is guaranteed. The OdV is positioned as a staff unit at the highest possible hierarchical position.
- **Professional**: the members of the OdV possess the technical and legal knowledge necessary to perform their assigned duties. These characteristics together with the members' independence guarantee their objectivity.
- **A provider of continuity**: the OdV will maintains a constant presence to guarantee effective and continuous application of the Model of Control.

On a general level, the Supervisory Body is entrusted with the task of supervising:

- the effectiveness of the Model, i.e., the observance of its prescriptions by the Recipients identified in relation to the different types of crimes covered by the Decree;
- the actual effectiveness and adequacy of the Model, i.e. the capacity, in relation to the structure of the Foundation, to prevent the commission of the crimes set forth in the Decree; ;
- the maintenance over time of the requirements of adequacy of the Model as the Foundation changes.

INTERNAL AUDIT & COMPLIANCE

To ensure the correctness, effectiveness and efficiency of its activities, the Foundation, in addition to guaranteeing the first level controls formalised in the operating procedures, has decided to implement an **Internal Control System** structured on different activities:

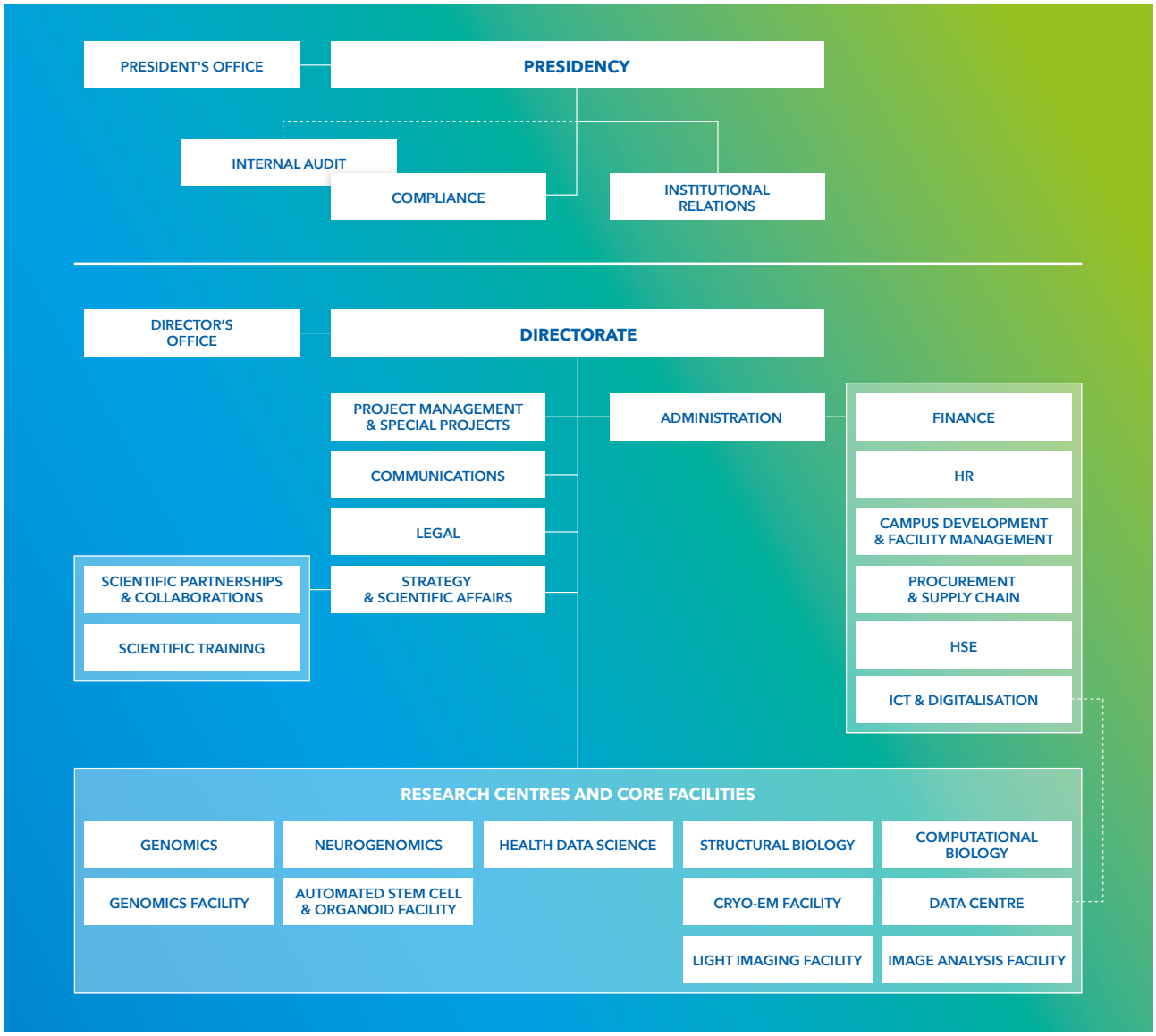


ORGANISATIONAL CHART

In order to identify the roles and responsibilities of the staff involved within its organisational structure, the Foundation has identified:

- the members of the "President's Office";
- the members of the "Director's Office";
- the research lines;
- the Operational and Support Departments (Legal Affairs, Human Resources, Campus development and Facility Management, Procurement, Finance, Information Technology, Strategy and Scientific Affairs, Communications).

THE DETAILED ORGANISATIONAL STRUCTURE OF THE FOUNDATION IS FORMALISED THROUGH AN ORGANISATIONAL CHART



CHAPTER 2

Our approach to value creation and distribution

2.1 OUR VALUE CREATION MODEL

We have adopted the impact approach of the IIRC (International Integrated Reporting Council) Framework to describe our value creation model.

Our value creation process thus represented evokes the pillars of our strategy which, by exploiting the different types of capital, allows us to obtain output and generate value in the short, medium and long term.

For Human Technopole human capital, i.e. people, their skills and diversity, are of fundamental value. In addition to human capital, we exploit the important resources deriving from financial capital which, as established by Article 1, paragraph 119 of Law no. 232 of 11 December 2016, is made up of contributions from the founding Italian Ministries and will be increased, in the future, by resources from other funding entities, including European ones, and from private individuals.

The infrastructural capital, consisting of our assets and facilities, as well as the intellectual capital, will continue to allow us to achieve our goals of scientific excellence and sharing of infrastructures with external scientists and other research institutions.

Stakeholder relations, partnerships and collaborations with other research institutes, our relational capital, are and will be the core of our value creation model. Thanks to this we will implement projects, events and initiatives of great relevance.

All these types of capital enable us to create value through our strategic initiatives.

INPUT

FINANCIAL CAPITAL
Financial resources available through public and private funding

HUMAN CAPITAL
Competence, experience and excellence of scientific and non-scientific staff

INFRASTRUCTURAL CAPITAL
Assets owned by HT, facilities, infrastructures and services

RELATIONAL CAPITAL
Relations with Stake-holders group and col-laboration with research centres and University

INTELLECTUAL CAPITAL
The Foundation's wealth of knowledge and organisation of scientific research

A.
- Centre for Genomics
- Centre for Neurogenomics
- Centre for Computational Biology
- Centre for Structural Biology
- Centre for Health Data Science

B.
- Data Centre
- Genomics Facility
- Cryo-EM Facility
- Light Imaging Facility
- Image Analysis Facility
- Automated Stem Cell and Organoid Facility

C.
- Centre for Innovation and Technology Transfer
- Partnership with pharmaceutical Industries
- Collaboration of R&S

D.
- PHD Training
- Courses and confer-ences for external scientists
- Scientific visitor Programme
- HT Early Career Fellows Programme

E.
- Publications
- Awards
- Events
- Conferences

Transformation of scientif-ic discoveries into tangible applications for the benefit of patients and society

—

Attraction of additional funding, including from private sources

Development and career opportunities to the next generation of scientists

Operating scientific services and facilities to be made available to external scientists

Scientific collaboration, institutional events and initiatives of great relevance

Innovative approach-es for personalized and preventive medicine

—

Awareness importance of science and scientific literacy

OUTPUT

FINANCIAL CAPITAL

The pool of funds that is:

- Available to an organisation for use in the production of goods or the provision of services
- Obtained through financing, such as debt, equity or grants, or generated through operations or investment

Core funding for Human Technopole's infrastructure and activities originates from public funds awarded by the Italian Government. It is expected, however, that as the institute grows and develops, and scientists transfer their research activities to HT, we will be able to attract increasing amounts of additional funding through competitive grants from various sources.
The Endowment Fund is made up of the restricted fund for the start-up of the Human Technopole scientific project and initially allocated to the Fondazione Istituto Italiano di Tecnologia (IIT) with an original amount of € 79.900.000 and transferred, in the form of both financial resources and assets in kind, to the Human Technopole Foundation, resulting in a residual amount of € 77.230.557, corresponding to the original amount, net of the charges incurred for the project by IIT.

Furthermore, during the financial year ended 31st December 2020, the HT Foundation received an amount of € 31.312 from the Italian Institute of Technology (IIT) as the residue of the Endowment Fund resulting from the closure of the current account dedicated to the management of the "HT Project". As of the closing date of the financial year 2020, the Management Fund was recorded among the items of the Foundation's net equity with a total amount of € 304.654.974 and included the contributions indicated in Article 1, paragraph 121 of Law no. 232 of 11th December 2016, relating to the years 2018, 2019 and 2020, for the portion not used at the closing date of the financial year and the portion to be used, and the contributions granted for the "Centre for Innovation and Technology Transfer in the field of Life Sciences".

This fund consists of two different items:
HT Management Fund of €294.745.749 and the CITT Management Fund amounting to €9.909.225.

HT & CITT MANAGEMENT FUNDS

HT Management Fund					
Period	***Contributions ex L. 232/2016***	***Contributions used***			***Contributions to be used***
		FY 2018	***FY 2019***	***FY 2020***	
2017	10.000.000	275.387	5.070.516	4.654.097	-
2018	114.300.000	-	-	68.054.251	46.245.749
2019	136.500.000	-	-	-	136.500.000
2020	112.000.000	-	-	-	112.000.000
Total	**372.800.000**	**275.387**	**5.070.516**	**72.708.348**	**294.745.749**

CITT Management Fund			
Period	***Contributions pursuant to art. 49-bis of Decree Law 34/2020 (conv. Law 77/2020)***	***Contributions used***	***Contributions to be used***
		FY 2020	
2020	10.000.000	90.775	9.909.225
Total	**10.000.000**	**90.775**	**9.909.225**
Total management Fund			**304.654.974**

The "CITT Management Fund" derives from the contribution granted under the provisions of Article 49-bis of Law Decree no. 34 of 19th May 2020, converted with amendments by Law no. 77 of 17th July 2020, which provided for the establishment of the structure called "**Centre for innovation and technology transfer in the field of life sciences**", specifying that the HT Foundation must adopt specific organisational measures and dedicated management solutions, with the adoption of separate accounting for the use of the resources allocated for this purpose. The contribution for the Centre for Innovation and Technology Transfer for the year 2020 amounted to €10.000.000 and, following the charges incurred for the start-up phase, it amounts to €9.909.225 as of 31/12/2020.

2020 FINANCIAL CAPITAL OUTCOMES

The 2020 financial year of the Human Technopole Foundation closed with a positive result after taxes of 13.918 euros, after provisions for IRES and IRAP taxes of 169.006 euros. Depreciation and amortisation on tangible and intangible fixed assets amounted to 723.508 euros. In addition, the activities carried out in 2020 produced total economic commitments of over **72 million euros**, despite the difficulties due to COVID. These commitments have been translated into the budgeting of contribu-

tions on operating and capital account for over 12M euros, related to what pertains to the year, and about 60M euros in deferred income, for the part of commitments whose execution pertains to future years. In financial terms, in 2020, revenue from grants amounting to approximately 59 million euros was recorded (excluding the grant allocated to the new Centre for Innovation and Technology Transfer), against monetary outlays of approximately 66 million euros. The table below shows in detail the relevant numbers of the fiscal year 2020, compared with the previous year.

EURO	31/12/2020	31/12/2019
Revenues	12.372.887	5.191.961
Gross operating margin	908.459	106.595
Operating result	184.952	65.012
Net Result	13.918	0
Fixed assets	60.761.347	863.774
Total equity	381.959.527	332.713.421

RECLASSIFIED PROFIT & LOSS

The value of production mainly includes grants from the MEF for a total of 12.137.776 euros, of which 11.414.268 euros is operating grants and 723.508 euros capital grants. In particular, part of the operating grants, amounting to 90.775 euros, refers to the activities of the CITT. In addition, revenues from commercial activities amounted to 13.918 euros. The reclassified Income Statement, compared with that of the previous year, is as follows (in euros).

Reclassified Profit & Loss	31/12/2020	31/12/2019	Variations
Revenues	12.372.887	5.191.961	7.180.925
External costs	7.310.418	2.778.429	4.531.990
Added value	**5.062.468**	**2.413.533**	**2.648.936**
Labour cost	4.154.009	2.306.936	1.847.074
Gross operating margin	**908.459**	**106.595**	**801.864**
Amortisation, depreciation and other accruals	723.508	41.585	681.922
Operating result	**184.952**	**65.012**	**119.940**
Financial income and charges	-2.028	72	-2.100

Ordinary result	**182.924**	**65.084**	**117.840**
Profit before taxes	**182.924**	**65.084**	**117.840**
Income taxes	169.006	65.084	103.922
Net Result	**13.918**	**0**	**13.918**

RECLASSIFIED BALANCE SHEET

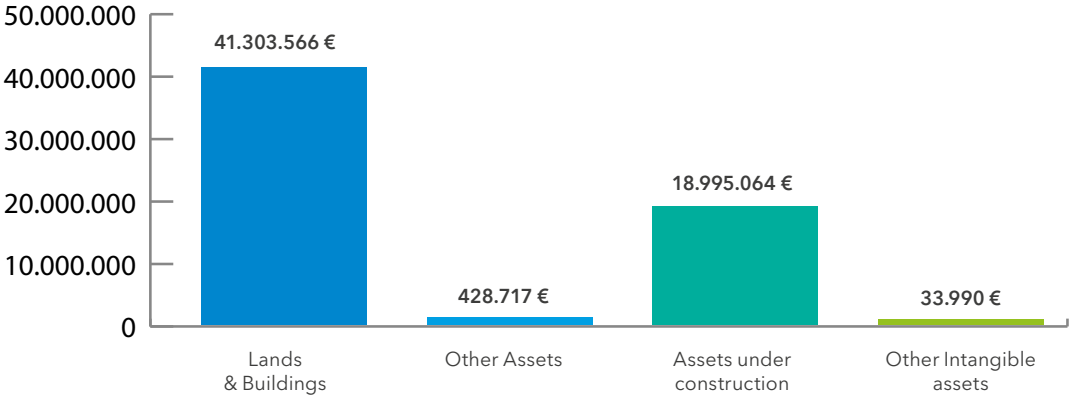
The main changes in the balance sheet during the 2020 financial year have been summarised in the following table. The asset and liability items have been appropriately reclassified so as to highlight the capital invested, the sources of financing and their determinants. The table shows the detailed values of the fiscal year 2020 and 2019.

Reclassified Balance Sheet	31/12/2020	31/12/2019	Variations
Intangible Assets	34.000	0	34.000
Tangible Assets	60.727.347	863.774	59.863.573
Financial Assets	0	0	0
Total Fixed Assets	**60.761.347**	**863.774**	**59.897.573**
Stock	0	0	0
Accounts Receivable	14.204	0	14.204
Other Accounts Receivable	308.009.057	254.361.946	53.647.112
Accrued income and Prepayments	418.717	187.462	231.255
Current Assets	**308.441.978**	**254.549.408**	**53.892.571**
Payables to suppliers	9.064.879	1.342.918	7.721.961
Down payments	0	0	0
Tax and social security debts	589.517	338.085	251.431
Other debts	159.733	55.771	103.962
Accrued liabilities and deferred income	60.761.347	38.032	60.723.315
Current Liabilities	**70.575.475**	**1.774.806**	**68.800.670**

Net Working Capital	**237.866.503**	**252.774.602**	**-14.908.099**
Employees' leaving indemnity	220.938	83.791	137.147
Tax and social security debts (due beyond subsequent year)	0	0	0
Other liabilities (due beyond subsequent year)	0	0	0
Medium & Long Term Liabilities	**220.938**	**83.791**	**137.147**
Net Invested Capital	**298.406.911**	**253.554.585**	**44.852.327**
Net Equity	381.959.527	332.713.421	49.246.106
Net Financial position (Medium Long Term)	0	0	0
Net Financial position (Short Term)	83.552.616	79.158.836	4.393.780
Shareholders' equity and net debt	**298.406.911**	**253.554.585**	**44.852.327**

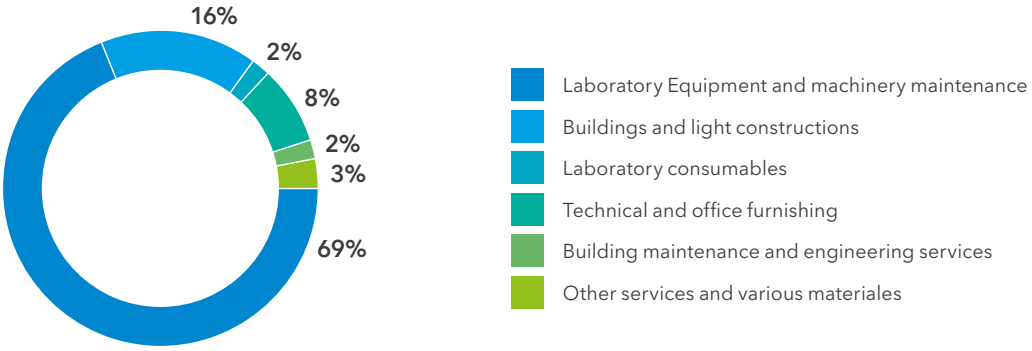
The item land and buildings reflect the purchase at the end of July 2020 of Palazzo Italia for a total value of 41.3 million euros, net of the depreciation of the year of 628.900 euros. In addition, assets under construction mainly refer to costs incurred for the construction of the lab Incubators, for the design of the New Building, for data warehouse and light microscopy equipment.

ASSETS 2020



In addition to the values included in the Financial Statements, during 2020 Human Technopole formalised several commitments which are expected to be completed over the next few years, for a total value of € 85.7M including: € 57.4M for the purchase of laboratory equipment and € 1.7M for machinery maintenance, € 1.3M for laboratory consumables, € 9.1M for buildings and € 4.7M for light constructions, € 0.7M for building maintenance and € 1.3M for engineering and architectural services, € 7M for technical and office furnishings, € 2.5M for other services.

COMMITMENTS 2020 FOR 85,7M



HUMAN CAPITAL

People's competencies, capabilities and experience, and their motivations to innovate, including their:

- Alignment with and support for an organisation's governance framework, risk management approach, and ethical values
- Ability to understand, develop and implement an organisation's strategy
- Loyalties and motivations for improving processes, good and services, including their ability to lead, manage and collaborate

Our HR strategy is guided by the knowledge that the skills and engagement of HT employees determine its success. "Hard skills" and professional competence are of course basic requirements, but we also look to identify and recruit people with "soft skills" that are important in the context of an international research institution like Human Technopole (e.g., readiness to evolve and adapt flexibly, ability to work in a multicultural environment, personal and family mobility, etc.).

These are crucial in defining a shared culture for Human Technopole based on specific values, which are directly reflected in the working style, leadership style, behaviour and overall working environment.

THE FOLLOWING ELEMENTS ARE MAJOR PILLARS OF HT'S EMPLOYEE STRATEGY:

THE LIST BELOW, SHOWS THE SCIENTIFIC LEADERS OF HUMAN TECHNOPOLE, MOST ARE STILL IN TRANSITION FROM A PREVIOUS APPOINTMENT:

Piero Carninci	Geneticist, Head of the Genomics Research Centre – Functional Genomics Programme. He is currently Team Leader of the Laboratory for Transcriptome Technology and Deputy Director of the RIKEN Centre for Integrative Medical Sciences in Yokohama (Japan).
Nicole Soranzo	Geneticist, Head of the Genomics Research Centre, Medical and Population Genomics Programme. She is also a senior group leader at the Wellcome Sanger Institute and a professor of human genetics at the University of Cambridge
Alessandro Vannini	Molecular biologist and biochemist, Head of the Structural Biology Research Centre.
Gaia Pigino	Biologist, Associate Head of the Structural Biology Research Centre. She is also responsible for a research group at the Max Planck Institute of Molecular Cell Biology and Genetics in Dresden, Germany.
Giuseppe Testa	Molecular biologist, he is Head of the Neurogenomics Research Centre. He is full professor at the Department of Oncology and Hemato Oncology of the University of Milan, previously he was director of the Stem Cell Epigenetics Laboratory of the European Institute of Oncology.
Andrea Sottoriva	Professor of Cancer Evolutionary Genomics and Principal Investigator of the Evolutionary Genomics and Modelling Group and head of the Computational Biology Research Centre at Human Technopole.
Emanuele Di Angelantonio	Professor of Clinical Epidemiology at the Department of Public Health and Primary Care, University of Cambridge, he works on big data analysis applied to the study of chronic diseases, blood donors, and cardiovascular risk prediction. Head of the Centre for Health Data Science at HT.

The implementation of Human Technopole's scientific activities goes hand in hand with the expansion and the consolidation of HT's administrative teams aimed at providing efficient and flexible services and creating an optimal working environment for HT's scientists.

TRAINING AT HT

One of the most important aspect for the Foundation is the improvement of the employees' skills, through training programmes. Human Technopole aims to support researchers in their scientific and career development by providing training in topics and technologies at the forefront of biomedical and life science research, and actively promoting the career development of scientists at all career stages.

Training at Human Technopole is both inward and outward facing, developing and offering advanced training opportunities to scientists working at HT as well as to external scientists. HT's dynamic and multidisciplinary nature provides an ideal environment to promote the development of talented young scientists. Training activities at HT are inclusive and designed to promote a diverse environment.

The goal of internal training at HT is to enable our scientists to reach their full potential as independent researchers and future leading scientists. Internal training activities address, but are not limited to, trainees, doctoral and postdoctoral researchers, as well as HT Group Leaders.

IT IS DEFINED AS FOLLOWS:

INTERNAL TRAINING

Trainees; the possibility for master students to perform their Master thesis at HT, in their lab of choice and upon acceptance by the corresponding Group Leader. Currently, HT has established partnerships for joint internship with University of Milan

Doctoral training; the participation in PhD Programmes in collaboration with national and international academic institutions. HT is a host institution of the PhD Programme in Systems Medicine of the European School of Molecular Medicine (SEMM). HT is part of the joint PhD Programe in Data Analytics and Decision Sciences (DADS) with Politecnico di Milano

Postdoctoral training; to broaden and deepen the research and soft skills of postdoctoral researchers, including courses in specific research areas and technologies

Group Leader training; a comprehensive training package in order to boost the skills necessary to effectively run a laboratory or to establish themselves as leaders in their field. This package is formed by mentoring programms and career development activities

The overarching and inspiring theme for HT's external training activities is to create a centre of excellence for training promising researchers in the biomedical sciences, while enabling broad access to HT's expertise, methods and resources. Training events for external scientists include conferences, symposia, workshops, and both theoretical and practical courses at the forefront of scientific and technological development in specific areas or technologies related to HT science and highly relevant for modern biomedical research.

Early Career Fellowships programme; the 1st edition was launched in October 2020, it is aimed to support the career development and to help talented researches in starting their independent research activity. Up to five researches are awarded a grant of 200.000 EUR/year for a period of five years.

2020 HUMAN CAPITAL OUTCOMES

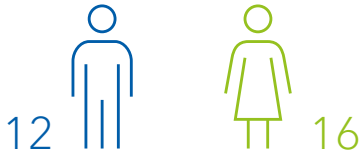
The headcount of HT Foundation employees at the end of 2020 is 70, up 42 from the end of 2019. During the year, personnel selections were carried out for the organisation's top positions, both in the Scientific Research area and in the Operations and Governance area.

The selection procedures for the Directors of the five Research Centres were completed and they became fully operational at the beginning of 2021. With regard to the roles of Group Leaders, who are in charge of specific research lines and projects, a number of applicants have been recruited in the areas of Computational Biology, Structural Biology and Neurogenomics, and other applicants have been identified, with recruitment expected in 2021. In the area of Research Facilities, which provide technical and instrumental support to research projects, the two new managers of the Cryo-EM and Automated Stem Cell and Organoid facilities have been appointed.

Still in the area of scientific management, a team dedicated to scientific training was created within the Strategy and Scientific Affairs function, and a number of PhDs were also initiated in collaboration with SEMM (European School of Molecular Medicine) and Politecnico of Milan (as part of the DADS - Data Analytics and Decision Science programme).

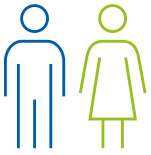
Finally, reporting directly to the Director of Administration, the Head of Corporate Programmes was hired. In the area of support functions, the IT Manager was hired; in the Governance area, the Head of Internal Audit & Compliance was hired.

HT HEADCOUNT OVERVIEW

28 Employees (December 2019)	70 Employees (December 2020)
	
12 16	32 38

The tables below show the HT population as of 31st December 2020, divided by working areas, gender, age and nationalities.

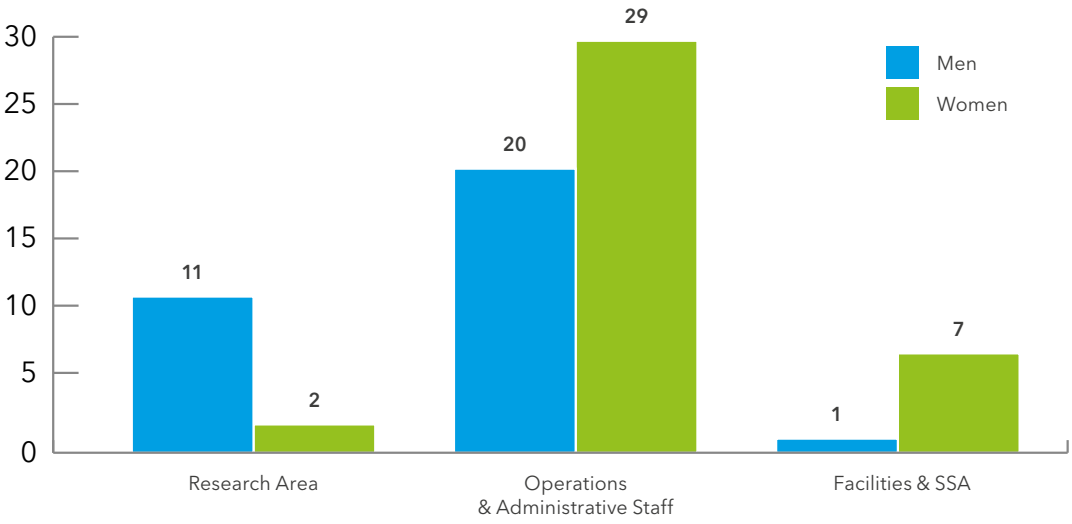
HT HUMAN RESOURCES BY AREAS 2020

Operation & Administrative Staff	Research Area	Facilities and Area
		
49	13	8

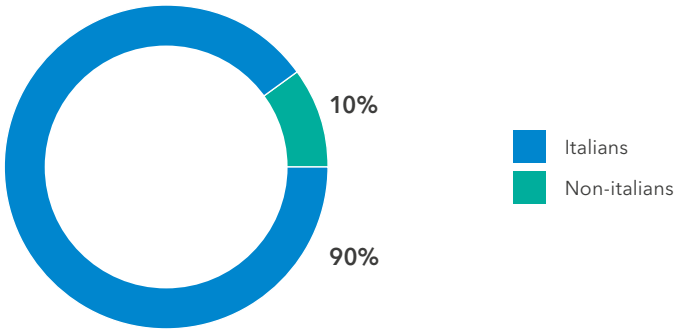
HT OVERALL GENDER DIVERSITY RATIO 2020

46% 54%

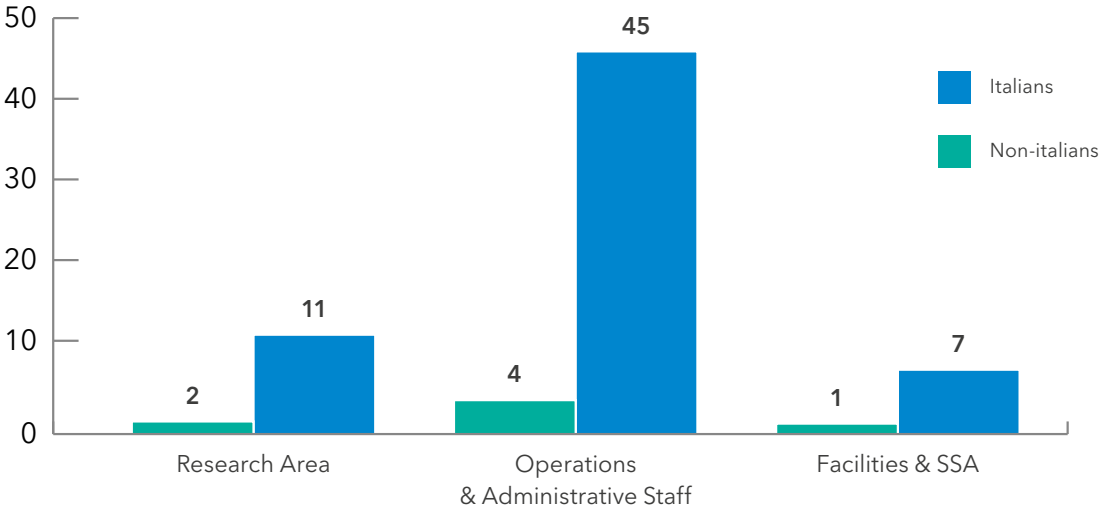
HT GENDER DISTRIBUTION AMONG AREAS 2020



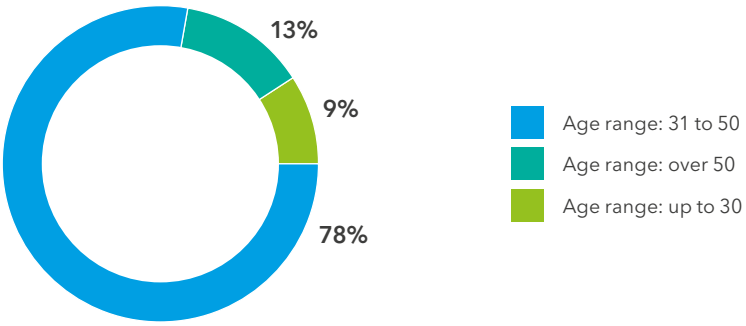
HT NON-ITALIANS/ ITALIANS EMPLOYEES RATIO



HT NON-ITALIANS/ ITALIANS DISTRIBUTION AMONG AREAS



HT AGE DISTRIBUTION



POST DOCS IN 2020

Former Institute	Country of Former Institute	Department
Politecnico of Milan	Italy	Health Data Science Research Centre
EMBL-EBI European Bioinformatics Institute	UK	Computational Biology Centre

PHD STUDENTS IN 2020

Human Resources Dep. **1 PhD**	Computational Biology Centre **1 PhD**	Neurogenomics Centre **4 PhDs**	Healt Data Science Research Centre **10 PhDs**

INFRASTRUCTURAL CAPITAL

- Manufactured physical objects (as distinct from natural physical objects) that are available to an organisation for use in the production of goods or the provision of services, including: building, equipment and infrastructure (such as roads, ports, bridges, and waste and water treatment,plants)
- Manufactured capital is often created by other organisations, but includes assets manufactured by the reporting organisation for sale or when they are retained for its own use.

Human Technopole is located within MIND (Milano Innovation District), a new city district covering the one million square metres of the former World Expo 2015 site, located northwest of Milan.
MIND will combine public functions such as research, higher education and healthcare with private development to create a science and technology park dedicated to Life Sciences, Healthcare, Biotech, Pharma, Agri-food, Nutrition, Data Science and Smart Cities (i.e. urban innovation). MIND is a public-private-partnership involving two main partners: Arexpo (owner of the site) on the public side and the Australia-based multinational developer Lendlease, specialised in urban regeneration and infrastructure projects, on the private side. In addition to Human Technopole, two other large-scale projects of public interest are being pursued on the MIND site: the Galeazzi IRCCS research hospital (of the Gruppo San Donato private hospital group) and the new campus that will host the University of Milan's scientific faculties – also in line with the intended focus around research, science and innovation, particularly in relation to health and well-being.

Plans for the area's complete urban re-design are based on the masterplan proposed by international design and innovation office Carlo Ratti Associati, winner of the international competition for the site's redesign and promoted by Lendlease. The project is based on a set of guiding principles including urban innovation, environmental sustainability and smart mobility. The development of the area is expected to extend over roughly ten years, though Arexpo and Lendlease are working towards having the general infrastructure and first activities in place in the next five years.

The Human Technopole project is central to the MIND development plans and as such will be characterised by buildings of high iconic value.
The plans for developing HT's real estate assets and campus foresee the major refurbishment and reuse of existing Expo pavilions as well as the construction of new buildings, on a total area of roughly 22.000 sqm. Specifically, the project foresees the re-purposing of Palazzo Italia, North
Pavilion and South Pavilion, and the construction of dedicated new technical areas, of incubator labs (to be hosted in prefabricated structures and temporary in nature) and of a new building (South Building) with a built surface of roughly 35.000 sqm.

Different types of space will be needed to support HT's scientific plans and activities – for administrative functions as well as for research purposes and to host technologically advanced scientific facilities. Areas for administrative and computational research work will mainly include office space, including open office space, and meeting rooms, whereas space dedicated to experimental research

work will include primary labs, support labs, common instrument rooms and shared facilities. Spaces within HT buildings will be equipped with two types of workstations, depending on the activities they are expected to host:

- "**Dry**", for HT Governance, administrative personnel and computational scientists, located in offices or in support space close to laboratories.
- "**Wet**", for researchers, technicians and facility staff, located in the laboratories.

BUILDINGS & LABORATORIES

PALAZZO ITALIA

After representing Italy during EXPO Milano 2015, Palazzo Italia is now the institutional headquarters of Human Technopole. Designed by Nemesi studio, the building is in front of the Tree of Life and is built on five levels, for a total height of 35 metres across an area of 14.400 square metres.
The architecture is inspired by the idea of an urban forest with textures of lines that generate light and shadow. It was designed according to principles of sustainability and conceived as a low energy building. During EXPO Milano 2015, the exhibition spaces were dedicated to the power of beauty and of the future to underline Italy's creativity and potential. At the end of the universal exposition, Palazzo Italia underwent intense refurbishment works to transform the exhibition areas into spaces able to welcome 400 workstations. Several areas have been maintained, including the restaurant space, the auditorium, the panoramic terrace and the internal courtyard.

INCUBATOR LABS

*The "**Incubators**" are positioned next to Palazzo Italia and the Tree of Life, covering an area of over 5.000 square metres. Two of the structures, both built on two floors, will be dedicated mainly to laboratory space, while the third, single story building will host part of HT's Cryo-electron microscopy facility, with two microscopes, a control room and an area for the preparation of samples. The incubator labs will host 130 wet lab workstations, including benches for experimental researchers, support desks and laboratories, instrument rooms, cell cultures, core services (washing and sterilisation, warehouse, etc.) and some offices. The incubator labs will be operational from May 2021 and will host the first batch of scientists from the Structural Biology, Genomics and Neurogenomics Research Centres. In addition, the labs are equipped with a photovoltaic system of two generators with 44 kW of power that will allow significant energy savings in line with Human Technopole's sustainability approach.*

NORTH & SOUTH PAVILION

North Pavilion*: the building has undergone intense redevelopment work to transform into a purpose-built space for HT's CyroEM and Light Imaging Facilities. It has support spaces for the preparation of samples and offices for the facilities' managers. On the first floor it hosts an open space office setting with twenty desks for the staff of the Image Analysis Facility and support space for other facilities. The building has been adapted to meet the microscopes' requirements which include reinforced floors to support the weight of the machines and stabilisation measures to ensure no tremors, vibrations or movements. It will be operational in the first half of 2021.*

South Pavilion*: currently under renovation, it will host experimental laboratories and further Human Technopole facilities. It will also include additional office space.*

SOUTH BUILDING

The new building will consist of two functional and flexible volumes that will develop around the Common Ground, the focal point from which the entire construction is generated, a central space that will be the heart of the building both in terms of its location and its function, characterised by a ground floor that is partly open and partly glazed. The communal space will wind its way through the ten floors creating an interconnected unicum reaching up to the roof, creating new spaces for gathering and relaxing. The first to ninth floors will be dedicated to laboratories and administrative offices, while the top floor will house dining areas, training rooms, representative meeting rooms, management offices and terraces with direct access to the green roof.

The green roof is the iconic element of the building: it is composed of asymmetrical pitches and a sequence of green terraces facing south overlooking the city of Milan. The roofing system also allows proper water control and contributes to the production of renewable energy in line with the green design approach pursued through the photovoltaic system and the green roof itself.

HT'S REAL ESTATE ACTIVITIES AND PLANS MAY BE SUB-DIVIDED INTO THREE DIFFERENT PHASES OF BUILDING DEVELOPMENT:

1st PHASE

Started in the second half of 2018, until the first half of 2021. The detailed planning of the Incubator Labs, in line with the research lines and activities they are expected to host, has been largely planned over the course of 2019-20, working closely together with the first set of Heads of Research Centres and Group Leaders recruited to HT, Palazzo Italia, on the other hand, has hosted the very first core of administrative and research activities of HT/IIT on some of its floors since early 2018.

A further round of reburbishment of the remainder of the building was recently finished. Palazzo Italia is envisioned to host further researchers, as the activities of HT's two dry Centres expand and/or transfer to Milan. HT's Management and administrative staff will also remain in Palazzo Italia. A small area in the basement of the building will serve for general functions for supporting research activities, such as a cryo-repository for preservation of biological samples and the general warehouse, while the North Pavilion will host the Cryo-EM and Light Imaging Facilities. Finally, the South Pavilion will host both experimental research groups and Core Facilities.

2nd PHASE

To last until the end of South Building construction works in 2026, will be aimed at starting up and consolidating the first core of HT's experimental research and service activities (i.e., of the Genomics, Neurogenomics and Structural Biology Research Centres), located in the Incubator Labs, North Pavilion and South Pavilion. These will host research (primary) labs, the first core of HT's scientific core facilities as well as other common shared services (e.g., cell culture, lab kitchen, animal facility, etc.) required to support HT's science. Subject to the timely completion of construction of the South Building, experimental research and service activities initiated in the Incubator Labs are expected to transfer gradually from 2026 onwards.

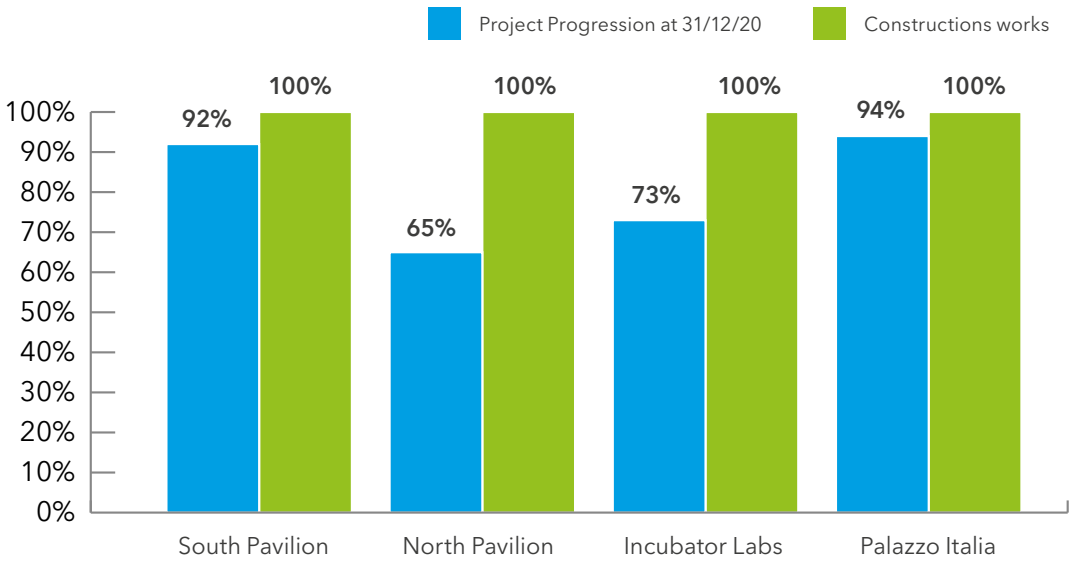
3rd PHASE

Starting in 2026, will focus on initiating and consolidating activities in the newly constructed South Building, which will be HT's main building for experimental research and service activities and host labs, shared services, and new Core Facilities as well as the expansion of existing Facilities, e.g., the CryoEM and the animal research facility. Construction of the South Building will include its connection to the other buildings on the HT campus.

2020 INFRASTRUCTURAL CAPITAL OUTCOMES

THE TABLE BELOW SHOWS THE PROGRESS OF CONSTRUCTION AND RENOVATION WORK AT THE END OF THE 2020:

% progress of infrastructure development projects (projects on schedule)



THE SQUARE METRES DEDICATED TO RESEARCH LABORATORIES IN 2020 WAS 474 (ONLY PALAZZO ITALIA). IN 2021 IT WILL BE 24.218 AS FOLLOWS:

% OF SQUARE METERS DEDICATED TO RESEARCH LABORATORIES		
Palazzo Italia 2020	sqm	474
Palazzo Italia 2021 (expected)	sqm	4.709
Other buildings 2020	sqm	0
Other buildings 2021 (expected)	sqm	19.509

RELATIONAL CAPITAL

The institutions and the relationships within and between communities, groups of Stakeholders and other networks, and the ability to share information to enhance individual and collective well-being. Social and relationship capital includes:

- Shared norms, and common values and behaviours
- Key stakeholder relationships, and the trust and willingness to engage that an organisation has developed and strives to build and protect with external Stakeholders
- Intangibles associated with the brand and reputation that an organisation has developed
- An organisation's social licence to operate

We are aware of the importance of the people and the territory in which we operate. During 2020 we implemented specific initiatives aimed at the economic, social and cultural development of the areas where we are active in.

OUR STAKEHOLDERS

We focus on adopting a Stakeholder inclusive approach and maintaining a strong relationship with our Stakeholders through transparency and effective communication. HT takes overall responsibility for ensuring the inclusion and engagement of our Stakeholders. During the year, we have had a range of structured engagements (interviews, initiatives and surveys) with our Stakeholders. Underpinning the engagement was a structured process of mapping and prioritising the key Stakeholders for Human Technopole, which saw the involvement of the company structures dedicated to relations with the various Stakeholders. Our approach to Stakeholder engagement will be covered in chapter 7 of this report. Below is a representation of the relevant Stakeholders for the Foundation.

SCIENTIFIC PARTNERSHIPS AND COLLABORATIONS

The preliminary phase of HT's first institutional collaboration, with Politecnico of Milan, dates back to February 2018 – before the HT Foundation was formally established or any HT staff were employed – and led to the creation of the joint Centre for Analysis, Decisions and Society (now renamed the Centre for Health Data Science) initially between the Politecnico and the Italian Institute for Technology. In 2019, a framework agreement was signed between HT and the Statale University of Milan, which lays the foundations for future scientific collaboration, to be established through activities such as joint research projects, training programmes, outreach and public engagement activities and/or exchange of staff. HT has recently concluded similar strategic partnership agreements with the University of Naples Federico II and with the University of Turin. In line with HT's intention to engage with all relevant Stakeholders, regular discussions have taken place and framework agreements for scientific collaboration similar to those made with academic partners were signed with Alisei and CLAN, national "clusters" established by the Ministry for Universities and Research, to promote interactions between industry and academia to enhance research and innovation capacities nationally in the fields of life science and agri-food and nutrition, respectively. We have also spoken with the Health Ministry and both networks of and individual IRCCS, funded by the Health Ministry and engaged in high-level medical research.

Interactions with the surrounding research community have been increasing and diversifying over late 2019 and 2020, following the announcement of the first members of the HT scientific leadership, i.e. HT's first Heads of Research Centre and Group Leaders. Their appointment has triggered an intense wave of initiatives and meetings with various players in the biomedical science community, who are eager to collaborate with HT on the basis of complementary expertise and/or common research objectives. Concrete collaborations have kicked off with both academic and clinical partners, including the European Institute of Oncology and University of Milan and the ASST FBF Sacco Hospital in Milan, the University of Padua and the Institute of Pediatric Research Citta' della Speranza – IRP in Padua, the IRCCS Neuromed in Molise, and the IRCCS Associazione Oasi Maria Santissima in Sicily. Collaborative endeavours are also at an advanced stage of discussion with the Istituto di Candiolo FPO IRCCS in Turin and the Ospedale Pediatrico Bambino Gesù in Rome. Existing formalised collaborations (e.g., with the University of Rome Tor Vergata) as well as emerging ones related to the management of biomedical databases and bioinformatics resources are also worth mentioning.

Other potential collaborations, lying at the forefront of scientific and technical development in areas such as biomedical imaging technologies and neuroscience, are being explored but are not yet finalised. Three of these, in which HT is already involved, are illustrated here by way of example. The participation in all these initiatives is strategic for HT and as such will be cross-cutting, involving scientists from different Centres and Core Facilities who will work together across disciplines and research topics.

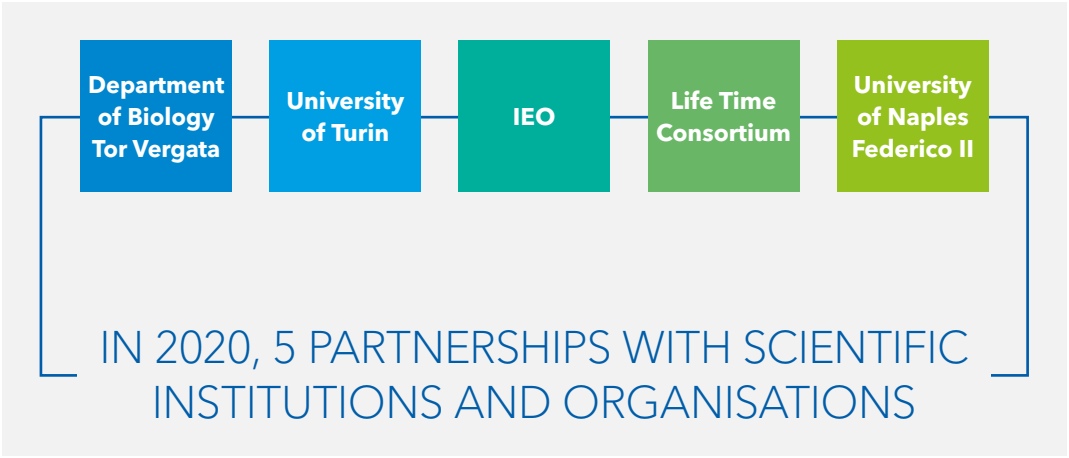
1 Human Technopole joined the European **LifeTime FET Flagship** initiative as an associate partner. The LifeTime consortium, which brings together over 120 leading scientists from over 90 research institutes in 15 countries, aims to improve health and patient care by tracking and understanding human diseases at single cell resolution, with a particular focus on single-cell multiomics, organoids and machine learning.

2 The **Human Cell Atlas** represents a global effort combining expertise in biology, medicine, genomics, technology development and computation to build a comprehensive collection of cellular reference maps, characterising each of the thousands of cell types in the human body. A systematic study of the molecular mechanisms underlying the production, function and combined activity of different cell types in health and disease would be an incredibly valuable resource for the global research community.

3 The **Cancer Dependency Map** is a partnership begun between the Broad Institute (USA) and the Wellcome Sanger Institute (UK) that pools expertise, data and computational tools to systematically identify genetic and pharmacologic cancer dependencies and the biomarkers that predict them. Initial discussions with selected consortium partners have been very positive and are expected to result in HT joining the initiative, in an effort to dynamically characterise the genetic dependencies of glioblastoma, in particular. A number of other major collaborative projects with national universities and research hospitals are also at an advanced stage of discussion and are expected to be formalised and the related projects will kick off in 2021.

2020 RELATIONAL CAPITAL OUTCOMES

SCIENTIFIC PARTNERSHIPS 2020



In 2020 we performed 2 research collaborations with Universities/IRCCS research centres:

1 Scientific collaboration for development of MINT and SIGNOR databases with Dept of Biology Tor Vergata;
2 Executive collaboration agreement with IEO for Genomics Joint Technological Unit;

THE RELATIONAL CAPITAL WAS A KEY ELEMENT FOR THE ORGANISATION OF SEVERAL IMPORTANT INSTITUTIONAL EVENTS AND INITIATIVES:

Open HT	The Italian Institute of Life Sciences Human Technopole opened its door virtually to representatives of the scientific community, over 350 actors of the Italian life sciences. The 1st day witnessed a key-note speech of Prof. Gaetano Manfredi, Minister of University and Research
Ambrosetti Life Science community	Agreement with European House Ambrosetti to participate in the Life Science Community established in 2015. In this contest, HT took part in a series of workshops and initiatives organized by Ambrosetti for the Community
STEM in the city	The event organized by the City of Milan to promote scientific disciplines among girls
Mind Education 2020	MIND Education is a programme designed to involve young people in the planning of the MIND Milano Innovation District. The promoters of MIND Education are Arexpo, Lendlease, Fondazione Human Technopole, Università Statale of Milan, Ospedale Galeazzi and Fondazione Triulza
MoU with associazione Civita	Human Technopole and Associazione Civita kick off the new year by signing a memorandum of understanding to carry out joint activities to promote scientific culture and dissemination of knowledge
One year to go Expo Dubai 2020	Palazzo Italia hosted "Life Sciences: the Italian model of innovation and research at EXPO 2020 Dubai". The event is part of the "One Year to Go" initiative organised by the General Commission for Italy at EXPO Dubai 2020 and Cluster ALISEI to celebrate Italian excellence in the life sciences sector
Visit of the Italian Parliament Innovation Group to HT and MIND	HT hosted a visit of some MPs at MIND - Milano Innovation District. The visit was an opportunity to share with the participants the state of the art of the HT project
Meeting with the Italian Parliament Health Group	President Marco Simoni was hosted in the Italian Parliament to give a presentation of HT to the Health Group
Event "The research strategies of the Human Technopole Foundation: what opportunities for IRCCSs in Lombardy"	Human Technopole continues its dialogue with Italian Research Hospitals (IRCCS)

During 2020 HT and its representatives were involved in many other important initiatives, such as *EMF Future Jobs MIND Lab, University of Brescia open day, Wired Health, Welfare Italia Forum 2020, Brescia Regeneration, Biotech il future migliore, Milano Digital week, Today4tomorrow, Webinar mission cancer, Lombardia Digital Summit, Health talk, Next generation, Maratona "I love Science", "Una città in salute", Focus Group "Milano/Bologna" le funzioni economiche, Produttività: coltiviamo la ripartenza, Podcast Nemesi Futura.*

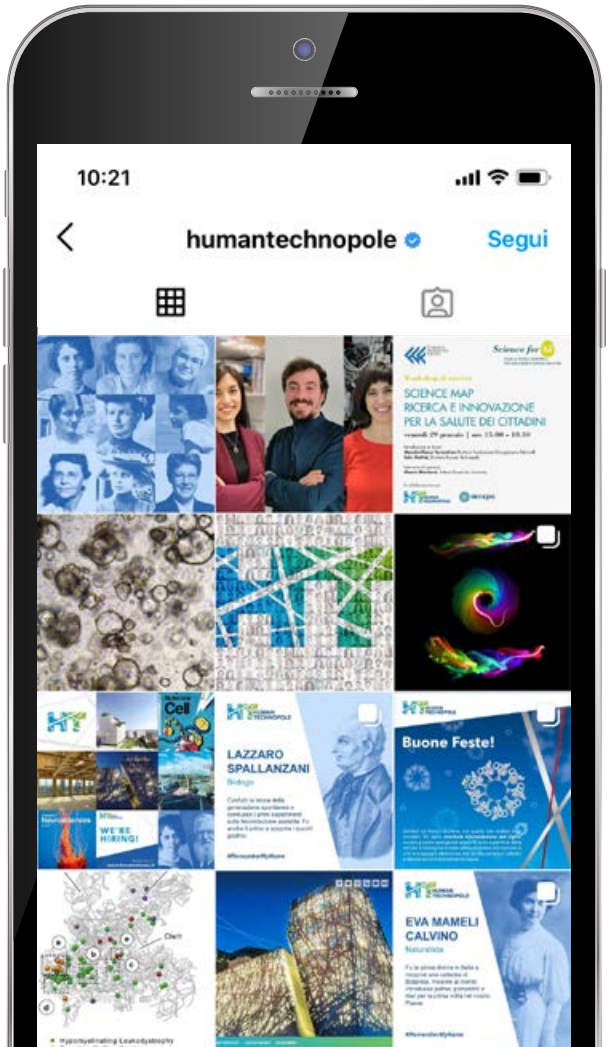
2020 MEDIA AND SOCIAL NETWORK PERFORMANCES

Human Technopole has a continuous presence in the media, to which it regularly provides news and updates. Looking through the 2020 press review, one not only notices a high number of releases, but in many cases also their qualitative importance:

- Human Technopole is present with dedicated articles in major publications, for example, 9 articles in "**Corriere della Sera**", 16 in "**Repubblica**", 7 in "**Il Giornale**", 7 in "**Avvenire**".
- Human Technopole is mentioned directly in the title of 27 articles;
- President Marco Simoni is present in 57 articles, with a citation or statement;
- Articles containing the HT citation were launched with a mention on the front page in 40 cases.

In 2020, the total number of mentions in newspapers, web, radio and TV was 1.356. Of these, 429 issues were generated by proactive activities, broken down as follows:

- 16 national newspapers
- 5 national periodicals
- 12 national TV stations
- 4 national radio stations
- 252 web
- 12 local editions of national newspapers
- 25 local newspapers
- 1 local periodical
- 5 local TV stations
- 97 agencies



HUMAN TECHNOPOLE AND SOCIAL NETWORK

OVER 13.000 FOLLOWERS 2020 VS 2019: + 55%

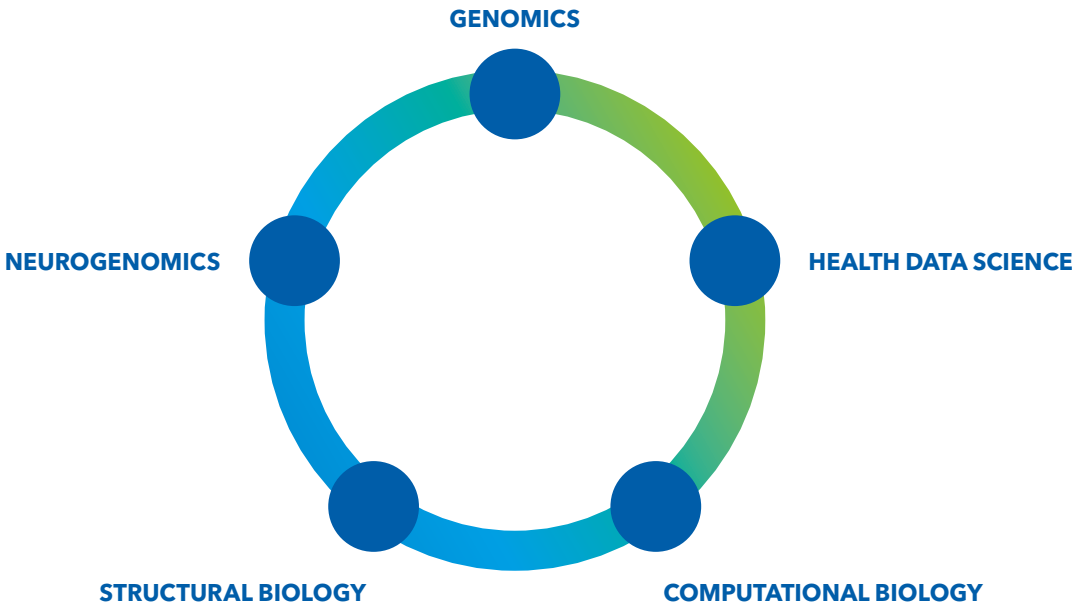
During the year 2020, the Human Technopole website (HOME - Human Technopole) had more than 81.000 visits, an increase of 55% compared to the previous year and the HT newsletter, launched in January 2020, gained +740 subscribers during the year.

INTELLECTUAL CAPITAL

Organisational, knowledge-based intangibles, including:

- Copyrights, software, rights and licences
- "Organisational capital" such as tacit knowledge, systems, procedures and protocols

HUMAN TECHNOPOLE'S RESEARCH ACTIVITIES ARE ORGANISED IN FIVE DIFFERENT FOCUS AREAS, EACH ONE SUPPORTED BY A RESEARCH CENTRE:



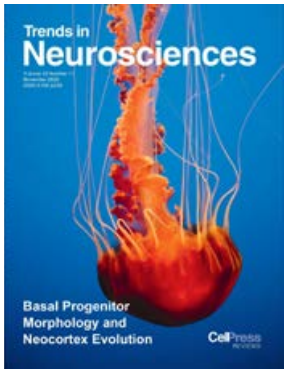
HT Science is interdisciplinary, including biologists, bioinformaticians, chemists, engineers, physicists, mathematicians, computer scientists and scientists with medical backgrounds. The benefit of this breadth of available expertise, however, can only be reaped if scientists work together across disciplines to leverage synergies between their diverse skillsets. Human Technopole will promote and incentivise interdisciplinary collaboration, for example through: the dual appointment of some Group Leaders in more than one Research Centre; joint interdisciplinary PhD and/or postdoc projects and/or postdoc projects between Centres; and the potential funding of pre- or postdoctoral fellowships with joint supervision.

Moreover, HT Research will take place in a barrier-free environment and will be characterised by a collegial management approach, which will foster an inclusive and open culture, with extensive collaboration between different teams, sharing laboratories and facilities and collaboration between the various Centres. Whenever appropriate, scientific activities will be managed using a "matrix system," where scientists will be involved in multiple projects that involve collaboration among different teams. This flexibility is essential, particularly in activities where technology development, data production, and data analysis are coordinated for large-scale projects (for example, in the field of genomics).

2020 INTELLECTUAL CAPITAL OUTCOMES

IN 2020 WE COUNT 27 PUBLICATIONS, DETAILED AS FOLLOW:

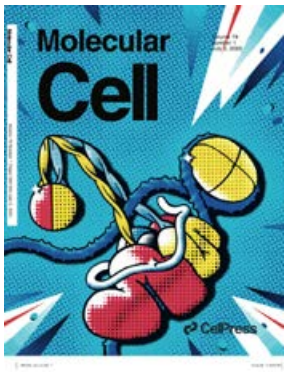
CENTRE FOR NEUROGENOMICS



Title	Authors	Journal
Serotonin Receptor 2A Activation Promotes Evolutionarily Relevant Basal Progenitor Proliferation in the Developing Neocortex.	Xing L., ***Kalebic N.***, Namba T., Vaid S., Wimberger P., Huttner W	***Neuron***
Autism spectrum disorder at the crossroad between genes and environment: contributions, convergences, and interactions in ASD developmental pathophysiology	Cheroni C., Caporale N., ***Testa G.***	***Molecular autism***
Thinking "ethical" when designing an international, cross-disciplinary biomedical research consortium	Torres Padilla M. E., Bredenoord A. L., Jongsma K. R., Lunkes A., Marelli L., Pinheiro I., ***Testa G.***	***The EMBO journal***
LifeTime and improving European healthcare through cell-based interceptive medicine	Rajewsky N., Almouzni G., Gorski S. A., Aerts S., Amit I., Bertero M. G., Bock C., Bredenoord A. L., Cavalli G., Chiocca S., Clevers H., De Strooper B., Eggert A., Ellenberg J., Fernández X. M., Figlerowicz M., Gasser S. M., Hubner N., Kjems J., Knoblich J. A., Krabbe G., Lichter P., Linnarsson S., Marine J. C., Marioni J., Marti-Renom M. A., Netea M. G., Nickel D., Nollmann M., Novak H. R., Parkinson H., Piccolo S., Pinheiro I., Pombo A., Popp C., Reik W., Roman-Roman S., Rosenstiel P., Schultze J. L., Stegle O., Tanay A., ***Testa G.***, Thanos D., Theis F. J., Torres-Padilla M. E., Valencia A., Vallot C., Van Oudenaarden A., Vidal M., Voet T. & LifeTime Community	

Basal Progenitor Morphology and Neocortex Evolution	***Kalebic N.***, Huttner W. B	***Trends in Neuroscience***
The sociability spectrum: evidence from reciprocal genetic copy number variations	***López-Tobón A.***, Trattaro S., ***Testa G.***	***Molecular Autism***
KMT2B and Neuronal Transdifferentiation: Bridging Basic Chromatin Mechanisms to Disease Actionability	Barbagiovanni G., Gabriele M., ***Testa G.***	***Neurosci Insights***
Copy number variants (CNVs): a powerful tool for iPSC-based modelling of ASD	Drakulic D., Djurovic S., Syed Y. A., Trattaro S., ***Caporale N.***, Falk A., Ofir R., Heine V. M., Chawner S. J. R. A., Rodriguez-Moreno A., Van Den Bree M. B. M., ***Testa G.***, Petrakis S., Harwood A. J.	***Molecular Autism***
In Vivo Targeting of Neural Progenitor Cells in Ferret Neocortex by In Utero Electroporation	***Kalebic N.***, Langen B., Helppi J., Kawasaki H., Huttner W. B	***Journal of Visualised Experiments***
A small 7q11.23 microduplication involving GTF2I in a family with intellectual disability	Pinelli M., Terrone G., Troglio F., Squeo G. M., Cappuccio G., Imperati F., Pignataro P., Genesio R., Nitch L., Del Giudice E., Merla G., ***Testa G.***, Brunetti-Pierri N.	***Clinical Genetics***
DNA Methylation Signature for EZH2 Functionally Classifies Sequence Variants in Three PRC2 Complex Genes	Choufani S., Gibson W. T., Turinsky A. L., Chung B. H. Y., Wang T., Garg K., Vitriolo A., Cohen A. S. A., Cyrus S., Goodman S., Chater-Diehl E., Brzezinski J., Brudno M., Ming L. H., White S. M., Lynch S. A., Clericuzio C., Temple I. K., Flinter F., McConnell V., Cushing T., Bird L. M., Splitt M.,Kerr B., Scherer S. W., Machado J., Imagawa E., Okamoto N., Matsumoto N., ***Testa G.***, Iascone M., Tenconi R., Caluseriu O., Mendoza-Londono R., Chitayat D., Cytrynbaum C., Tatton-Brown K., Weksberg R.	***American Journal of Human Genetics***
Extracellular matrix-inducing Sox9 promotes both basal progenitor proliferation and gliogenesis in developing neocortex	Güven A., ***Kalebic N.***, Long K. R., Florio M., Vaid S., Brandl H., Stenzel D., Huttner W. B.	***eLife***

CENTRE FOR STRUCTURAL BIOLOGY



Title	Authors	Journal
A micronutrient with major effects on cancer cell viability.	Kapara A., ***Vannini A.***, Peck B.	***Nature Metabolism***
Human Condensin I and II Drive Extensive ATP-Dependent Compaction of Nucleosome-Bound DNA	Kong M., Cutts E. E., Pan D., Beuron F., Kaliyappan T., Xue C., Morris E. P., Musacchio A., ***Vannini A.***, Greene E. C.	***Molecular Cell***
Hybrid Gene Origination Creates Human-Virus Chimeric Proteins during Infection	Ho J. S. Y., Angel M., Ma Y., Sloan E., Wang G., Martinez-Romero C., Alenquer M., Roudko V., Chung L., Zheng S., Chang M., Fstkchyan Y., Clohisey S., Dinan A. M., Gibbs J., Gifford R., Shen R., Gu Q., Irigoyen N., Campisi L., Huang C., Zhao N., Jones J. D., Van Knippenberg I., Zhu Z., Moshkina N., Meyer L., Noel J., Peralta Z., Rezelj V., Kaake R., Rosenberg B., Wang B., Wei J., Paessler S., Wise H. M., Johnson J., ***Vannini A.***, Amorim M. J., Baillie J. K., Miraldi E. R., Benner C., Brierley I., Digard P., Łuksza M., Firth A. E., Krogan N., Greenbaum B. D., MacLeod M. K., Van Bakel H., Garcìa-Sastre A., Yewdell J. W., Hutchinson E., Marazzi I.	***Cell***
DNA origami-based single-molecule force spectroscopy elucidates RNA Polymerase III pre-initiation complex stability	Kramm K., Schröder T., Gouge J., Vera A. M., Gupta K., Heiss F. B., Liedl T., Engel C., Berger I., ***Vannini A.***, Tinnefeld P., Grohmann D.	***Nature Communications***

CENTRE FOR COMPUTATIONAL BIOLOGY

Drug mechanism-of-action discovery through the integration of pharmacological and CRISPR screens
Emanuel Gonçalves, Aldo Serura-Cabrera, Clare Pacini, Gabriele Picco, Fiona M Behan, Patricia Jaaks, Elizabeth A Coker, Donny van der Meer, Andrew Barthorpe, Howard Lightfoot, Tatiana Mironenko, Alexandra Beck, Laura Richardson, Wanjuan Yang, Ermira Lleshi, James Hall, Charlotte Tolley, Caitlin Hall, Iman Mall, Frances Thomas, James Morris, Andrew R Leach, James T Lynch, Ben Sidders, Claire Crafter, **Francesco Iorio**, Stephen Fawell, Mathew J Garnett

Title	Authors	Journal
Identification of Intrinsic Drug Resistance and Its Biomarkers in High-Throughput Pharmacogenomic and CRISPR Screens	Ayestaran I., Galhoz A., Spiegel E., Sidders B., Dry J. R., Dondelinger F., Bender A., McDermott U., ***Iorio F.***, Menden M. P.	***Patterns***
Analysis of CRISPR-Cas9 screens identify genetic dependencies in melanoma	Christodoulou E., Rashid M., Pacini C., Alastair D., Robertson H., Van Groningen T., Teunisse A. F. A. S., ***Iorio F.***, Jochemsen A. G., Adams D. J., Van Doorn R.	***Pigment Cell and Melanoma Research***
Drug mechanism-of-action discovery through the integration of pharmacological and CRISPR screens	Gonçalves E., Segura-Cabrera A., Pacini C., Picco G., Behan F. M., Jaaks P., Coker E. A., Van Der Meer D., Barthorpe A., Lightfoot H., Mironenko T., Beck A., Richardson L., Yang W., Lleshi E., Hall J., Tolley C., Hall C., Mali I., Thomas F., Morris J., Leach A. R., Lynch J. T., Sidders B., Crafter C., ***Iorio F.***, Fawell S., Garnett M. J.	***Molecular Systems Biology***
CELLector: Genomics-Guided Selection of Cancer In Vitro Models	Najgebauer H., Yang M., Francies H. E., Pacini C., Stronach E. A., Garnett M. J., Saez-Rodriguez J., ***Iorio F.***	***Cell systems***

HEALTH DATA SCIENCE

Data mining application to healthcare fraud detection: a two-step unsupervised clustering method for outlier detection with administrative databases

Michela Carlotta Massi [1|2], **Francesca Ieva** [3|4|5], Emanuele Lettieri [6]

Title	Authors	Journal
Data mining application to healthcare fraud detection: a two-step unsupervised clustering method for outlier detection with administrative databases	Massi M. C., ***Ieva F.***, Lettieri E.	***BMC Medical Informatics and Decision Making***
Connected from the Outside: The Role of US Regions in Promoting the Integration of the European Research System	***Rabosio E.***, Righetto L., Spelta A., ***Pammolli F.***	***Quantitative Science Studies***
Modelling the Effect of Recurrent Events on Time-to-event Processes by Means of Functional Data	***Ieva F.***, Spreafico M., Burba D.	***International Workshop on Functional and Operatorial Statistics***
O2S2 for the Geodata Deluge	Menafoglio A., Pigoli D., ***Secchi P.***	***International Workshop on Functional and Operatorial Statistics***
Economic and social consequences of human mobility restrictions under COVID-19	Bonaccorsi G., Pierri F., Cinelli M., Flori A., Galeazzi A., Porcelli F., Schmidt L., Valensise C. M., Scala A., Quattrociocchi W., ***Pammolli F.***	***Proceedings of the National Academy of Sciences***
The Endless Frontier? The Recent Increase of R&D Productivity in Pharmaceuticals	**Pammolli F.**, Righetto L., Abrignani S., Pani L., Pelicci P., ***Rabosio E.***	***Journal of Translational Medicine***
A behavioural approach to instability pathways in financial markets	Spelta A., Flori A., Pecora N., Buldyrev S., ***Pammolli F.***	***Nature Communications***

2.2 OUR STRATEGY

STRATEGIC ISSUES

GENERATE **INNOVATION AND QUALITY OF RESEARCH**	**5** centres of research: genomics, neurogenomics, computational biology, structural biology and "Health Data Science"
DEVELOP AND PROVISION OF **INFRASTRUCTURES, INNOVATIVE RESEARCH METHODS AND INSTRUMENTS**	**6** research facilities, **51.000** sqm of offices and laboratories, **1029** "dry" workstations, **853** "wet" workstations in the near future
ATTRACT AND TRAIN **RESEARCH TALENTS**, SHARE RESEARCH OUTPUTS	Around **500** people will be hired by 2024 and roughly 70% will be dedicated to scientific research, services and scientific support. Overall investment of **5M** for Early Career Fellowship Programme
OBTAIN **SCIENTIFIC REPUTATION** AND PROMOTE **DISSEMINATION**	In 2020, **27** publications, over **350** scientists hosted to event "Open HT", **1** medal Società Italiana di Biochimica e Biologia Molecolare 2020 for our biochemist, **7** scientific collaborations
PROMOTE **RESEARCH-BASED INNOVATION**	Contribution 2020 of **10M**, plus **2M** in subsequent years for setting up of a Centre for Innovation and Technology Transfer (CITT).
CONTRIBUTE TO **SUSTAINABILITY (ENVIRONMENTAL, SOCIAL AND ECONOMIC)**	Environmental sustainability in MIND development, diversity and inclusiveness as a core values of organisation and staff, Consip convention to be efficient in the use of resources
BUILD **PARTNERSHIP, NETWORKING** AND PROMOTE **STAKEHOLDER ENGAGEMENT**	**Many institutional** initiatives organised in 2020 with some of our main Stakeholders
ACHIEVE **EFFECTIVENESS AND EFFICIENCY OF OPERATIONAL PROCESSES**	Adoption of new information management system (SAP) and consolidation of Sintel Platform and usage of Consip convention

THE EIGHT STRATEGIC ISSUES OF HT ARE DESCRIBED BELOW:

INNOVATION AND QUALITY OF RESEARCH IN THE AREAS of genomics, neurogenomics, computational biology, structural biology, health data science.

The main objectives related to this strategic issue are the following:

1. Develop research programmes of excellence at national and international level;
2. Develop new approaches to preventive and personalised medicine and new strategies in support of public health;
3. Generate innovation through an interdisciplinary approach;
4. Contribute to and promote the Italian biomedical research system.

Five broad areas have been selected, complementary and highly relevant to biomedical and health research, which will form the basis of the research strategy of Human Technopole for the period 2020-2024.

With regard to this strategic issue five Research Centres have been created, which generate research in the following main fields:

GENOMICS. Genomics is an essential component of modern biomedicine. Research in this field generally aims to identify the mechanisms that regulate gene expression and the way in which inherited genetic information gives rise to differences among individuals that are relevant to health and well-being. The genomics research at Human Technopole will be broadly developed and composed of two complementary research programmes: one in Functional Genomics and the other in Medical and Population Genomics.

One of the main objectives of this research work at Human Technopole will be to help characterise the genetic variability and the uniqueness environment of the Italian population in order to improve our understanding of the cause of ISE genetics of various diseases in the population, generating additional potential for both research and clinical purposes.

NEUROBIOLOGY. Neurobiology is another area of focus for HT, given the important public health burden that neurological disorders represent, but also as a research area where significant benefits remain to be reaped from the integration of genomics, disease modelling and other cutting-edge methods. Specifically, the application of new technologies to the study of neurobiology is expected to integrate and create synergies with activities and high-profile research programmes in this field, both at national and European level.

Human Technopole's research in neurobiology will combine computational and experimental approaches using different experimental approaches and using different systems to investigate the structure and function and development of the nervous system, with particular attention to the mechanisms underlying neuropsychiatric and neurodegenerative disorders.

Research in this area provides a detailed insight into the functioning of molecules, as well as often representing a crucial first step in the design of new drugs.

STRUCTURAL BIOLOGY. The initial Human Technopole strategy placed strong emphasis on Structural Biology, which focuses on the study of the structure of molecules and molecular complexes involved in human diseases. In addition to the relevance of such studies for the discovery of disease mechanisms, the strategic focus on Structural Biology is also largely motivated by the possibility for Human Technopole to provide access - through the creation of a user facility for cryo-microscopy -to a crucial recent technology that has revolutionised research in Structural Biology elsewhere, but which is not widely available to scientists in Italy due to its cost and its technical complexity.

COMPUTATIONAL BIOLOGY. Research in all of the above areas generates enormous amounts of data and must therefore integrate closely with research in Computational Biology, which is absolutely essential to every aspect of modern research in the life sciences. HT's computational biologists will use statistical, computational, and bioinformatics approaches to develop solutions for the analysis, management, and integration of large-scale data in support of all areas of Human Technopole research. In the area of Computational Biology, as well as for Genomics, Human Technopole also plans to develop and/or host and manage software tools and data resources that will be accessible to the broader biomedical community. The goal is both to provide a service to the external community and, if this can be arranged with the many Stakeholders that will be involved, to link publicly accessible international biomolecular data resources with the more restricted national medical informatics data.

HEALTH DATA SCIENCE. Finally, statistical and big data methods similar to those applied to molecular information to study aspects of human biology can be used to analyse different types of large-scale data, on areas such as the effectiveness of treatments and behavioural economic and social behaviour, to investigate and solve problems related to Public Health and Health Systems. Integrating big data from a variety of sources to develop tools to support the medical system, particularly in the areas of precision medicine, health management, and health economics, is the primary objective of Human Technopole's research in this field.

This is an innovative and very interesting area of research, albeit of a very different nature from the other directions and research objectives of HT, all of which share a strong focus on human biology at the molecular scale. One of the main objectives of this type of research in Human Technopole is to transfer this knowledge by providing analysis and advice to various Stakeholders, but particularly to regulators, as the design and implementation of model systems for assessing the socioeconomic impact on the national health system of the various aspects of precision medicine can be important tools in contributing to the design of policies intended to optimise efforts in the areas mentioned above.

It is already possible to identify highly relevant potential areas for the future development of Human Technopole, which would be an ideal complement to further strengthen Human Technopole's scientific activity and maximise its potential impact on human health.

Such research areas are, for example, Cell Biology and Metabolism. Cell Biology, the study of the structure, organisation and function of the cell, represents the missing natural link between the understanding of structures and mechanisms at the molecular level (provided for example by Structural Biology) and the information obtained from large-scale (gen)omics studies operating at the level of organisms. The integration of these different disciplines or domains is what will enable scientists at Human Technopole to gain an in-depth and holistic understanding of the mechanisms that regulate human health and their deregulation in disease.

In order to maximise synergies with the rest of the activities planned in Human Technopole, the Centre for Metabolism will focus on areas related to human metabolism, the human microbiome and the resulting individual response to food, drugs and microbes. This is an emerging and highly promising aspect of human biomedicine that is well integrated with other planned research, while making optimal use of both genomics and other high-throughput technologies, as well as infrastructure and expertise in computational biology. Importantly, it would also open up fields of collaboration with agribusiness and nutrition research outside of HT.

By the end of 2024 Human Technopole expects to be home to approximately 30-35 research groups and will have a staff of at least 500 employees. This goal will be achieved through the expansion of these five Centres of Research to enable them to reach critical mass, rather than through the addition of new major research topics. With the establishment of new research groups, however, the focus of each Research Centre will expand to allow for increasing overlap between respective interests and to promote more collaborative efforts among the Centres.

Seminars, shared research reports, retreats, and journal clubs will all be used as tools to strengthen scientific interactions, with particular emphasis on stimulating interactions between "wet" and "dry" scientists both within Centres and between Centres. The efforts of Human Technopole in its different research areas will aim to promote the distribution, reuse and re-analysis of the data, in accordance with international standards and according to the FAIR principles (Findable, Accessible, Interoperable and Reusable).

As a whole, the research at Human Technopole will advance our understanding and help to develop new therapeutic strategies (including ATMPs and advanced therapy drugs) for various disease groups. Based on the various projects that are getting underway, a significant example in this regard are chronic and degenerative diseases, such as:

- Cancer and cardiovascular diseases and their intermediate phenotypes;
- Neurodegenerative and neurodevelopmental disorders, such as autism and intellectual disabilities;
- Rare and orphan diseases, such as primary ciliary dyskinesia;
- Respiratory diseases, such as cystic fibrosis.

Some of the aforementioned disease areas, in particular cancer, neuropsychiatric disorders, and cardiovascular diseases, are among the leading causes of death in the world and represent some of the greatest unmet treatment needs of contemporary medicine, while also constituting a major burden on health care systems in terms of social costs.
More specifically, the first key strategic initiatives to be pursued by the Human Technopole research teams will be the following:

- Study of genetic diversity and disease susceptibility in Italy - Complete genomic characterisation of participants in the "Moli-sani" study conducted by the Mediterranean Neurological Institute Neuromed IRCCS;
- Longitudinal profiling of high-throughput brain organoids for the deconvolution of neurodevelopmental disorders of the cohorts organised by IRCCS Associazione Oasi Maria Santissima of Troina, Sicily;
- Machine learning-based analysis of data from the Sistema Tessera Sanitaria Italian.

Taken together, the plans outlined so far will provide Human Technopole with the tools necessary to study a wide range of human diseases and to address some of today's major health challenges. Overall, the goal of Human Technopole's research work is to enable the assessment of risk and protective

factors that influence disease development, the identification of new targets and biomarkers, the development of novel therapies in collaboration with partners, and the mechanistic understanding of various groups of diseases, including cancer, neurodevelopmental disorders, and cardiovascular diseases.

DEVELOPMENT AND PROVISION OF INFRASTRUCTURES. INNOVATIVE RESEARCH METHODS AND INSTRUMENTS

The main objectives devoted to pursuing this strategic issue are the following:

1. Provide high quality infrastructure, equipment, services and research methods;
2. Ensure high quality of the research area/environment;
3. Provide accessible infrastructures, equipment, services and research methods to internal and external researchers.

Human Technopole's research in all the areas described will be supported by state-of-the-art scientific infrastructures and facilities, essential to remain competitive in today's international research environment, which will appeal to internal and external users. In addition to meeting the needs of HT scientists, most of these facilities and services will be set up at scale, including public research organisations on a meritocratic and competitive basis.
The Human Technopole plans to provide user access to scientific services are aimed at widely meeting the needs of the research community, providing access to equipment and technologies not readily available or easily accessible to scientists working in Italy.

The development and use of and provision of access to infrastructure, tools and research methods are also a fundamental part of the strategic vision of Human Technopole.

The technology-oriented research groups focused on the development of innovative methods and innovative tools for life sciences research will complement the biology-oriented research groups whose goal is to address important open questions in human biology and biomedicine.

This organisational model has the important purpose of ensuring that the services and facilities of Human Technopole, including those made available to external scientists, are constantly stimulated by the research questions of the internal researchers whose work depends on these technologies and thus remain at the forefront of developments in the field.

A comprehensive framework will also support HT scientists and HT collaborators in specific aspects of research management, including activities related to grant management, technology transfer, research ethics, and regulatory aspects of modern research.

Scientists from Italian public research organisations will have access to the facilities and to the research services of Human Technopole at the same costs as Human Technopole's own scientists, and HT will provide funds to allow access to its services to users who otherwise would not be able to access them.

In order to expand and facilitate further access for researchers and to position the facilities of Human Technopole at an international level, they will participate in European initiatives and programmes and other dedicated programmes (e.g. iNEXT, Instruct, Euro-BioImaging, etc.).

Having groups of scientists from different Centres and research fields pursuing certain methods and techniques will allow the exploitation of equipment and technologies for a diverse range of applications, thus stimulating their development to address new experimental needs. In this context, strong collaborative links with research partners (e.g., universities, research institutes, etc.), will be fundamental as well as with the developers and suppliers of the respective technologies.

However, most distributed research infrastructures, which provide access to equipment and data and which play a critical role, particularly in the life sciences, still cost more and require more technical expertise than most individual research institutions can afford.

There is broad consensus that a healthy national research environment depends on a network of excellent research centres funded in such way that ambitious long-term projects can be pursued. Well-known examples of such networks are the Max Planck Institutes in Germany or the research units of the Medical Research Council in the UK, Cancer Research UK in the UK or the Howard Hughes Medical Institute Investigator Program in the United States.

ATTRACTION, TRAINING OF RESEARCH TALENT, SHARING OF RESEARCH OUTPUTS

The main objectives linked to this strategic issue are the following:

1. Attract researchers of excellence at international level;
2. Share knowledge and encourage the exchange and dissemination of knowledge and experience;
3. Train the next generation of researchers;
4. Promote the mobility and exchange of researchers of excellence between research institutions and organisations.

In line with the importance of centres and research infrastructures of excellence in building scientific capacity, Human Technopole will enrich the national system by contributing to its improvement and acting as a reference point for the Italian academic community engaged in life sciences through its synergistic missions. At the same time, the goal of Human Technopole to achieve high standards (both in research as well as at organisational and managerial level), as well as provide a model for other similar centres, makes HT an ideal partner for other European,national and international institutes of excellence and collaboration. Thanks to the creation of new scientific contacts with key partners and international networks, Human Technopole will give greater visibility to Italian biomedical research contributing to raising its profile.

An important goal for Human Technopole, and also a way to extend its activities beyond the institute to the external community, will be the provision of advanced scientific training programmes aimed at young scientists.

HT will increasingly engage in training activities in a wide range of areas relevant to biomedical and life sciences research, with the goal of enhancing scientific capacity and benefitting the external research community.

Training in Human Technopole will be directed at both internal and external participants, and HT's dynamic and multidisciplinary environment will provide an ideal context for the development of talented young scientists. The fundamental and inspiring theme of the external training activities will be to create a centre of excellence for training talented researchers in the biomedical sciences and allow broad access to Human Technopole expertise, methods and resources.

Human Technopole internal doctoral and postdoctoral fellows, as well as young Group Leaders who are independently coordinating research or service teams for the first time, will benefit from mentoring programmes and career development activities, as well as high-level scientific training. Interdisciplinary research will be particularly encouraged, e.g. through joint PhD or postdoctoral projects shared between research groups from different Research Centres and/or Human Technopole groups.
High standards of mentoring and guidance will be implemented to support PhD students and postdocs on their way to research-based or non-research-based leadership positions. Special attention will also be given to training Human Technopole early-stage researchers in research-related topics, e.g., research ethics and bioethics, in part with the goal of preparing young scientists for clinical settings in translational research involving patient samples and disease data.
The training events will include symposia, workshops and both theoretical and practical courses at the forefront of scientific and technological development in specific areas or technologies related to Human Technopole's scientific activity and of great relevance to modern biomedical research, on topics as targeted to fill the gaps in available training programmes, wherever possible, particularly for young scientists in Italy. It is expected that Human Technopole's training programme will benefit scientists active in academic institutions. as well as in the life sciences and healthcare industries.

SCIENTIFIC REPUTATION AND DISSEMINATION

This strategic issue is linked to the following strategic objectives:

1. Be present in the most relevant international dissemination networks (conferences, associations, etc.) and scientific boards;
2. Produce high-level scientific publications;
3. Obtain research funding and awards;
4. Organise/host scientific events for specialist and non-specialist audiences.
5. Promote scientific literacy and dissemination for a wider audience.

Human Technopole plans to organise and offer scientific training events as a tool to improve scientific capacity and foster to the external research community. With different timelines for implementation, various courses and workshops will be organised in many important areas.

The training will be coordinated by Group Leader and Head of Facilities of Human Technopole, as well as by professors and external speakers. Several conferences are also planned, including a symposium on Cryo-EM to inaugurate the Human Technopole Facility in 2021, neuroscience conferences, meetings organised by major international research initiatives or consortia (e.g. Human Cell Atlas, LifeTime, and others), as well as dedicated conferences to explore synergies in specific fields with potential national partners (e.g., research institutes, universities, scientific societies, IRCCS, etc.).

We plan to offer training courses for external scientists on research-related topics, for example in the field of entrepreneurship and technology transfer.

The conception and implementation of a Scientific Visitors' Programme is a further initiative that Human Technopole will develop in order to ensure that its expertise, infrastructure and methods are shared with the external community.

The vision behind this programme is to encourage the mobility and dissemination of the skills and methods developed internally, allowing external scientists to spend a period of time in Human Technopole for research collaborations, to learn methods in use at HT and to use the infrastructure and facilities of HT. Although the programme is opened to visiting scientists from national and international research institutions, it is expected that a significant proportion of the participants will be constituted by scientists coming from Italian institutions.

RESEARCH-BASED INNOVATION (TECHNOLOGY TRANSFER)

The objectives linked to this strategic issue are the following:

1. Sign agreements with external organisations and industries to create economic and societal value from our research results;
2. Develop, file, register and defend patents;
3. Create new companies and promote technology transfer;
4. Provide training and mentoring services in innovation to the Italian (and international) academic community.

The life sciences field, including medical technologies, biotechnology and pharmaceuticals is extremely productive and represents an area of great interest for innovation. Contributing to economic and social progress by transferring research results into applications, therapies and products is one of Human Technopole's main objectives and represents a further way for HT to fulfil its mission.

As our research activities grow, technology transfer activities will be set up in a structured way to help translate the discoveries and inventions of Human Technopole scientists into tangible applications and marketable products.

New technologies and methods that could emerge from HT's work cover the entire life sciences in the broadest sense, including therapeutic and diagnostic strategies, enabling technologies, molecular tools and assays, instrumentation and devices, as well as software applications and databases. These will be developed in close collaboration with industrial partners in the pharmaceutical, biotechnology, engineering and computer science sectors.

In addition, to initiating its own technology transfer activities, and in line with our commitment to the broader academic community, we are exploring potential ways in which Human Technopole can contribute to improving technology transfer opportunities for Italian researchers more broadly.

Successful technology transfer requires a wide range of business and intellectual property skills and expertise, as well as research experience, in order to be able to understand the underlying science, and to identify and attract business partners. The program will span the five years of the Strategic Plan. It is envisaged that the program will have a total budget of up to 20 million euros.
The interest of commercial partners with whom HT negotiates for the development of optimised commercialisation strategies for individual products and technologies, fostering an entrepreneurial mindset in academia, is of paramount importance.

In this context, one avenue already described is that of entrepreneurship courses. In addition, there is a shortage of technology transfer professionals with appropriate competencies and skillsets, particularly in Italian universities and research institutes.

In view of this, a further direction to follow in the future for Human Technopole could concern the organisation and offer of high-level professional training courses for a new generation of technology transfer professionals, with particular attention on the exploitation of the results of biomedical research and development.

In addition to training courses, Human Technopole will be involved as much as possible in organising other events and initiatives regarding the exploitation of research results for academic institutions and, in this context, we have already started to collaborate with some partners.
In the meantime, we continue to have contacts with key players from universities and other public and private non-profit organisations active in this sector to explore the national landscape of technology transfer and identify additional ways in which HT can benefit the broader academic community. Although it is not envisaged that Human Technopole will directly create and manage start-up accelerators or incubators during the period of the current Strategic Plan, initiatives in this sense are being developed as part of the activities carried out within the MIND site with which Human Technopole will collaborate closely and from which, where possible, it will benefit by creating nearby "innovation spaces".

Human Technopole's relationships with industry, however, will go beyond those aimed at promoting technology transfer. Over the past year, Human Technopole's leadership has engaged in many interactions with potential corporate partners in a variety of areas, including biotechnology, pharmaceuticals, instrumentation, and IT, engaging in dialogues with companies active in genomics, data analytics, biomedical imaging and multiple other areas. Different models were discussed with each of these entities, depending on complementarity with HT's scientific activity and opportunities for specific collaborative initiatives. These ranged from the implementation of joint postdoctoral projects or programmes to joint training initiatives (e.g., the organisation of courses and workshops) to R&D collaborations for the co-development of new tools, instruments (e.g. algorithms and software) and applications, with activities sponsored or co-sponsored by the respective corporate counterparts. Opportunities are also being explored to create more formal and longer-term partnerships with selected companies, combining the provision of tools and services with co-development efforts and access to new technologies, which will, for example, be made available for experimentation by Human Technopole researchers and users through HT's Core Facilities. In the future, joint HT-industry labs may also be set up, although concrete plans to do so are not yet in development.

SUSTAINABILITY (ENVIRONMENTAL. SOCIAL. ECONOMIC)

The main objectives linked to pursuing this strategic issue are the following:

ENVIRONMENTAL SUSTAINABILITY
Contribute to minimise the environmental impact of the MIND site, optimise the environmental efficiency of buildings and laboratories, minimise experiments on animals

SOCIAL SUSTAINABILITY
Promote equal gender opportunities, improve the quality of life of citizens (health, age, well-being), have a positive impact on the territory (employment, economic induced activities, etc.), promote awareness of the importance of science and research in society and the public, becoming a reference for a new generation of students

ECONOMIC SUSTAINABILITY
Attract investors, including private investors, be efficient in the use of resources, ensure economic-financial balance from a long-term perspective through self-financing

Human Technopole must devote strong attention to ethical, legal and societal aspects that are increasingly necessary for the day-to-day implementation of research projects. An ethics and regulatory unit will be established at Human Technopole offering key research support to all HT research groups, both "wet" and "dry". The mission of this unit is to guide and accompany researchers – from the inception of a project till its completion – through all the ethical and regulatory processes that are relevant and required for project design and/or practical implementation. Such a centralised unit will serve three important and complementary purposes. First, it will ensure that HT operates according to the highest bioethical and regulatory standards, achieving the necessary credibility in the practice of responsible research and innovation, thereby boosting the credibility of its scientific ambition. Second, it will allow researchers to deal cost-effectively with bioethical and regulatory requirements, ensuring that they engage with the relevant issues but able to delegate their full operational implementation to ad hoc and streamlined processes and expertise. Fulfilling such requirements, especially without an adequate background or expertise (as is still the case for most scientists) requires a major and ever-increasing administrative effort, with timeframes that would impact on researchers' scientific productivity if they were solely responsible.

Third, it will significantly enhance HT's competitiveness in the acquisition of external funds, especially at the international level. The evaluation of grant proposals nowadays routinely demands an in-depth discussion of the bioethical, societal and regulatory aspects of research projects. Importantly, the engagement that is required and/or that proves most successful is not limited to the generic, formal adherence to ethics checklists but needs a substantial level of professionalism on these topics that most life science education programmes still lack. Thus the expert staff in the unit will provide HT researchers with a manageable environment, allowing them to remain competitive. Another important goal for a project on the scale of that of Human Technopole is to minimise its environmental impact. HT's Operations will contribute to this aim through a combination of initiatives, incentives and policies. HT's policies will systematically include a reference to their social

and environmental impact, with specific rules, procedures and guidelines based on existing norms and regulations such as CAM ("Criteri Ambientali Minimi", i.e., minimum sustainability criteria) for procurement and the LEED (Leadership in Energy and Environmental Design) green building rating system or Life Cycle Assessment methods for environmental impact evaluation, in the case of laboratories and buildings. All HT employees and departments will be engaged in the active promotion of environmental sustainability, through dedicated programmes and initiatives, both at the individual and collective level, in a number of administrative areas – including for example:

- HR encouragement of remote working, use of public transport, car sharing, etc.
- IT management through specific programmes for retired hardware, disk virtualisation to replace desktops or workstations with high energy consumption, etc.
- Real estate and facility management, making use of efficient, eco-friendly systems for air conditioning, waste and water management, etc.
- Purchase of goods and services with Green certifications Constant awareness, monitoring and gradual improvements will be promoted to ensure long term impact, which will be part of HT's "corporate culture", leveraged by active collaborations with other MIND partners and Stakeholders.

On the procurement side, HT will encourage small companies and local enterprises wherever possible. Fully in line with the spirit and policies of HT, particular emphasis will be given to aspects of environmental sustainability, encouraging innovation, respect for the environment, ethical projects and the circular economy. An attitude of honesty and transparency, where choices are clearly illustrated and motivated, will characterise HT's procurement activities.
Diversity and inclusiveness will be core values for Human Technopole's organisation and staff, stemming from the conviction that highly diverse teams yield the best and most innovative results.

Our overall aim will be to create an international, welcoming, inclusive workplace, characterised by a collegial environment and collaborative approach. To encourage and support mobility and diversity in the HT workforce, specific measures and practical support will be provided to expatriates and their families to help them relocate and settle in Italy and the Milan area.

Given the HT structure and the Italian research funding landscape we do not intend to apply for competitive funds from the Italian Ministries who fund research. Rather, international funding organisations and agencies are expected to represent the main sources of external funding for Human Technopole's research. These will include the European Commission, through its Framework Programmes and other funding schemes such as the European Research Council and other individual awards, the National Institutes of Health (NIH), which fund some activities outside of the US, private foundations and non-profit organisations (i.e. charities). Looking to the future, additional funds are expected to contribute to HT's overall budget, originating from patent licensing and IP-related revenues (e.g. royalties) as well as from joint programmes with industry.

PARTNERSHIP, NETWORKING AND STAKEHOLDER ENGAGEMENT

The main objective devoted to pursuing this strategic issue are the following:

1. Build long term partnerships with relevant Stakeholders;
2. Contribute to the development and valorisation of the MIND site by promoting common projects and synergies with MIND site partners;
3. Promote Stakeholders engagement.

An important goal for Human Technopole will be the provision of advanced scientific training programmes aimed at young scientists.

In the early stages, we will initiate some joint post-doc projects in collaboration with external partners (academic or industrial). HT's internal training activities will focus primarily on doctoral students and postdocs, but it is anticipated that a number of undergraduate students and young visiting scientists will also be able to work at Human Technopole in the future. As part of its mission, HT will be committed to organising and hosting scientific training activities and events for external scientists from universities and other institutions of research, as a service to the national and international community.

In this context, Human Technopole's leadership has already contacted several Stakeholders in Italy, including universities, scientific societies and individual hospitals and research institutes, to identify areas of particular need.

Overall, Human Technopole's external training activities will aim to create a world-class forum for sharing, discussing and learning about cutting-edge biomedical science and technology.
Access to external professional training will also be offered, if within HT's budget and compatible with the needs of its staff. Additional development opportunities will be provided to Human Technopole staff through dedicated national training funds (e.g., "Fondimpresa" and "Fondirigenti").

Whichever specific partners or research areas will be involved, public-private partnerships certainly seem to be a clear way to be able to utilise HT's capacities and competences to stimulate industrial and technological development.

The private sector would seem an obvious way to leverage HT's skills and expertise to stimulate industrial and technological development. The location within the MIND campus should help to promote such interactions, as we anticipate that highly innovative companies will be among the first to move to the site.

It should also facilitate the creation of a space where research discoveries can take their first steps towards translation, either through the creation of start-ups or through joint development with industrial partners.

Finally, Human Technopole's openness will be expressed through activities that engage its non-scientific Stakeholders and the general public - including children, students, teachers, and citizens from all walks of life. By engaging in a variety of communication, educational and outreach activities, HT will play an active role in communicating science effectively, promoting understanding among the public of the importance of scientific research and knowledge-based innovation and stimulating an ongoing and productive dialogue between science and society.

This dialogue will not only involve the dissemination of scientific concepts, but will equally, if not more importantly, promote profound debates about the role and responsibility of scientists and the many important ethical issues associated with modern scientific research.

Ultimately, the goal of Human Technopole is to play an active role in communicating science effectively and in ensuring that the work of our institute, as well as that of science more generally, is heard and understood not only by scientists, but also by ordinary citizens.
To achieve these objectives, the communication strategy of Human Technopole will be aimed at building, consolidating and maintaining the visibility and reputation of Human Technopole by promoting events and initiatives that establish a positive relationship between the institute and its main Stakeholders.

Overall, communication activities will support HT's strategic development by raising its profile while creating reasonable expectations.
The activities that Human Technopole will conduct in this area will take advantage of a variety of different tools, to be used selectively according to the specific target audiences among the various stakeholder groups.

These tools include the national press, radio, television and digital media, including some scientific media, social media, and organising and participating in seminars, conferences, and events as another way to increase awareness of HT's mission and work by engaging in a public dialogue.

In fact, the primary mission of Human Technopole is to contribute to the promotion of human health and well-being, and one of the main Stakeholders is therefore the general public, ordinary citizens who can benefit from the activities of Human Technopole in the long run.

The available spaces in Human Technopole will be used to host public events, seminars and conferences to expand the reach of Human Technopole and engage the community local community and visitors who travel to HT to attend these events.

The activities of training and outreach (i.e., targeted to non-scientists) will be designed and organised in collaboration with academic and scientific dissemination and communication partners, where possible and will include the participation of HT in existing initiatives, such as the European Researchers' Night, the Festival of Sciences, etc.

First contacts have been initiated with some of these potential partners to explore and plan joint initiatives and scientists and leadership of Human Technopole have already participated in similar events.

Particular emphasis will be given to the involvement of younger generations through schools and through existing science education programmes to raise awareness and promote careers in the life sciences or biomedical research.

In all the areas described above, from scientific to clinical and industrial relationships to interactions with the general public, Human Technopole will collaborate and work with other organisations, both nationally and internationally.

EFFECTIVENESS AND EFFICIENCY OF OPERATIONAL PROCESSES

The main objectives devoted to pursuing this strategic objective are the following:

1 Technological and digital process development (Digital Transformation)

1 Build an attractive environment for non-scientific professionals

With regard to the digital transformation, Human Technopole will implement a complex process to acquire new digital skills and their operative, tactical and strategic usage through new digital instruments. This process, for example, will be used in asset management, warehouse management, human resource management. Another important focus will be on the assessment and on the development of a business intelligence platform, that will interface with the current ERP so that it can elaborate data and give an additional value to the administrative processes.

Human Technopole will offer its staff a series of additional training opportunities, organising courses in "soft skills" and on technical topics of more general interest (e.g., computer courses) for the improvement of professional profiles and the promotion of the constant personal and professional development of its employees. These courses, to which all Human Technopole employees will have access, will offer scientists and non-scientists the opportunity to learn and develop transferable skills important for their activity in Human Technopole as well as for their careers outside HT, and are aimed at integrating and creating synergies with scientific training (e.g., activities and courses specifically designed for PhD students and post-docs). In addition to professional training in areas relevant to Human Technopole, the training programme will include a wide range of courses and workshops designed to develop, for example, personal, communication, project management and computing skills, to name a few examples. In this context, courses will also be offered in the area of management and leadership development, in particular for new research Group Leaders and administrative staff entering management positions. Finally, language courses will be available in line with the international nature of Human Technopole, including basic courses to support the integration of international employees in Italy, as well as advanced language training for specific job purposes in HT. In general, the courses organised will be flexible and customised according to the needs and requests of HT personnel. The planned scheme for general employee training will be defined and managed by the Human Resources department according to the needs of the organisation.

A structured and detailed schedule for these activities has not yet been developed, but they have already been initiated on a small scale in 2020 and will expand, with the support of a dedicated staff member, over the period covered by the current Strategic Plan. Access to external professional training will also be offered, if within HT's budget and compatible with the needs of its staff.

2.3 OUR STAKEHOLDER ENGAGEMENT AND MATERIALITY MATRIX

The analysis of materiality, and consequently the creation of a materiality matrix, was conducted based on the IIRC guidelines for the stages of Stakeholder mapping and prioritizing and analysis of the results of their involvement. With regard to the definition of the key issues and application of the materiality principles, we refer to the criteria of Accountability and of the GRI Standards.

The materiality matrix summarises the various perspectives and provides an overview of the strategic issues with the greatest potential to influence the actions and performance of HT and the decisions of its Stakeholders, as well as the degree of "alignment" or "misalignment" between the priorities attributed by Stakeholders to the various strategic issues and the HT's level of commitment in this regard.

The Stakeholders categories identified are: **staff of "HT", Italian ministries, industrial associations, local institutions, civil society and local communities, suppliers and partners, research institutions**. The relevance of the various Stakeholders is assessed and weighted in relation to the following parameters: dependence (in the sense of the importance of the relationship for the Stakeholder), influence (importance of the relationship for HT) and urgency (temporal aspect of the relationship).

THE FOLLOWING TABLE SHOWS THE CATEGORISATION OF OUR KEY STAKEHOLDERS AND THEIR PRINCIPAL CHARACTERISTICS.

Stakeholder groups	HT considerations	Stakeholder priorities	Link to our output capitals	How we engage
Italian Ministries	As the founding members and financing institutions, they require to be kept informed on how the funds are used and on the Foundation's perspectives		- Relational capital - Intellectual capital - Human capital - Infrastructual capital	- Accountability and transparency of financial reporting - Involvement in defining the guidelines for the future growth of HT
Industrial associations	They expect we are able to market the results of our research by creating partnership and promoting the technology transfer		- Relational capital - Financial capital	- Involvement of external partners in developing the CITT (Centro per l'innovazione ed il trasferimento tecnologico)
Local institutions	Expect HT to be scientifically excellent, thus contributing to the development of the local territories in terms of overall sustainability		- Relational capital - Intellectual capital - Infrastructual capital	- Organisation of events, initiatives, partnerships
Civil society and local communities	Expect HT to contribute to the development of the local territories in terms of overall sustainability and creation of partnerships		- Relational capital - Intellectual capital	- Initiatives create dialogue about scientific research - Focusing the organisation and activities on ESG practices
Suppliers, partners	These Stakeholders play an important role in enabling us to meet our commitments to create a Centre of Excellence in the research field		- Relational capital - Intellectual capital	- Fair tender, procurement and 'expression of interest' processes - Interactions aiming at creating partnership within MIND area

Stakeholder groups	HT considerations	Stakeholder priorities	Link to our output capitals	How we engage
Our staff	Employees play a critical role in ensuring we achieve our strategic objectives. We need to understand their needs, challenges and aspirations		- Relational capital - Intellectual capital - Human capital - Infrastructural capital	- Trainings - Employee surveys - Conventions - Direct engagements by supervisors and business management - Internal communication measures including digital platforms such as intranet, announcements and campaigns - Issue of a Code of Ethics
Research institutions / community	They expect to create scientific partnerships, by establishing joint projects and sharing scientific infrastructure		- Intellectual capital - Human capital - Infrastructural capital	- Definition of partnership and scientific joint programmes (e.g., Covidiamo)

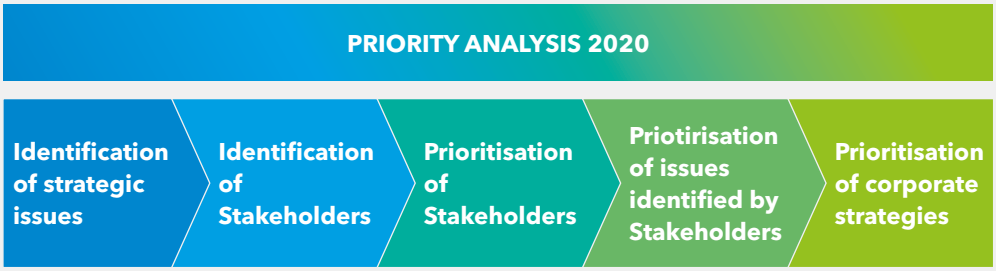
Two aspects were investigated in relation to the eight strategic issues:

- from the Stakeholder side, the relative importance of each issue in the perception of Stakeholders and the 'direction' of their expectations (i.e. an expectation of engagement rather than disengagement on the part of HT);
- from the HT side, the assessment of the issues takes place in relation to the strategic objectives, the current and future commitment taken on and the related impact on the HT's activities.

The importance of strategic issues for Stakeholders and the 'direction' of their expectations has been studied through an analysis of the results of listening to, involving and talking to key Stakeholders during initiatives that HT undertook during 2020. Examples of the sources considered are interviews, surveys, institutional relations at national and local level, and media monitoring. The relevance of the issues with respect to the HT strategy was determined by involving the corporate bodies, top management and other company departments for analyses of specific issues, and reflects the strategic guidelines defined by the 2020-2024 Strategic Plan, and the missions and objectives of HT.

Analysis of these aspects enabled the attribution of various priority levels for the strategic issues and their positioning in a matrix.

THE PRIORITISATION PROCESS CONSISTS OF FIVE MAIN STEPS, AS SHOWN IN THE FOLLOWING ILLUSTRATION.

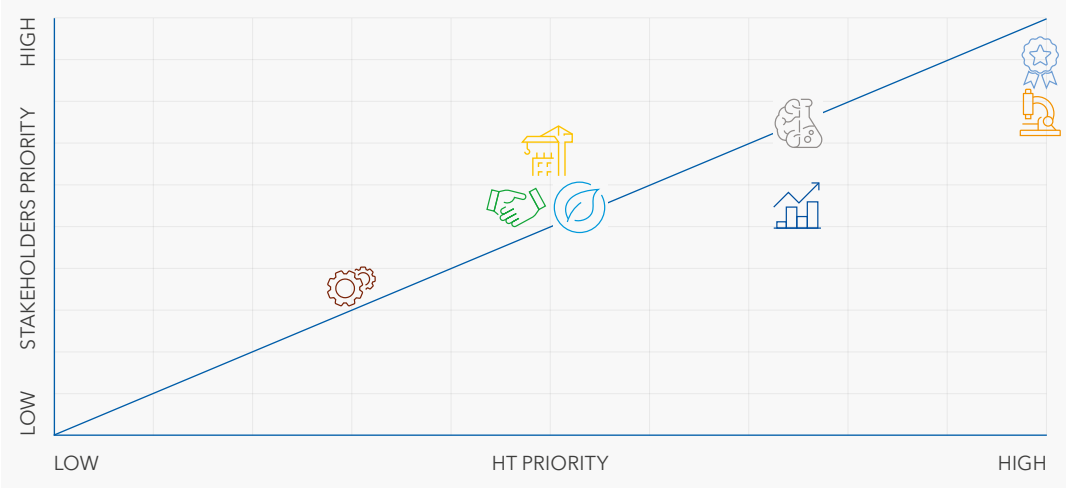


Studying the materiality matrix with regard to each axis helps consideration of:

- on the vertical axis, the priority which Stakeholders, duly calibrated on the basis of their importance, attribute to the various strategic issues. On the high side of the matrix are, therefore, the issues on which Stakeholders request more commitment from Human Technopole in terms of investments, enhancement of existing management practices and systems, formalisation of clear commitments and policies.
- on the horizontal axis are the strategic issues on which Human Technopole plans to focus its efforts and the "level" at which this commitment will be addressed. On the right of the matrix are, therefore, the issues to which, as part of the HT's strategic objectives, a high level of commitment is planned for coming years.

The combination of the two perspectives enables the most important strategic issues both for HT and for Stakeholders to be identified (so-called material issues), and consequently the level of alignment or misalignment between external expectations and internal relevance to be verified.

MATERIALITY MATRIX



- Attraction, training of research talent, sharing of research outputs
- Innovation and quality of research
- Sustainability (environmental, social, economics)
- Partnership, networking and stakeholder engagement
- Development and provisione of infrastructures, innovative research methods and instruments
- Research-based innovation
- Scientific reputation and dissemination
- Effectiveness and efficiency of operational process

The materiality matrix shows the most important issues for Human Technopole and for our Stakeholders; as we can see above there is a general alignment on all the strategic issues between the Foundation's strategy and the weighted average of the priorities expressed by our Stakeholders.
The materiality matrix shows us that the two most important strategic issues for HT, i.e. "scientific reputation and dissemination" and "innovation and quality of research" are also important for our Stakeholders. Furthermore, on the issue "attraction, training of research talent, sharing of research outputs", the internal and external priorities are perfectly matched.
The second important consideration is that, focusing on every single Stakeholder and their own expectations, we can find a general alignment on the two most relevant issues for Human Technopole.

2.4 OUR RESPONSIBLE AND SUSTAINABLE APPROACH

RESPONSIBLE AND SUSTAINABLE APPROACH: OUR CONTRIBUTION TO THE ACHIEVEMENT OF THE SUSTAINABLE DEVELOPMENT GOALS

In 2015 United Nations Member States adopted the 2030 Agenda for Sustainable Development, which provides a shared vision and roadmap for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), "which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests" (UN website).

THE 17 SUSTAINABLE DEVELOPMENT GOALS ARE SUMMARISED BELOW:

We identified 10 SDGs that are aligned with our strategic goals and directly relevant to our approach to generating values.

We recognise that the SDGs are interconnected and therefore any of our strategic activities may contribute to more than one SDG, including those not listed here. However, we believe that the 10 SDGs identified are those we can make the most significant contribution to.

Below, we present how we believe we contribute to the SDGs through our strategy and current activities and projects. The table summarises the link among the 10 SDGs and our strategic issues.

INNOVATION AND QUALITY OF RESEARCH	3 | Good health and well being	
DEVELOPMENT AND PROVISION OF INFRASTRUCTURES, INNOVATIVE RESEARCH METHODS AND INSTRUMENTS	11 | Sustainable cities and communities	
	3 | Good health and well being	
ATTRACTION, TRAINING OF RESEARCH TALENT, SHARING OF RESEARCH OUTPUTS	4 | Quality education	
	8 | Decent work and economic growth	
SCIENTIFIC REPUTATION AND DISSEMINATION	4 | Quality education	
RESEARCH-BASED INNOVATION (TECHNOLOGY TRANSFER)	9 | Industry, innovation and infrastructure	
	8 | Decent work and economic growth	
SUSTAINABILITY (ENVIRONMENTAL, SOCIAL, ECONOMIC)	3 | Good health and well being	
	4 | Quality education	
	5 | Gender equality	
	6 | Clean water and sanitation	
	7 | Affordable and clean energy	
	8 | Decent work and economic growth	
	12 | Responsble production and consumption	
	16 | Peace, justice and strong institutions	
PARTNERSHIP, NETWORKING AND STAKEHOLDER ENGAGEMENT	8 | Decent work and economic growth	
	16 | Peace, justice and strong institutions	
EFFECTIVENESS AND EFFICIENCY OF OPERATIONAL PROCESSES	8 | Decent work and economic growth	

A short description of each SDG is presented below, along with the contribution provided by HT activities and programmes and the relation to HT's strategic issues and objectives.

3 - GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages

HT may contribute to the advancement of this SDG through its main research areas and programmes, and its research infrastructures. So, this goal is strictly connected to the strategic objectives of HT strategy "**Innovation and quality of research**" and "**Development and provision of infrastructures, innovative research methods and instruments**".
It is also related to the strategic objective "**Sustainability**", and in particular with the social sustainability and the goal "Improve the quality of life of citizens (health, age, well-being)".

4 - QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

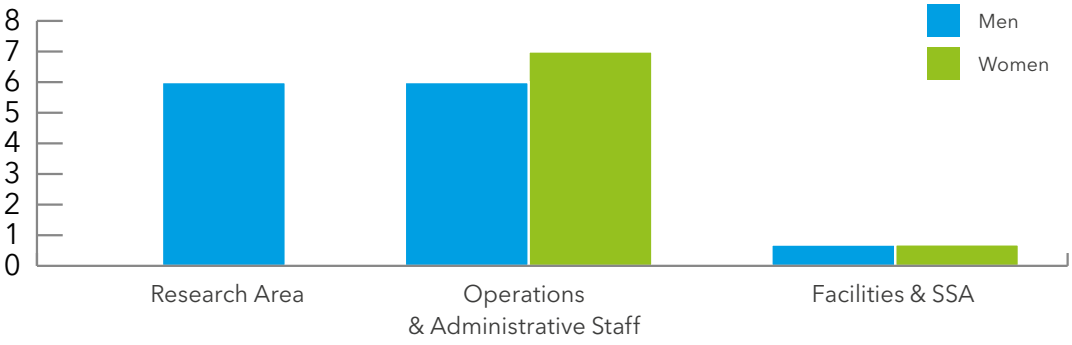
HT may contribute to the advancement of this SDG through its activities and programmes aimed at training the next generations of researchers, promoting the mobility and exchange of researchers of excellence, and disseminating scientific knowledge both to specialist and non-specialist audiences. So, this goal is strictly connected to two strategic objectives of HT strategy: "**Attraction, training of research talent, sharing of research outputs and scientific reputation and dissemination**". It is also related to the strategic objective "**Sustainability**", and in particular with the social sustainability and the goals to promote awareness of the importance of science and research in society and the public and become a point of reference for a new generation of students.

5 - GENDER EQUALITY

Achieve gender equality and empower all women and girls

HT may contribute to the advancement of this SDG through its activities and programmes on diversity management and aimed at favouring equal opportunities for women and men.
So, this goal is strictly connected to the strategic objective of HT strategy: "**Sustainability**", and in particular with the social sustainability and the goal "Promote equal gender opportunities". See table below reporting the number of women and men in managerial roles as of 2020.

WOMEN IN MANAGERIAL ROLES PER AREA 2020



6 - CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

HT may contribute to the advancement of this SDG through its activities and programmes on implementation and adoption of a QHSE Policy that will constitute HT's commitment also related to the safeguarding and protection of the environment, to the reduction of environmental impacts, to the optimisation of the use of energy resources and to the use of the best available technologies. This goal is related to the strategic objective "**Sustainability**", and in particular with environmental sustainability and the goals "Contribute to minimise the environmental impact of the MIND site" and "Optimise the environmental efficiency of buildings and laboratories".

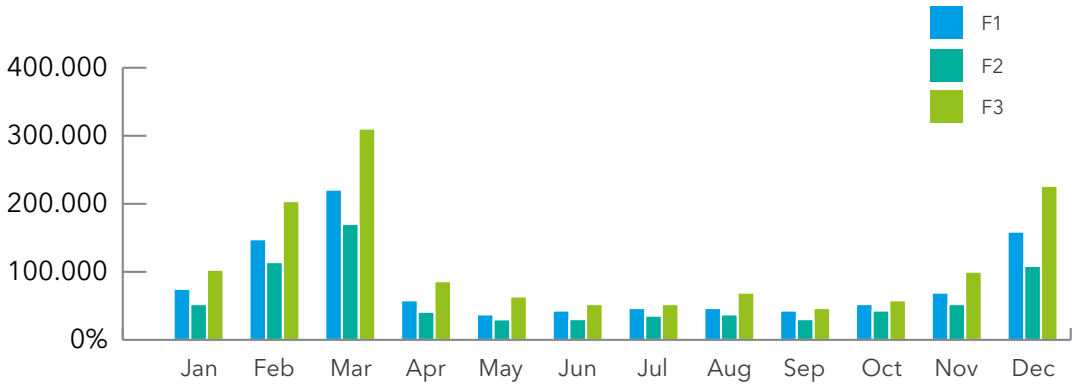
Water consumption 2020 (in cubic meters)		
N. of seats (annual average)	n	48
Forecast consumption pro-capita	it/pax/dd	45 (considering two 10lt drains and a 25lt sink consumption)
Conversion to cm	cm/pax/dd	0.045
Monthly days of use	dd	21
Total		**544.32**

7 - AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all

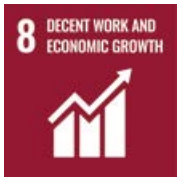
HT may contribute to the advancement of this SDG through its activities and programmes on the implementation of photovoltaic systems plant in Campus buildings and the activation of the 'green option' through a Consip agreement that will allow HT to use electricity produced from renewable sources. This goal is related to the strategic objective "**Sustainability**", and in particular with the environmental sustainability and the goal "Optimise the environmental efficiency of buildings and laboratories".

ENERGY CONSUMPTION 2020 (KWH)



Energy from photovoltaic plants	
Building	**kWh per year estimated for 2021**
Palazzo Italia	84.720
North Pavilion	14.447
South Pavilion	34.363
Incubator Labs	49.656
Total	**183.186**

IN 2021, THE "**OPZIONE VERDE**" WILL BE ACTIVATED THROUGH A CONSIP CONVENTION THAT WILL ALLOW HT TO USE ELECTRICITY PRODUCED FROM RENEWABLE SOURCES



8 - DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

HT may contribute to the advancement of this SDG thanks to its strong relationship with many Stakeholders and partners, the technology transfer and research-based innovation. HT will have a considerable and ever-increasing impact on the surrounding regions in terms of employment. Thanks to technology transfer it will also promote the creation of new businesses and jobs.

HT will continue to create more job opportunities for young talent, senior researchers and staff employees through its training programmes.
Thus, this SDG is related to many strategic objectives of HT strategy:

- "**Attraction, training of research talent, sharing of research outputs**";
- "**Research-based innovation**" (**technology transfer**);
- "**Sustainability**", and in particular with the social sustainability and the goal Have a positive impact on the territory;
- "**Partnership, networking and Stakeholder engagement**";
- "**Effectiveness and efficiency of operational processes**".

9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

HT may contribute to the advancement of this SDG through its activities and programmes related to the establishment and management of a new Centre of Innovation and Technology Transfer. In order to fulfil the task envisaged in the provision and to encourage the appropriate involvement in the project of the entities explicitly referred to in paragraph 1 of the so-called "Decreto Rilancio", i.e., institutes for hospitalisation and care of a scientific nature, universities, the National Research Council, research centres, SMEs and innovative start-ups, Human Technopole launched a discussion about technology transfer at the beginning of September 2020 with over 70 representatives of these entities and numerous other Stakeholders in the sector. The Foundation has also promoted a study of national and international best practices that could serve as a model for the new centre. This goal is related to the strategic objective "**Research-based innovation**" (technology transfer).

11 - SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

HT may contribute to the advancement of this SDG through its activities and programmes of development of buildings and infrastructures that are based on the following criteria:

- **Flexibility**. The possibility to adapt, modify and reconfigure space over time to respond to changing needs and/or accommodate new research lines and technologies is crucial for modern life science research and thus for Human Technopole.
- **Durability and maintainability**. Design and technical solutions are applied that ensure maximum durability, limit the need for ordinary and extraordinary maintenance, and optimise and/or reduce operating and maintenance costs.
- **Innovative construction technologies**. Where possible, industrialised construction solutions and

the use of advanced materials are and will be favoured, in line with principles of modularity and construction efficiency (e.g. prefabrication and speed of assembly).

- **Environmental sustainability and energy efficiency**. The planning of interventions and installations will be carried out in line with criteria of energy saving and environmental sustainability, by providing innovative, technologically advanced components as well as by adopting architectural solutions, such as passive design, that allow the reduction of energy consumption and produce energy. Every effort will be made to implement sustainable solutions for the management of waste as well.

- **"Common ground" concept**. The overall MIND development project foresees buildings with a permeable ground floor ("common ground") and the absence of individual, closed building lots. The degree of "openness" of the ground level of HT's buildings will be defined according to the needs of the new research centres with regard to internal logistic needs for HT's scientific activities, logistic needs (pedestrian and vehicular traffic) of HT staff, external suppliers and visitors, safety issues and the protection of HT research work and results. This goal is related to the strategic objective "**Development and provision of infrastructures, innovative research methods and instruments**".

12 - RESPONSIBLE PRODUCTION AND CONSUMPTION

Ensure sustainable consumption and production patterns

HT may contribute to the advancement of this SDG through its activities and programmes on introduction the function of Environment, Health & Safety Expert that will start the analysis of environmental aspects (emissions, waste, effluents, water resource management, etc.). Specific software will be implemented for the management of special hazardous and non-hazardous waste produced by research centre activities. This goal is related to the strategic objective "**Sustainability**", and in particular with the Environmental sustainability and the goals "Contribute to minimise the environmental impact of the MIND site" and "Optimise the environmental efficiency of buildings and laboratories".

16 - PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

HT may contribute to the advancement of this SDG through its activities and programmes on adoption of an Organisational, Management and Control Model in compliance with Legislative Decree 231/2001 to give an absolute guarantee of legality, transparency and fairness in the management of its institutional activities. Furthermore, when awarding public contracts for the acquisition of works, services and supplies, the Foundation shall act in compliance with the principles of economy, effectiveness, timeliness and fairness, respecting the principles of free competition, non-discrimination, transparency, proportionality and publicity, as well as the principle of rotation of invitations and awards for those procedures that require it, taking into account criteria of environmental sustainability and avoiding conflicts of interest.

This goal is related to the strategic objectives "**Partnership, networking and Stakeholder engagement**" and "**Sustainability**", and in particular with the Social Sustainability.

CHAPTER 3

Our expectations for the future

3.1 RISKS AND OPPORTUNITIES

RISKS

It is possible to identify a number of risks to the successful development of HT in the short and medium term and in both external and internal contexts. A few of the most important risks arising from the internal context are listed here.

ATTRACTING RESEARCHERS

Inability to attract leading researchers.

HT has developed HRM practices and employment programmes comparable to those offered by internationally recognized institutions.
As long as HT continues to receive stable support from its Stakeholders this risk will remain low

* This would potentially undermine the HT project, but the risk can already be regarded as low. Many of the initial searches organized by HT have been successful in recruiting scientists who would be competitive for similar positions at leading institutes throughout the world.

ATTRACTING A DIVERSE WORKFORCE

Inability to attract diverse workforce

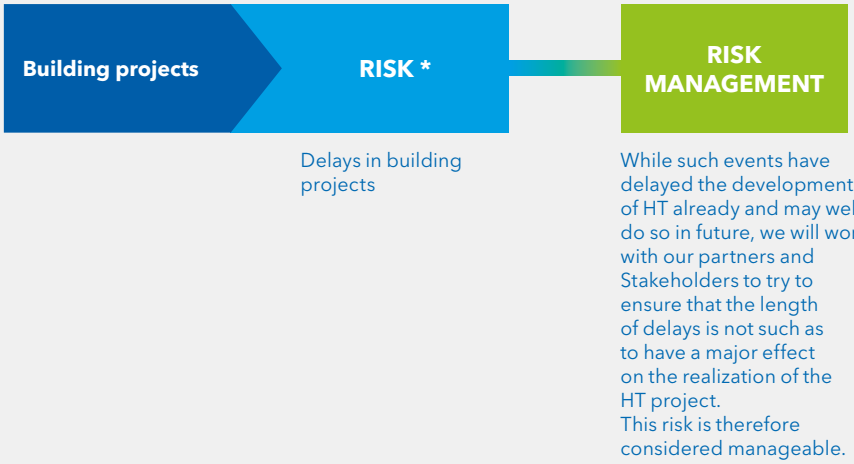
HT has set ambitious diversity goals (initially, in terms of gender and international diversity) and adjust recruitment policies in order to reach these goals. Thus, this risk can be considered low.

* Research is by its nature international, and all world-leading research organisations can recruit international staff. Because of the unique nature of national education systems, the resulting diversity promotes the quality and originality of research produced. Gender balance is unequal in many research institutions. Lack of diversity would reduce the quality of work carried out at HT.

DIFFICULTIES IN COORDINATION BETWEEN STAFF AND RESEARCHERS

* Risk arises from the different cultures and professional approaches

BUILDING PROJECTS



* Despite its early stage, HT has already experienced delays due to both litigation (a common problem in public building projects) and COVID-19 pandemic (an unforeseeable event).

INTEGRATION WITH OR SUPPORT FROM THE NATIONAL COMMUNITY

Lack of integration with our support from the national community

We may say that the greater the openness of HT towards other Italian universities, research centres and business partners, through the provision of research facilities and collaborative projects, and the better it communicates the advantages of mutual collaboration, the lower this risk will be

* HT is designed to be an institute that competes on an international scale. However, it has also to support the national research and business community. So, it can only succeed if it is well accepted by the Italian community. Here again, although this would be a significant risk, the early signs are that it is unlikely to occur. Even before in-house research activity has started, examples of planned collaboration between HT and other Italian institutions and integration into national activities, like PhD programmes, can be traced. Abroad interest in HT has also been manifested by the many invitations to meet and discuss with potential partners from research, industry and medicine and the large audiences that have been attracted by the events HT has organised so far.

INABILITY TO SET UP COLLABORATIONS BASED ON ACCESS TO PATIENT DATA

Inability to set up collaborations based on access to patient data

We are aware of the issues and are working with both individual research clinicians and hospitals as well as with health regional and national authorities to overcome them

* Here we have made a good start with several collaborations with clinicians that are built around cohorts in Molise and Sicily, as well as Covid-19 studies based on patients that are mainly from Lombardy and Veneto. However, our plans will require broad access to national and regional patient data collections, as well as on further collaborations in other fields of research.

COMMUNICATION OF MISSION AND STRATEGY AND MANAGEMENT OF CONFLICTING INTERESTS

* This risk derives from HT's dual mission (to be a centre of international excellence but also to promote the development of national research) and from the collaboration with both private and public partners, who may different objectives and have different visions on HT's role.

From an **external perspective**, the following risks, which are not directly dependent on our capacity to manage them, are:

A The political risk coming from the Italian political scenario. HT is a publicly financed project and it needs support from Government and the political environment. The instability typical of the Italian political landscape is a potential source of risk, even though with low probability. Moreover, the Italian context may not facilitate the attraction of talented researchers and staff. However, it can be pointed out that the way Italy has managed the COVID-19 pandemic has improved its reputation as a country characterised by a collective discipline and ability to manage difficult situations.

B Another external risk is connected to the complex and slow bureaucratic procedures typical of many Italian public bodies and institutions that can delay the HT project realisation timeframe, in particular with reference to the construction of the buildings and laboratories and to the arrangement of the scientific equipment.

C Italian legislation may also not help in attracting talents and in meeting project deadlines.

OPPORTUNITIES

It is possible to identify some opportunities that can favour a successful development of HT, in the short and medium term and that come from both external and internal contexts

RELATIONSHIPS WITH MANY DIFFERENT CATEGORIES OF STAKEHOLDERS

BREXIT AND THE NEXT GENERATION EU

CHAPTER 4

Performance review

4.1 KEY PERFORMANCE INDICATORS

Strategic issue	Strategic objective	KPI	GRI	Value 2020
INNOVATION AND QUALITY OF RESEARCH	**To pursue research and innovation**	No. of research projects signed in 2020		**2**
DEVELOPMENT AND PROVISION OF INFRASTRUCTURES, INNOVATIVE RESEARCH METHODS AND INSTRUMENTS	**To Provide high quality infrastructure, equipment, services and research methods**	net Investments (amount) in buildings/laboratories/technologies (tangible assets)		**59.863.573**
		net Investments (amount) intangible assets		**34.000**
	To ensure high quality of the research area/environment	% progress of infrastructure development projects (projects on schedule) (average)		**81%**
		Square meters dedicated to research laboratories estimation 2021		**24.218**
ATTRACTION, TRAINING OF RESEARCH TALENT, SHARING OF RESEARCH OUTPUTS	**To train next generations of researchers**	No. of Phd students		**16**
		No. of Postdoc fellows		**2**
SCIENTIFIC REPUTATION AND DISSEMINATION	**To promote scientific litteracy and dissemination for a wider audience**	No. of articles and papers		**27**
		No. of dissemination/educational initiatives organized for non-specialist Stakeholders		**1**
RESEARCH -BASED INNOVATION (technology transfer)	**To create new companies and promote technology transfer**	Set-up companies		**Setting out of general and preliminar principles of creating a technology transfer platform in the field of the life science**
SUSTAINABILITY (Environmental, social and economic)	**To operate in an environmental sustainable way**	Energy consumption within the organisation	GRI 302	**KWH 3.038.630**
		Water consumption	GRI 303 - 5	**MC 544,32**
		Energy from renewable sources		**Available estimate 2021**
	To pursue social sustainability	Diversity in governance bodies and employees (gender)	GRI 405-1	**Male 46% Female 54%**
		Diversity in governance bodies and employees (age)	GRI 405-1	**< 30: 9% 30-50: 78% > 50: 13%**
		Diversity in governance bodies and employees (region)	GRI 405-1	**Italy: 90%; Europe: 10%**
		Total number of new employee hires during the reporting period, by age group, gender and region	GRI 401 1a	**No. 42**

PARTNERSHIP, NETWORKING AND STAKEHOLDER ENGAGEMENT	**To attract research partners**	No. of partnerships with universities/IRRCS/ research centres		**3**
		Participation to academic/institutional initiatives started in 2020		**5**
	To contribute to the development and valorisation of the MIND site by promoting common projects and synergies MIND site partners.	No. of initiatives developed in partnership with other MIND area subjects		**2**
	To promote Stakeholder engagement	No. of initiatives with other relevant Stakeholders		**4**
		Social media followers		**13.668**
		No. of website visits		**81.000**
		Sewsletter subscribers		**740**
		Press mentions		**1.356**
		Chairman intervention in events hosted by Stakeholders		**14**
EFFECTIVENESS AND EFFICIENCY OF OPERATIONAL PROCESSES	**To increase effectiveness of operational processes through technological and digital process development**	% of development/ progress status in digital transformation		**20%**

4.2 FINANCIAL STATEMENTS

This section of the document contains the 2020 Financial Statements approved by the Supervisory Board on 25 March 2021.

BALANCE SHEET HT FOUNDATION - ASSETS

BALANCE SHEET – ASSETS	31/12/2020	31/12/2019
A) Accounts receivable from shareholders in respect of unpaid share capital	**0**	**0**
Accounts receivable from shareholders in respect of unpaid share capital - already called up	0	0
Accounts receivable from shareholders in respect of unpaid share capital - not yet called up	0	0
B) Fixed Assets	**60.761.347**	**863.774**
I. Intangible Assets	**34.000**	**0**
4) Concessions, licences, trademarks	13.966	0
6) Intangible fixed assets in progress and advances	0	0
7) Other	20.034	0
II. Tangible Assets	**60.727.347**	**863.774**
1) Land and buildings	41.303.566	0
2) Plant and machinery	2.183	1.421
3) Industrial and commercial equipment	0	0
4) Other assets	426.534	167.069
5) Work in progress and advances	18.995.064	695.284
III. Financial Assets	**0**	**0**
C) Current Assets	**391.575.937**	**333.522.873**
I. Stock	**0**	**0**
II. Accounts Receivable	**308.023.261**	**254.361.946**
1) vs from customers	14.204	0
- due within the subsequent year	14.204	0
- due beyond the subsequent year	0	0
5-bis) tax assets	14.437.105	91.540
- due within the subsequent year	14.437.105	91.540
- due beyond the subsequent year	0	0
5-quarter) other	306.571.952	254.270.406
- due within the subsequent year	306.571.952	254.270.406
- due beyond the subsequent year	0	0
III. Financial assets other than fixed assets	**34.005.952**	**0**
7) Non-interest-bearing accounts with the General State Treasury	34.005.952	0
IV. Cash-in-hand, cash-at-bank and cash equivalents	**49.546.724**	**79.160.927**
1) Banck and postal accounts	49.546.685	79.160.734
2) Cheques	0	0
3) Cash and cash equivalents	39	194

D) Accrued income and Prepayments	**418.717**	**187.462**
Discount on loans	0	0
Other	418.717	187.462
TOTAL ASSETS	**452.756.001**	**334.574.109**

BALANCE SHEET – LIABILITIES & EQUITY	**31/12/2020**	**31/12/2019**
A) EQUITY	**381.959.527**	**332.713.421**
I. Endowment Fund	77.261.869	77.230.557
- Endowment Fund HT	77.261.869	77.230.557
- Endowment Fund CITT	0	0
II. Equity Binding by Third Parties	0	0
III. Equity Binding by Board decision	0	0
IV. Yearly Fund	304.654.974	255.454.097
- Yearly Fund HT	294.745.749	255.454.097
- Yearly Fund CITT	9.909.225	0
V. Statutory reserves	0	0
VI. Reserve for own shares in portfolio	0	0
VII. Other Reserves:	0	1
- Reserve from roundings-off to whole euros (2 decimals)	0	1
- Translation reserve from foreign consolidation	0	0
- Consolidation reserve	0	0
VIII. Cumulative Results of Operation	28.766	28.766
IX. Results of Operation	13.918	0
B) Provisions for contingent liabilities and charges	**0**	**0**
C) Employees' leaving indemnity	**220.938**	**83.791**
D) Accounts Payable	**9.814.189**	**1.738.866**
4) Accounts payable to banks	60	2.092
- due within the subsequent year	60	2.092
- due beyond the subsequent year	0	0
7) Accounts payable to suppliers	9.064.879	1.342.918
- due within the subsequent year	9.064.879	1.342.918
- due beyond the subsequent year	0	0
12) Tax liabilities	302.553	176.978
- due within the subsequent year	302.553	176.978
- due beyond the subsequent year	0	0
13) Accounts payable to social security institutions	286.964	161.107
- due within the subsequent year	286.964	161.107
- due beyond the subsequent year	0	0

14) Other accounts payable	159.733	55.771
- due within the subsequent year	159.733	55.771
- due beyond the subsequent year	0	0
15) Other accounts payable from internal recharges	0	0
- due within the subsequent year	0	0
- due beyond the subsequent year	0	0
E) Accrued liabilities and deferred income	**60.761.347**	**38.032**
- premium on loans	0	0
- other	60.761.347	38.032
TOTAL LIABILITIES & EQUITY	**452.756.001**	**334.574.110**

INCOME STATEMENT (Values in EURO)	**31/12/2020**	**31/12/2019**
A) Value of Production	**12.372.887**	**5.191.961**
1) Income from sales and services	0	0
2) Variations in raw materials, subsidiary materials, consumables and goods	0	0
3) Variations in work in progress on order	0	0
4) Capitalised internal work in progress	0	0
5) Other incomes:	12.372.887	5.191.961
a) Other	235.111	121.445
b) MEF grants to HT:	12.047.001	5.070.516
- of which operating account grants	11.323.493	5.070.516
- of which capital account grants	723.508	0
c) MEF grants to CITT	90.775	0
- of which operating account grants	0	0
- of which capital account grants	90.775	0
B) Expenses	**12.187.935**	**5.126.949**
6) Raw materials, subsidiary materials, consumables and goods	889.440	30.599
7) Services	6.252.890	2.551.697
8) Rent/Lease	164.767	191.545
9) Personnel Costs	4.154.009	2.306.935
a) salaries and wages	3.016.694	1.727.504
b) social contributions	920.692	474.768
c) employees' leaving indemnity	195.321	104.663
d) accruals for pension and similar benefits	21.302	0
e) Other costs	0	0
10) Amortisation, depreciation and value adjustments	723.508	41.585
a) amortisation of intangible assets	9.847	0
b) depreciation of tangible assets	713.661	29.499

c) other value adjustments	0	12.086
14) Miscellaneous running costs	3.321	4.588
Difference between revenues and expenses (A-B)	**184.951**	**65.012**
C) Financial income and costs	**-2.028**	**72**
16) Other financial income:	570	0
d) Other financial income	570	0
17) Interest and other financial costs:	-161	0
17-bis) Exchange gains and losses	-2.437	72
D) Value adjustments of financial assets	**0**	**0**
E) Extraordinary gains and losses	**0**	**0**
Result before taxes	182.924	65.084
22) Income taxes	169.006	65.084
a) Current taxes	169.006	65.084
b) Taxes of prior years	0	0
c) Deferred tax assets and liabilities	0	0
d) Income (expense) from the adoption of tax consolidation /fiscal transparency regime	0	0
23) Net Result	13.918	0

CASH FLOW HT FOUNDATION

Values in Euro	FY 31/12/2020	FY 31/12/2019
A. Cash flow from operating activities (indirect method)		
Profit (loss) for the year	13.918	0
Income taxes	169.006	65.084
Interest expense (interest income)	(409)	0
(Dividends)	0	0
Total capital (gains)/losses from the disposal of assets	0	0
of which tangible assets	0	0
of which intangible assets	0	0
of which financial fixed assets	0	0
1 Profit (loss) for the year before income taxes, interest, dividends and capital gains/losses from sale	**182.515**	**65.084**
Adjustments in connection with non-monetary items with no offsetting items in the net working capital		
Accrual to provisions	0	83.791
Amortisation/depreciation of fixed assets	723.508	29.499
Write-downs of assets due to permanent value impairment	0	12.086
Value adjustments to financial assets and liabilities generated by derivative financial instruments which do not involve a cash flow	0	0

Other adjustments in connection with non-monetary items	0	0
Total adjustments in connection with non-monetary items with no offsetting items in the net working capital	723.508	125.376
2. Cash flow before changes in working capital	**906.023**	**190.460**
Changes in working capital		
Decrease/(increase) of inventory	0	0
Increase/(decrease) of accounts receivable from customers	(14.204)	0
Increase/(decrease) of accounts payable to suppliers	7.721.961	1.338.038
Decrease /(Increase) of accrued income and prepayments	(231.255)	(187.462)
Increase /(decrease) of accrued liabilities and deferred income	60.723.315	(6.218.101)
Other decreases/(increases) in working capital	(53.453.623)	(254.034.597)
Total changes in working capital	14.746.194	(259.102.122)
3. Cash flow after changes in working capital	**15.652.217**	**(258.911.662)**
Other adjustments		
Interest collected/(paid)	409	0
(Income taxes paid)	(7.100)	(102.528)
Dividends collected	0	0
(Use of provisions)	137.147	0
Other collections/(payments)	0	0
Total other adjustments	130.456	(102.528)
Cash flow from operating activities (A)	**15.782.673**	**(259.014.190)**
B. Cash flow from investing activities		
Tangible assets	(60.577.234)	(905.359)
(Investments)	(60.577.234)	(905.359)
Realisation price of divestments	0	0
Intangible assets	(43.847)	0
(Investments)	(43.847)	0
Realisation price of divestments	0	0
Financial fixed assets	0	0
(Investments)	0	0
Realisation price of divestments	0	0
Financial assets not included among fixed assets	(34.005.952)	0
(Investments)	(34.005.952)	0
Realisation price of divestments	0	0
(Acquisition undertakings or business concerns not including cash-in-hand and cash-at-bank)	0	0
Disposal undertakings or business concerns not including cash-in-hand and cash-at-bank	0	0
Cash flow from investing activities (B)	**(94.627.033)**	**(905.359)**

C. Cash flow from financing activities		
Debt		
Increase (decrease) of short-term bank debt	(2.032)	2.092
Loans taken out	0	0
Loans repaid	0	0
Equity		
Share capital increase	49.230.156	332.684.655
(Share capital reimbursement)	0	0
Sale (purchase) of treasury shares	0	0
Dividends (and interim dividends) paid	0	0
Cash flow from financing activities (C)	**332.686.747**	**332.686.747**
Cash increase (Decrease) (A ± B ± C)	(29.614.204)	72.767.198
Exchange differences in cash-at-bank, cash-in-hand and cash equivalents	0	0
Cash at the beginning of the year	0	0
Bank and post office deposits	79.160.734	6.393.730
Cheques	0	0
Cash-in-hand and cash equivalents	0	0
Total cash-at-bank, cash-in-hand and cash equivalents at the beginning of the year	79.160.734	6.393.730
Of which are not freely usable	0	0
Cash at the end of the year		
Bank and post office deposits	49.546.685	79.160.734
Cheques	0	0
Cash-in-hand and cash equivalents	39	194
Total cash-at-bank, cash-in-hand and cash equivalents at the end of the year	49.546.724	79.160.928
Of which are not freely usable	0	0

INCOME STATEMENT – CITT DETAIL

INCOME STATEMENT (Values in EURO)	31/12/2020
A) Value of Production	**90.775**
1) Income from sales and services	0
2) Variations in raw materials, subsidiary materials, consumables and goods	0
3) Variations in work in progress on order	0
4) Capitalised internal work in progress	0
5) Other incomes:	90.775
a) Other	0
b) MEF grants to HT:	0
- of which operating account grants	0

- of which capital account grants	0
b) MEF grants to CITT	90.775
- of which operating account grants	0
- of which capital account grants	90.775

B) Expenses	**90.775**
6) Raw materials, subsidiary materials, consumables and goods	0
7) Services	59.553
8) Rent/Lease	0
9) Personnel Costs	31.222
a) salaries and wages	23.698
b) social contributions	5.929
c) employees' leaving indemnity	1.222
d) accruals for pension and similar benefits	373
e) Other costs	0
10) Amortisation, depreciation and value adjustments	0
a) amortisation of intangible assets	0
b) depreciation of tangible assets	0
c) other value adjustments	0
14) Miscellaneous running costs	0
Difference between revenues and expenses (A-B)	**0**

C) Financial income and costs	**0**
16) Other financial income:	0
d) Other financial income	0
17) Interest and other financial costs:	0
17-bis) Exchange gains and losses	0
D) Value adjustments of financial assets	**0**

E) Extraordinary gains and losses	**0**
Result before taxes	0
22) Income taxes	0
a) Current taxes	0
b) Taxes of prior years	0
c) Deferred tax assets and liabilities	0
d) Income (expense) from the adoption of tax consolidation /fiscal transparency regime	0
23) Net Result	0

The table does not show any comparison with 2019 values, since the activity started in 2020

INCOME STATEMENT – COMMERCIAL ACTIVITY DETAIL

INCOME STATEMENT (Values in EURO)	31/12/2020
A) Value of Production	**13.918**
1) Income from sales and services	0
2) Variations in raw materials, subsidiary materials, consumables and goods	0
3) Variations in work in progress on order	0
4) Capitalised internal work in progress	0
5) Other incomes:	13.918
a) Other	13.918
b) MEF grants to HT:	0
- of which operating account grants	0
- of which capital account grants	0
b) MEF grants to CITT	0
- of which operating account grants	0
- of which capital account grants	0
B) Expenses	**230.293**
6) Raw materials, subsidiary materials, consumables and goods	0
7) Services	90.261
8) Rent/Lease	0
9) Personnel Costs	20.524
a) salaries and wages	15.367
b) social contributions	3.915
c) employees' leaving indemnity	987
d) accruals for pension and similar benefits	254
e) Other costs	0
10) Amortisation, depreciation and value adjustments	119.508
a) amortisation of intangible assets	0
b) depreciation of tangible assets	119.508
c) other value adjustments	0
14) Miscellaneous running costs	0
Difference between revenues and expenses (A-B)	**-216.375**
C) Financial income and costs	**0**
16) Other financial income:	0
d) Other financial income	0
17) Interest and other financial costs:	0
17-bis) Exchange gains and losses	0

D) Value adjustments of financial assets	**0**

E) Extraordinary gains and losses	**0**
Result before taxes	-216.375
22) Income taxes	62.557
a) Current taxes	62.557
b) Taxes of prior years	0
c) Deferred tax assets and liabilities	0
d) Income (expense) from the adoption of tax consolidation /fiscal transparency regime	0
23) Net Result	-278.932

EXPLANATORY NOTE

PART A – INTRODUCTION

The Human Technopole Foundation - hereinafter: HT Foundation, Foundation or HT - was established by Article 1, paragraph 116, former Law no. 232 of December 11, 2016.
The year ended at December 31, 2020 represented the third year of activity of the Foundation and was characterised by the growth of scientific operations through the launch of research activities and the infrastructural development of the HT Campus.

In July 2020, art. 49-bis titled "Urgent measures regarding health, support to work and the economy, as well as social policies related to the epidemiological emergency from COVID-19" former Decree Law no. 34 of May 19, 2020, converted with amendments by Law no. 77 of July 17, 2020, provided for the disbursement, in favour of HT, of the contribution for the year 2020 of 10 million euros and 2 million euros per year starting from the year 2021 "as the State's contribution to the costs of promoting and financing highly innovative research projects carried out in collaboration with companies by the Human Technopole Foundation referred to in Article 1, paragraphs 116 to 123, of Law no. 232 of December 11, 2016, through a structure called "Centre for innovation and technology transfer in the field of life sciences", based in Lombardy".

The establishment of this Centre (also called in the following CITT) aims to promote collaboration between private actors of the innovation system and national and European research institutes, ensuring the wide dissemination of research results and knowledge transfer and supporting patent activity and the exploitation of intellectual property. The Centre also aims to promote collaborative research activities between companies and innovative start-ups for the development of biotechnology, artificial intelligence technologies for genetic analysis, proteomics and metabolomics, technologies for diagnostics, active surveillance, protection of vulnerable individuals, improving the quality of life and active ageing. These financial statements, submitted for your examination and approval, show a positive operating result for the year of 13.918 euros.

THE FOLLOWING TABLE SUMMARISES DATA RELATING TO PUBLIC CONTRIBUTIONS RECEIVED AND THE RELATED USE OF FINANCIAL RESOURCES DURING THE YEAR.

Value of MEF grant paid to HT on 22.10.2018	6.531.520
Value of the Initial Fund paid to HT on 22.10.2018	77.140.000
Cash out from 01.11.2018 to 31.12.2018	137.790
Cash out from 01.01.2019 to 31.12.2019	4.372.803
Ending Financial Balance at 31.12.2019	**79.160.927**
Value of MEF grant paid to HT on 11.08.2020	35.812.898
Value of MEF grant paid to HT on 17.12.2020	24.005.952
Value of MEF grant paid to HT on 17.12.2020 CITT	10.000.000
Cash in for Initial Fund balance from IIT Genova 26.05.2020	31.312
Reimbursement from recharged costs from 01.01.2020 to 31.12.2020	90.063
HT Cash out from 01.01.2020 to 31.12.2020	65.520.110
CITT Cash out from 01.01.2020 to 31.12.2020	28.426
Ending Financial Balance at 31.12.2020	**83.552.616**

Significant events during the year
Please refer to the contents of the Management Report on Operations.

Drafting criteria
The Financial Statements as of and for the year ended December 31, 2020 have been prepared in accordance with articles 2423 et seq. of the Italian Civil Code, adopting the long form, although the conditions set out in art. 2435-bis for preparation in abbreviated form apply. The criteria used in the drafting and valuation take into account the rules present in the national legislation pursuant to Legislative Decree 139/2015, through which Directive 2013/34/EU was implemented. The values in the financial statements are represented in units of full euros by rounding off the relevant amounts. Any rounding differences have been reported under the item "Euro rounding reserve" included in the equity items. Pursuant to article 2423, paragraph 6, of the Italian Civil Code, the Explanatory Notes have been drawn up in euros. The Explanatory Notes provide information on items in the Balance Sheet and Income Statement in the order in which such items are shown in the respective financial statements.

Principles of drafting
The valuation of the items in the financial statements was carried out in accordance with the general criteria of prudence and competence, with a view to business continuity.
In accordance with the accrual principle, the effects of transactions and other events have been recorded in the accounts and attributed to the period to which such transactions and events refer, and not to the period in which the related cash movements (receipts and payments) take place.

In application of the principle of relevance, the obligations relating to recognition, measurement, presentation and disclosure were not complied with when their observance would have an irrelevant effect in terms of providing a true and fair view.

Continuity in the application of valuation criteria over time is a necessary element for the purposes of the comparability of the company's financial statements in different periods.
Recognition and presentation of items in the financial statements have been made taking into account the substance of the transaction or contract.

The Financial Statements comprise the "Balance Sheet", the "Income Statement", the "Cash Flow Statement", the "Notes" and the "Management Report".

The "Balance Sheet" is organised by macro-classes, in accordance with the criterion of increasing liquidity, whilst the groupings and items are subdivided according to type.

The various balance sheet items are shown net of the related adjustment items.
Memorandum accounts are no longer included in the Financial Statements and are described in these Notes.

The Income Statement has been prepared in accordance with the format established by article 2425 of the Italian Civil Code and represents the Company's financial position.

The Income Statement is characterised by the cost and revenue structure of the production carried out, with a scalar development and whose content reflects an order of costs by nature.

The Income Statement is divided into areas that highlight:
Ordinary operations, (items A and B), which consist of the Foundation's typical and non-typical activities and whose economic result is indicated with the definition: "Difference between production value and costs";

Financial management, (items C and D), which refers to charges and income deriving from the provision of funds and their temporary investment pending their use in ordinary operations;
Income taxes (Item 20) consist of direct taxes (IRAP and IRES) levied on taxable income for the year. They have been accounted for by taking into account the taxable income for the year and on the basis of the tax regulations in force.

At the end of the year there were no deferred tax liabilities or deferred tax assets.
The comparison with the previous accounting period is carried out by means of indication in two separate columns of the balance for the current year and that for the previous year.

The **Statement of Cash Flow** is an element of the Financial Statements. It should be noted that the Foundation, in compliance with the provisions of OIC 10, has adopted the indirect method.
The Notes to the Financial Statements have been prepared in order to clarify, complete and analyse the information contained in the Balance Sheet, Income Statement and Cash Flow Statement, as well as to provide information on the valuation criteria applied, and details of changes in the various asset and liability items.

It is an integral part of these Financial Statements and provides information of a descriptive and tabular nature, with particular reference to balance sheet, income statement and financial position.

Exceptional cases pursuant to art. 2423, fifth paragraph, of the Italian Civil Code
There were no exceptional circumstances that made it necessary to resort to exceptions pursuant to art. 2423, paragraph 5 of the Italian Civil Code.

Evaluation criteria applied

Assets
Intangible Assets
These are recorded at their historic purchase cost, including ancillary expenses and VAT (where this is considered non-deductible due to the fact that they are intended for institutional activities), and are shown net of amortisation charged directly to the individual items.

- Licenses, concessions and trademarks are amortised at an annual rate of 20%.
- Leasehold improvements are depreciated at rates that depend on the duration of the contract.

If, irrespective of the depreciation already recorded, an impairment loss occurs, the asset is written down accordingly. If, in subsequent years, the reasons for the write-down no longer apply, the original value is reinstated, adjusted only for depreciation.

Tangible Assets
Tangible fixed assets are recorded at purchase cost, including ancillary expenses and non-deductible VAT, and adjusted by the corresponding accumulated depreciation. Depreciation, charged to the

Income Statement, has been calculated on the basis of the criterion of the residual useful life of the asset, taking into account its use, destination and economic-technical duration:

Asset Type	% Amortisation
Industrial buildings	3%
Plant and machinery	10%
Furniture and fittings	12%
Electronic office machines	20%
Mobile phones	20%
Servers	20%

If, irrespective of the depreciation already recorded, an impairment loss occurs, the asset is written down accordingly. If, in subsequent years, the reasons for the write-down no longer apply, the original value is reinstated, adjusted only for depreciation.

Credits

They are shown at their estimated realisable value and without using the amortised cost method, given that all receivables are due in the short term and therefore the application of the amortised cost method would have insignificant effects.

Financial assets not constituting assets

The issuance of accounting standard OIC 14, has changed, starting from the 2016 financial year, the classification and valuation of cash and cash equivalents by restricting its belonging to bank and postal current accounts that have the requirement of being instantly accessible and usable for any business purpose.

In the light of these provisions, there are two important aspects concerning the assets held in the Foundation's treasury accounts with the Bank of Italy. These assets:

- are not required to be collectible with instant access (given the procedure and withdrawal limits imposed by law and the guidelines agreed with the Ragioneria Generale dello Stato (RGS));
- have strong similarities with the centralised treasury management methods given the impossibility for the Foundation to access these funds directly but only after requesting authorisation and transfer to the RGS.

In accordance with the provisions of the new OIC 14, these assets of the HT Foundation, which are held in treasury accounts with the Bank of Italy, are therefore recorded under "Financial assets not constituting fixed assets" at nominal value.

Equity

The equity of non-commercial entities is intended on a lasting basis to support the acquisition of the necessary productive factors of both a current and investment nature, its nature is therefore definable as a "core mission fund", to be allocated to the achievement of the statutory purposes.

Debts

Debts are entered at their nominal value, which is considered representative of their decreasing value and substantially conforms to the amortised cost criterion.

Payables in foreign currencies have been accounted for on the basis of the exchange rates on the date on which the relevant transactions were carried out; positive or negative differences arising from the valuation of foreign currency items at the year-end exchange rate are credited or debited respectively to the year.

"Payables to suppliers", in addition to the value of payables for invoices received, include the value of invoices to be received for services rendered and orders delivered, not invoiced by the closing date of the financial year.

"Taxes payable" include liabilities for withholding taxes as withholding agent, direct taxes for the year represented by IRAP and IRES as well as indirect taxes. The latter are determined in accordance with a realistic forecast of the tax charges to be paid, taking into account current tax legislation, and are shown net of advances paid.

"Payables to pension and social security institutions" include the value of social security charges relating to employees and collaborators, accrued and not paid at the closing date of the financial year, including payables to supplementary pension funds for those who availed themselves of the option provided for by Law 296 of 27.12.2006 concerning the allocation of severance indemnities as from 1 January 2007.

"Other payables" include residual payables, not included in the previous items, including payables to employees for all liabilities accrued towards them, in accordance with current legislation, including the value of annual leave and other benefits accrued but not taken at the balance sheet date.

Accruals and prepayments
They were determined according to the criterion of actual accrual for the year.
The item "prepaid expenses" includes costs incurred before the end of the financial year for the portion pertaining to the following year.

"Deferred income" includes income realised before the end of the financial year but accruing to the following year.

Severance fund
This represents the actual debt accrued to employees in accordance with the law and current employment contracts, considering all forms of remuneration of an ongoing nature.

The provision corresponds to the total of the individual indemnities accrued in favour of employees at the closing date of the financial statements and is equal to the amount that would have been payable to employees if they had terminated their employment on that date. The amount included in this item is related to the severance indemnity accrued by most of the employees, who decided to keep it in the company, not availing themselves of the option provided by Law No. 296 of December 27, 2006 to pay the severance indemnity accrued from January 1, 2007 to complementary pension funds.

Income tax
Taxes are provided for on an accrual basis and in accordance with current tax regulations.
At the closing date of the financial year, there were no deferred tax liabilities or prepaid tax assets.

Income and expenses
Income and expenses are recognised on an accrual basis, irrespective of the date of collection and payment, and on a prudent basis, also in relation to the preservation of the value of Human Technopole's assets and in anticipation of the continuation of the business.

Operating contributions
In accordance with Accounting Principle no. 1 for not-for-profit entities, contributions received on the account during the financial year, either by law or under contractual provisions, related to specific activities of the Foundation, are recognised on an accrual basis, in relation to the expenses incurred to which they refer, regardless of whether they have been received.

In this regard, the standard provides that "when a correlation between income, in any case of a non-monetary nature, can be identified, it can be correlated with the expenses of the financial year. This correlation constitutes a fundamental corollary of the principle of economic competence of the management events characterising institutional activities and expresses the need to set off the charges for the financial year, whether certain or presumed, against the related income". As these are contributions specifically for the Foundation's ordinary activities, they are recorded in the income statement under item A5) Other revenues and income, where they are indicated separately under the sub-item "Operating grants".

Costs pertaining to the financial year are partly covered by the use of the contribution deferred in the previous financial year, through the recording of the portion pertaining to the future in the item deferred income and partly through the use of the "Operating fund".

Capital contributions
Contributions received in full are recognised in the balance sheet as deferred income and are reduced at the end of each tax period by charging to the profit and loss account an annual portion determined on the basis of the useful life of the asset acquired.

In accordance with the principles set out in OIC No. 16, letter F.II.a), capital grants received from the State (included in the mixed grant awarded annually in relation to investment plans for the acquisition of depreciable assets and other expenses, with specific reference to orders formalised by the end of the financial year) are also recognised on this basis for the portion intended for the acquisition of tangible fixed assets, commensurate with the cost of investments and with the restriction on their use in connection with the Foundation's statutory and legal mission.

Capital grants are accounted for using the "income method", whereby the amount of the grant, recognised in the income statement under "other revenues and income", is deferred to future years through the recognition of deferred income, with depreciation charged to the income statement on the gross cost of the assets equal to the grant for the year.

Memorandum accounts
The commitments entered into by the Foundation are shown in the appropriate section of the notes to the accounts. In particular, the value of contracts for which there is a revocable commitment to make future grants is shown.

PART B - INFORMATION ON THE BALANCE SHEET ASSETS

ASSETS

INTANGIBLE ASSETS

Balance at 31/12/2020	Balance at 31/12/2019	Variations
34.000		34.000

MOVEMENTS IN INTANGIBLE ASSETS

	Installation and expansion costs	Development costs	Industrial patent rights and intellectual property rights	Concessions. licenses. tra-demarks and similar rights	Startup	Intangible fixed assets in progress and advances	Other intangible fixed assets	Total intangible fixed assets
Value at the beginning of the year								
Cost								
Revaluations								
Amortisation (Amortisation Fund)								
Write-downs								
Book value								
Changes during the year								
Increases for acquisitions				20.951			22.896	43.847
Amortisation for the year				6.985			2.862	9.847
Write-downs made during the year								
Other variations								
Total changes				13.966			20.034	34.000
Value year-end								
Cost				20.951			22.896	43.847
Revaluations								
Amortisation (Amortisation Fund)				6.985			2.862	9.847
Write-downs								
Book value				13.966			20.034	34.000

Intangible fixed assets arise from increases during the year ended at 31/12/2020 and consist of: "Concessions, licences, trademarks and similar rights" and "Other intangible fixed assets".
The item "Other intangible assets" refers to "leasehold improvements", carried out by the HT Foundation in relation to small interventions on the building leased from the company Arexpo Spa.

TANGIBLE ASSETS

Balance at 31/12/2020	Balance at 31/12/2019	Variations
60.727.347	863.774	59.863.573

MOVEMENTS IN TANGIBLE ASSETS

	Land and buildings	Plant and machinery	Industrial and commercial equipment	Other tangible fixed assets	Tangible assets under construction and prepayments	Total tangible fixed assets
Value at the beginning of the year						
Cost		1.496		208.580	695.284	905.360
Revaluations						
Amortisation (Amortisation Fund)		75		29.425		
Write-downs				12.086		
Book value		1.421		176.069	695.284	863.774
Changes during the year						
Increases for acquisitions	41.932.554	1.014		343.886	18.299.780	60.577.234
Amortisation for the year	628.988	252		84.421		713.661
Write-downs made during the year						
Other variations						
Total changes	41.303.566	762		259.465	18.299.780	59.863.573
Value year-end						
Cost	41.932.554	2.510		552.466	18.995.064	61.482.594
Revaluations						
Amortisation (Amortisation Fund)	628.988	327		113.846		743.161
Write-downs						12.086
Book value	41.303.566	2.183		438.620	18.995.064	60.739.433

The value of the buildings recognised in the financial statements refers to the purchase of Palazzo Italia, located in Milan at 171 Via Cristina Belgioioso, the headquarters of the HT Foundation. The property was sold by notarial deed dated 31 July 2020 between HT and Arexpo Spa.

It should be noted that the item "Other assets" also includes the assets transferred by the Italian Institute of Technology (IIT) on 20 February 2019 following the signing of the Agreement between IIT and Human Technopole.
IIT. in order to allow the Human Technopole Foundation to be fully operational for the implementation of the "Human Technopole" scientific and research project referred to in Article 1, paragraph 116, of Law no. 232 of 11 December 2016, and the Decree of the President of the Council of Ministers of 16 September 2016, purchased in the interest of HT assets amounting to €90.557.29 forming part of the Agreement entered into between the two Foundations.

In this context, pursuant to and for the purposes of Article 3.2 of the Agreement. IIT has transferred the aforesaid assets to HT.

IN PARTICULAR, THE HISTORICAL COST OF THE ASSETS SOLD BY IIT UNDER THE ITEM "OTHER ASSETS" IS DETAILED AS FOLLOWS:

Asset	Acquisitions from IIT
Furniture and fittings	2.867
Electronic office machines	87.690
Mobile phones	0
Total	**90.557**

THE TOTAL OF "OTHER ASSETS" IS BROKEN DOWN AS FOLLOWS:

II 4) Other tangible fixed assets	Furniture and Furnishings	Electromechanical and electronic office machines	Cell phones
Historical cost	8.426	199.114	1.040
Previous years' amortisation	850	40.557	104
Balance at 31/12/2019	**7.576**	**158.557**	**936**
Acquisitions during the year	3.005	340.881	0
Amortisation for the year	3.474	80.739	208
Balance at 31/12/2020	**7.107**	**418.699**	**728**

The item "Tangible assets in progress and advances" is recorded for an amount of € 18.995.064 and includes the costs incurred for the call for tenders launched by the company Arexpo Spa as well as those deriving from the competition held for the design of the New building, seat of the Foundation's laboratories and the competition held for the installation and construction of temporary structures (so-called Incubators) that house the first laboratories following the construction of the new building.

CURRENT ASSETS

CURRENT RECEIVABLES

Balance at 31/12/2020	Balance at 31/12/2019	Variations
308.023.261	254.361.946	53.661.315

CHANGES AND MATURITY OF RECEIVABLES INCLUDED IN CURRENT ASSETS

	Value at the beginning of the year	Change during the year	Year-end value	Amount due within the financial year	Amount due after the financial year	Of which with a residual maturity of more than 5 years
Changes and maturity of receivables included in current assets		14.204	14.204	14.204		
Tax receivables recorded under current assets	91.540	1.345.565	1.437.105	1.437.105		
Receivables from others included in current assets	254.270.406	52.301.546	306.571.952	306.571.952		
Total receivables included in current assets	254.361.946	53.661.315	308.023.261	308.023.261		

THE ITEM "RECEIVABLES FROM CUSTOMERS AT 31/12/2020 CONSISTS OF THE FOLLOWING:

Description	Amount
Due from customers - Italy	1.586
Receivables for invoices to be issued to clients - Italy	12.618
Total	**14.204**

The item "Tax credits" as of 31/12/2020 is composed of the amount of 1.437.391 euros. corresponding to the VAT credit that HT Foundation has following the purchase of Palazzo Italia and the amount of VAT adjusted for a credit amount of 286 euros.

The recognition of this credit position is in accordance with the results of the response by the Revenue Agency to the "Interpello" request of 29/07/2020 submitted by the HT Foundation.

THE ITEM "RECEIVABLES FROM OTHERS" AS OF 31/12/2020. AMOUNTING TO €306.571.952, IS COMPOSED AS FOLLOWS:

Description	Amount
Due to the State for contributions to be paid out	306.549.630
Others	22.322
Total	**306.571.952**

The item Receivables from the State amounts to €306.549.630 and consists of the contributions indicated in Article 1, paragraph 121 of Law no. 232 of 11 December 2016, relating to the years 2018, 2019 and 2020 for the portion not collected at the closing date of the financial year, as summarised in the following table:

Period	Contributions ex L. 232/2016	Grants disbursed at 12/31/2019	Residual contributions at 12/31/2019	Grants disbursed at 12/31/2020	Residual contributions at 12/31/2020
2017	10.000.000	6.531.520	3.468.480	3.468.480	-
2018	114.300.000	-	114.300.000	56.350.370	57.949.630
2019	136.500.000	-	136.500.000	-	136.500.000
2020	112.100.000	-	-	-	112.100.000
Total	**372.900.000**	**6.531.520**	**254.268.480**	**59.818.850**	**306.549.630**

BREAKDOWN OF RECEIVABLES RECORDED IN CURRENT ASSETS BY GEOGRAPHICAL AREA

The breakdown of receivables at 31/12/2020 by geographic area is not considered significant.

FINANCIAL ASSETS NOT CONSTITUTING FIXED ASSETS

CHANGES IN FINANCIAL ASSETS NOT CONSTITUTING FIXED ASSETS

Balance at 31/12/2020	Balance at 31/12/2019	Variations
34.005.952		34.005.952

	Value at the beginning of the year	Changes during the year	Year-end value
Non-interest bearing accounts with the Central State Treasury		34.005.952	34.005.952
Total financial assets not constituting fixed assets		**34.005.952**	**34.005.952**

Paragraph 4 pursuant to Article 49-bis of the former Decree-Law no. 34 of 19 May 2020, converted with amendments by Law no. 77 of 17 July 2020, added the following sentence to the Law establishing the HT Foundation, in particular, to Article 1, paragraph 121 pursuant to Law no. 232/2016: "The contributions to the Foundation's endowment fund and management fund charged to the State budget shall be credited to a non-interest-bearing account opened with the State Treasury, in the name of the Foundation". Therefore, in compliance with the law, a non interest bearing account no. 25084 was opened with

the Central State Treasury. This account is credited with the annual contribution and the sum necessary for its operation is transferred to the cashier's account with Banca Intesa in accordance with the procedures set out in Ministerial Decree MEF 49506 of 16 June 2010 and subsequent guidelines.

The balance as at 31/12/2020 consists of the following amounts:

- €10mil deriving from the provisions of Article 49-bis former Decree-Law no. 34 of 19 May 2020, converted with amendments by Law no. 77 of 17 July 2020 for the establishment of the CITT;
- €24.005.952 deriving from the portion of the 2018 contribution collected during the current financial year.

CASH AND CASH EQUIVALENTS

Balance at 31/12/2020	Balance at 31/12/2019	Variations
49.546.724	79.160.928	(29.614.205)

	Value at the beginning of the year	Changes during the year	Year-end value
Bank and postal deposits	79.160.734	(29.614.050)	49.546.685
Cheques	0	0	0
Cash and other valuables on hand	194	(155)	39
Total cash and cash equivalents	**79.160.928**	**(29.614.205)**	**49.546.724**

The balance represents cash and cash equivalents at the end of the financial year.

THE ITEM "BANK AND POST OFFICE DEPOSITS" AS OF 31/12/2020, AMOUNTING TO €49.546.685 IS COMPOSED AS FOLLOWS:

Description	Amount
Banca Intesa c/c 162106	49.046.685
Banca Intesa c/c 167570	500.000
Total	**49.546.685**

It should be noted that €500.000 is deposited in a current account with IntesaSanPaolo and constitutes an escrow deposit necessary to issue a guarantee to Arexpo Spa for €1.000.000. This guarantee was required at the time of the assignment of the framework agreement entered into between IIT and Arexpo Spa, which was assigned under the agreement between the Foundation and IIT.

ACCRUED INCOME AND PREPAID EXPENSES

Balance at 31/12/2020	Balance at 31/12/2019	Variations
418.717	187.462	231.255

They measure income and expenses whose accrual is in advance or deferred with respect to their cash and/or documentary manifestation; they do not take into account the date of payment or collection of the related income and expenses, which are common to two or more financial years and can be allocated over time.

THERE ARE NO ACCRUALS OR DEFERRALS WITH A DURATION OF MORE THAN FIVE YEARS AT 31/12/2020.

	Accrued income	Prepaid expenses	Total accrued income and prepaid expenses
Value at the beginning of the year		187.462	187.462
Changes during the year		231.255	231.255
Year-end value		418.717	418.717

THIS ITEM CAN BE BROKEN DOWN AS FOLLOWS:

Description	Amount
Licenses	495
Maintenance and repairs	1.433
Software Services	4.239
IT support and maintenance services	112.181
Science instrumentation maintenance and repair	70.638
Cost PhD Students	200.500
Expenses for employee and collaborator travel	186
Various equipment leases	11.509
Meeting and event organisation expenses	14.640
Advertisements and staff recruitment	1.327
Transport and shuttle services	1.569
Total prepaid expenses	**418.717**

PART B - INFORMATION ON THE BALANCE SHEET LIABILITIES AND EQUITY

EQUITY

Balance at 31/12/2020	Balance at 31/12/2019	Variations
381.959.527	332.713.421	49.246.106

MOVEMENTS ON EQUITY

	Value at the beginning of the year	Allocation of previous year's result		Other changes			Operating result	Year-end value
		Attribution of dividends	Other destinations	Increments	Decreases	Reclassifications		
Endowment funds and reserves	77.230.557			31.312				77.261.869
Management Fund	255.454.097			49.200.877				304.654.974
Euro rounding reserve	1				(1)			
Economic surplus (deficit) for the previous year	28.766							28.766
Economic surplus (deficit) for the year							13.918	13.918
Total net equity	**332.713.421**			**49.232.189**	**(1)**		**13.918**	**381.959.527**

As established by Article 1, paragraph 119 of Law no. 232 of 11 December 2016, the Foundation's assets are made up of contributions from the founding Ministries and increased by further contributions from the State, as well as resources from public and private entities.

The Endowment Fund is made up of the restricted fund for the start-up of the Human Technopole scientific project, provided for by Article 5 of Legislative Decree no. 185 of 25 November 2015, converted, with amendments, into Law no. 9 of 22 January 2016 and initially allocated to the Fondazione Istituto Italiano di Tecnologia (IIT) for an original amount of € 79.900.000 and transferred, in the form of both financial resources and assets in kind, to the Human Technopole Foundation, for the residual amount of € 77.230.557, corresponding to the original amount, net of the charges incurred for the project by IIT.

As dictated by Article 6, paragraph 4, of the Human Technopole Foundation's Articles of Association and Article 3 of the Foundation's Regulation, contained in the Prime Minister's Decree of 27 February 2018, the aforementioned endowment fund is unavailable and restricted to the pursuit of statutory purposes.

Furthermore, during the financial year ended at 31 December 2020, the HT Foundation received an amount of € 31.312 from the Italian Institute of Technology (IIT) as the residue of the Endowment Fund resulting from the closure of the current account dedicated to the management of the "HT Project".

As of the closing date of the financial year 2020, the Endowment Fund was recorded among the items of the Foundation's net equity for a total amount of €304.654.974 and included the contributions indicated in Article 1, paragraph 121 of Law no. 232 of 11 December 2016, relating to the years 2018, 2019 and 2020, for the portion not used at the closing date of the financial year and the portion to be used, of the contributions granted for the "Centre for Innovation and Technology Transfer in the field of Life Sciences".

This fund consists of two different items:
- HT Management Fund of €294.745.749
- CITT Management Fund amounting to €9.909.225

CHANGES IN THE OPERATING FUND ARE SHOWN IN THE TABLE BELOW:

HT Management Fund					
Period	**Contributions ex L. 232/2016**	**Contributions used**			**Contributions to be used**
		FY 2018	**FY 2019**	**FY 2020**	
2017	10.000.000	275.387	5.070.516	4.654.097	-
2018	114.300.000	-	-	68.054.251	46.245.749
2019	136.500.000	-	-	-	136.500.000
2020	112.000.000	-	-	-	112.000.000
Total	**372.800.000**	**275.387**	**5.070.516**	**72.708.348**	**294.745.749**

CITT Management Fund			
Period	**Contributions pursuant to art. 49-bis of Decree Law 34/2020 (conv. Law 77/2020)**	**Contributions used**	**Contributions to be used**
		FY 2020	
2020	10.000.000	90.775	9.909.225
Total	**10.000.000**	**90.775**	**9.909.225**

Total Operating Fund	**304.654.974**

It should be noted, as highlighted in the introductory section of these Notes to the Financial Statements, that the "CITT Management Fund" derives from the contribution granted under the provisions of Article 49-bis of Law Decree no. 34 of 19 May 2020, converted with amendments by Law no. 77 of 17 July 2020, which provided for the establishment of the structure called "Centre for Innovation and Technology transfer in the field of life sciences", specifying that the HT Foundation must adopt specific organisational measures and dedicated management solutions, with the adoption of separate accounting for the use of the resources allocated for this purpose.

The contribution for the Centre for Innovation and Technology Transfer for the year 2020 amounted to €10.000.000 and, following the charges incurred for the start-up phase, it amounts to €9.909.225 as of 31/12/2020.

In compliance with art. 6, fourth paragraph, of the Human Technopole Foundation Statute and art. 3 of the Foundation's Regulation, contained in the Prime Minister's Decree of 27 February 2018, the Management Fund is intended to cover operating expenses.

SEVERANCE PAY

Balance at 31/12/2020	Balance at 31/12/2019	Variations
220.938	83.791	137.147

	Severance pay
Value at beginning of year	83.791
Changes during the year	
Provision for the year	137.147
Profit for the year	
Other changes	
Total changes	137.147
Year end value	220.938

The provision set aside represents the company's actual debt at 31/12/2020 to employees in force at that date.

DEBTS

Balance at 31/12/2020	Balance at 31/12/2019	Variations
9.814.189	1.738.866	8.075.323

CHANGES AND MATURITY OF DEBTS

THE MATURITY OF PAYABLES IS BROKEN DOWN AS FOLLOWS:

	Value at beginning of year	Change during the year	Year-end value	Amount due within one year		Amount due after one year	Of which with a residual maturity of more than 5 years
Payables to banks	2.092	(2.092)	60	60			
Payables to suppliers	1.342.918	7.721.961	9.064.879	9.064.879			
Tax debts	176.978	125.575	302.553	302.553			
Payables to social security institutions	161.107	125.857	286.964	286.964			
Other liabilities	55.771	103.962	159.733	159.733			
Total payables	**1.738.866**	**8.075.323**	**9.814.189**	**9.814.189**			

"Payables to suppliers" are recorded at nominal value and this item includes, in addition to the value of payables for registered invoices, the amount of invoices to be received for services pertaining to the financial year relating to invoices to be received.

THE TOTAL OF THE ITEM "PAYABLES TO SUPPLIERS" AT 31/12/2020 IS COMPOSED AS FOLLOWS:

Description	Amount
Suppliers of goods and services	4.412.816
Invoices to be received	4.652.063
Total	**9.064.879**

The item "Taxes payable" only includes liabilities for certain and definite taxes.
The item "Taxes payable" includes payables for IRAP tax in the amount of € 49.382, net of advances paid during the year in the amount of € 39.050. In addition, there are IRES tax payables of € 80.574.

THE ITEM "TAXES PAYABLE" AT 31/12/2020 IS MADE UP AS FOLLOWS:

Description	Amount
Debt IRAP	49.382
Debt IRES	80.574
Payables for withholding tax on employee income	133.716
Payables to tax authorities for withholding tax on self-employed income	13.725
Other tax liabilities	25.156
Total	**302.553**

"Payables to social security institutions" include the amount of social security charges for employees and collaborators, accrued and unpaid as of 31 December 2020 for an amount of €208.835 and the social security portion of the allocations to the funds for €78.129.

"Other payables" include residual payables, which by their nature do not fall under the previous items, including payables to the Foundation's collaborators for all liabilities accrued towards them. In particular, the amount of payables related to employees' accrued but untaken holidays is €143.741.

BREAKDOWN OF DEBTS BY GEOGRAPHICAL AREA

THE BREAKDOWN OF PAYABLES AT 31/12/2020 BY GEOGRAPHICAL AREA IS SHOWN IN THE TABLE BELOW:

Geographical area	Obligations	Convertible obligations	Payables to shareholders for loans	Payables to banks	Payables to other lenders	Advances	Payables to suppliers	Debts represented by debt securities
Italy				60			9.044.005	
EU							16.434	
Outside EU							4.440	
Total							**9.064.879**	

Geographical area	Payables to subsidiaries	Payables to affiliated companies	Payables to parent companies	Payables to companies controlled by parent companies	Tax debts	Payables to social security institutions	Other liabilities	Debts
					302.553	286.964	159.733	9.814.189
Total					**302.553**	**286.964**	**159.733**	**9.814.189**

ACCRUALS AND DEFERRED INCOME

Balance at 31/12/2020	Balance at 31/12/2019	Variations
60.761.347	38.032	60.723.315

	Accrued expenses	Deferred income	Total accrued income and prepaid expenses
Amount at the beginning of the year	38.032	0	38.032
Variarions during the year	(38.032)	60.761.347	60.723.315
Amount at the beginning of the year	0	60.761.347	60.761.347

THIS ITEM CAN BE BROKEN DOWN AS FOLLOWS:

Description	Amount
Deferred income contributions	60.761.347
Total	**60.761.347**

The criteria adopted in the valuation and translation of the values expressed in foreign currency for these items are reported in the first part of these notes.

In accordance with the indirect method governed by OIC 16, deferred income includes the portion of the capital grant (treated as prepaid income to be deferred) related to depreciable assets acquired during the year, amounting to € 60.761.347.

PART C - INFORMATION ON THE PROFIT AND LOSS ACCOUNT

VALUE OF PRODUCTION

Balance at 31/12/2020	Balance at 31/12/2019	Variations
12.372.887	5.191.961	7.180.926

Description	31/12/2020	31/12/2019	Variations
Revenues from sales and services	0	0	0
Other income and revenues	12.372.887	5.191.961	7.180.926
Total	**12.372.887**	**5.191.961**	**7.180.926**

THE ITEM "OTHER REVENUES AND INCOME" IS COMPOSED AS FOLLOWS:

Operating contribution - HT pursuant to Article 1. paragraph 121 of Law no. 232/2016: amounting to €11.323.493 relating to the portion of the operating contribution, related in accrual terms to the specific activities of the Foundation on account of the expenses incurred (as provided for by accounting principle no. 1 for non-profit entities).

Operating contribution - CITT ex art. 49-bis D.L. 34/2020. converted with modifications by L. 77/2020: amounting to €90.775 related to the share of the operating contribution related to the financing of the "Centre for Innovation and Technology Transfer in the field of Life Sciences". The total amount of the contribution ex lege is equal to €10.000.000; the amount included in the item "Other revenues and income" is the portion pertaining to the year ended at 31 December 2020 used for the start-up phase of the Centre.

Capital contribution - HT: amounting to €723.508, it refers to the capital contribution for the year. calculated on the basis of the depreciation charged to the income statement and determined on the basis of the useful life of the assets acquired during the year and in previous years. The presentation of this contribution derives from the application of the so-called "income method", according to which the amount of the contribution, recorded in the income statement among other revenues and income, is deferred for accrual to subsequent years through the recording of deferred income, charging to the income statement the depreciation calculated on the gross cost of the assets equal to the portion of the contribution pertaining to the year.

Other revenues and income: amounting to €235.111 relating to recharges for the reimbursement of costs and to the contingent asset realised following the cancellation of the IRAP debt for 2019, taking into account that the Foundation has taken advantage of the provisions contained in Legislative Decree 34/2020.

COSTS OF PRODUCTIONS

Balance at 31/12/2020	Balance at 31/12/2019	Variations
12.187.935	5.126.949	7.060.986

Description	31/12/2020	31/12/2019	Variations
Materials. supplies and goods	889.440	30.599	858.841
Services	6.252.890	2.551.697	3.701.193
Use of third party assets	164.767	191.545	(26.778)
Wages and salaries	3.016.694	1.727.504	1.289.190
Social charges	920.692	474.768	445.924
Severance pay	195.321	104.663	90.658
Pensions and similar benefits	21.302	0	21.302
Amortisation of intangible assets	9.847	0	9.847
Depreciation of tangible fixed assets	713.661	29.499	684.162
Other write-downs of assets		12.086	(12.086)
Other operating expenses	3.321	4.588	(1.267)
Total	**12.187.935**	**5.126.949**	**7.060.986**

COST OF RAW MATERIALS. CONSUMABLES AND GOODS AND COST OF SERVICES

These concern the costs incurred for the procurement of consumables and are a direct consequence of the research activities and structural costs incurred by the HT Foundation.

WITH PARTICULAR REFERENCE TO COSTS FOR SERVICES, THE AMOUNT OF €6.252.890 IS COMPOSED OF THE FOLLOWING ITEMS:

Expenses for services - 31.12.2020	Euro Amount
Technical, administrative and legal consulting	832.118
Software support and maintenance services	1.097.052
Insurance	116.209
Fees for collaborators	310.781
Fees for Bodies and Committees	720.836
Maintenance and repairs	1.124.651
Other research support services	384.240
Training	41.680
Communication and publications	251.054
Costs PhD Students	329.618
Other service costs	404.942
Selection and publication services	369.550
Organisational and management support services	270.160
Total	**6.252.890**

PERSONNEL COSTS

This item includes all expenses for employees including merit improvements, category upgrades, contingency payments, the cost of untaken annual leave and provisions required by law and collective agreements.

DEPRECIATION OF TANGIBLE FIXED ASSETS

Depreciation is calculated on the basis of the useful life of the asset and its use in production.

OTHER OPERATING EXPENSES

The HT Foundation did not record any costs of significant size or impact under this heading.

FINANCIAL INCOME AND EXPENSES

Balance at 31/12/2020	Balance at 31/12/2019	Variations
(2.028)	72	(2.100)

Description	31/12/2020	31/12/2019	Variations
Other income	570	0	570
(Interest and other financial charges)	(161)	0	(161)
Profit (loss) on currency exchange	(2.437)	72	(2.509)
Total	**(2.028)**	**72**	**(2.100)**

CURRENT. DEFERRED AND PREPAID INCOME TAXES FOR THE YEAR

Balance at 31/12/2020	Balance at 31/12/2019	Variations
169.006	65.084	103.922

Taxes	Balance at 31/12/2020	Balance at 31/12/2019	Variations
IRES	80.574	0	80.574
IRAP	88.432	65.084	23.348
Total	**169.006**	**65.084**	**103.922**

Taxes for the year have been recorded.

Pursuant to Article 2427, first paragraph, no. 14, of the Italian Civil Code, it should be noted that there are no temporary differences detectable for deferred taxation purposes.

CALCULATION OF IRES

Institutional Activity	Fiscal year 31/12/2020
Income from buildings	113.207
rate IRES	24%
IRES Institutional Activity	27.170

Commercial Activity	Fiscal year 31/12/2020
A) Value of production	
- 5) other revenues and incomes	13.918
B) Costs of production	
- 7) Expenses for services (mixed costs)	(90.261)
- 9) Personnel costs (mixed costs)	(20.524)
- 10) Depreciation and amortisation (mixed costs):	(119.508)
Share of cadastral revenue	(2.265)
Costs non deductible	441.160
Corporate income	222.520
Rate IRES	24%
IRES Commercial Activity	53.404

IRES total	FY ending 31/12/2020
IRES Institutional Activity	27.170
IRES Commercial Activity	53.404
IRES for the year	80.574

CALCULATION OF IRAP

Institutional Activity	Fiscal year 31/12/2020
Personnel costs	
- Gross taxable amount	3.375.372
- Deductions	(675.412)
Net taxable base	2.700.320
Rate IRAP	3.9%
IRAP Institutional Activity	105.313

Decree-Law no. 34 of 19 May 2020, converted with amendments by Law no. 77 of 17 July 2020, on: 'Urgent measures on health, employment support and the economy, as well as social policies related to the epidemiological emergency from COVID-19', in paragraph 1, Article 24, provided that: "The payment of the first instalment of the advance payment of the regional tax on production activities relating to the tax period following the one in progress on 31 December 2019 is [...] not due, to the extent provided for by Article 17, paragraph 3, of the Decree of the President of the Republic no. 435 of 7 December 2001, or by Article 58 of Decree-Law no. 124 of 26 October 2019, converted, with amendments, by Law no. 157 of 19 December 2019; the amount of such payment is in any event excluded from the calculation of the tax to be paid in full for the same tax period."

Therefore, on the basis of the aforementioned provision, the HT Foundation was not required to pay the first instalment, amounting to 40% of the IRAP advance payment due for the tax year 2020. Moreover, again in light of the provisions of Article 24 above, the amount corresponding to the first instalment of the advance payment is in any event excluded from the calculation of the tax to be paid in full for 2020.

In compliance with the law, having to exclude the amount of the first instalment of the IRAP advance payment, equal to €26.034, the final tax to be paid, relating to the Institutional Activity is €79.279, as shown in the table relating to the calculation of the total IRAP.

Commercial Activity	Fiscal year 31/12/2020
A) Value of production	13.918
B) Costs of production	(90.261)
Non deductible IRAP	311.048
Taxable base IRAP	234.705
Rate IRAP	3.9%
IRAP Commercial Activity	9.153

IRAP total	Fiscal year 31/12/2020
IRAP Istitutional Activity	79.279
IRAP Commercial Activity	9.153
IRAP for the year	88.432

IRAP has been calculated according to the provisions concerning noncommercial entities, while IRES has been calculated considering that the real estate owned by the HT Foundation contributes to the formation of income on the basis of the cadastral results, without deduction of expenses or other specific negative components.

PART D - OTHER INFORMATION

DATA ON EMPLOYMENT

Please refer to the Management Report.
The composition of the workforce as at 31/12/2020 is shown below; the staff were hired during 2020, including the core group of people formally hired by IIT in 2018 (12 people). The remaining figures were added to the Foundation's workforce through recruitment advertisements published on the Foundation's website and on major international recruiting sites (Linkedin, Springer Nature, Eurojobsites).

The average number of staff, broken down by category, changed as follows compared to the previous year.

Employee's level	31/12/2020	31/12/2019	Variations
Managers	21	10	11
Mid - managers	17	6	9
Employees	32	12	20
Workers			
Other Employees			
Total Employees	**70**	**28**	**42**

In the management of labour relations, reference was made, for salary and regulatory aspects, to two National Collective Labour Agreements (hereinafter referred to as CCNL): (i) for employees with managerial qualifications, the CCNL DIRIGENTI INDUSTRIA; (ii) for other qualifications, the CCNL CHIMICA-AZIENDE INDUSTRIALI.

	Managers	Mid-managers	Employees	Workers	Other employees	Total Employees
Average number	13	10	17			40

REMUNERATION. ADVANCES AND CREDITS GRANTED TO DIRECTORS AND AUDITORS AND COMMITMENTS UNDERTAKEN ON THEIR BEHALF

	Supervisory Board	Management Committee	Board of Auditors
Fees	422.605	120.000	35.641
Anticipations			
Credits			
Commitments made on their behalf under guarantees given			

COMMITMENTS, GUARANTEES AND CONTINGENT LIABILITIES NOT SHOWN IN THE BALANCE SHEET

The year 2020 saw the formalisation of numerous commitments that will be completed over the next few years, totalling € 85.689.721 including:

- €57.370.728 for the purchase of laboratory equipment and € 1.696.503 for machinery maintenance.
- €1.271.663 for laboratory consumables.
- €9.089.000 for buildings and € 4.735.918 for light constructions
- €717.589 for building maintenance and € 1.319.241 for engineering and architectural services.
- €5.734.000 for technical furnishings and € 1.271.240 for office furnishings
- €2.483.838 for other services and various materials.

IN ADDITION, BANK GUARANTEES HAVE BEEN GRANTED FOR A TOTAL AMOUNT OF €1.021.250, BROKEN DOWN AS FOLLOWS:

Amount	Beneficiary	Expiry date
€1.000.000	Arexpo spa	30/07/2029
€21.250	Immobiliare Mozart sas	31/12/2022

Finally, it should be noted that the sum of €500.000 deposited in a current account opened with IntesaSanPaolo spa constitutes a cash pledge in favour of the bank. This guarantee was given at the time of the issuance of the surety of €1.000.000 in favour of Arexpo referred to in the table above.

It should be noted that in February 2021, the bank guarantee in favour of Arexpo Spa was reduced to the amount of €282.832. The request for the release of the amount of €500.000 held in the current account of IntesaSanPaolo is still pending.

Information on transactions with related parties

The entity has not entered into any transactions with related parties.

Information on agreements not shown in the balance sheet

Please refer to the Management Report and to the previous point on commitments not shown in the Balance Sheet.

Information on significant events after the end of the financial year

In January 2021, construction work on the Incubator Lab was completed and the Labs were handed over to the Foundation after the first compliance checks.

In addition, the repurposing and construction activities started in 2020 continue, in preparation for the acquisition of the Cardo -South Pavilion, the US6 -North Pavilion and the land on which the Foundation's new headquarters will be built.

Information on derivative financial instruments pursuant to Article 2427-bis of the Italian Civil Code

The Foundation does not hold derivative financial instruments.

Information pursuant to Article 1. paragraph 125-bis. of Law No. 124 of 4 August 2017
Pursuant to Article 1, paragraph 125, of Law no. 124 of 4 August 2017, in compliance with the obligation of transparency, it should be noted that the following contributions were received during the year

- €31.312 as the residue of the Endowment Fund resulting from the closure of the current account dedicated to the management of the "HT Project";
- €3.468.480 as residual contributions for the year 2017;
- €56.350.370 as the share of contributions for the year 2018;

This amount represents the residual resources referred to in Article 5, paragraph 2, of Decree-Law no. 185 of 25 November 2015, converted with amendments, into Law no. 9 of 22 January 2016, transferred pursuant to Article 1, paragraph 123, of Law no. 232 of 2016.

It should also be noted that, as provided for by Decree-Law No. 34 of 19 May 2020, converted with amendments by Law No. 77 of 17 July 2020, the Foundation also collected the amount of:

- €10.000.000 as a contribution for the Innovation and Technology Transfer Centre for the year 2020;

Finally, the Foundation has accrued contributions during the financial year, which have not yet been materially received, amounting to €306.549.630, relating to the years 2018, 2019 and 2020.

OTHER INFORMATION

THE TABLE BELOW SUMMARISES THE INCOME STATEMENT FOR THE HT FOUNDATION'S COMMERCIAL ACTIVITY:

	Fiscal Year 31/12/2020
A) Value of production	13.918
5) Other revenues and income - Contributions	13.918
B) Costs of production	230.293
7) Expenses for services	90.261
9) Personnel costs	20.524
- Wages and salaries	15.367
- Social charges	3.916
- Severance pay	987
- Pensions and similar benefits	254
10) Amortisation and depreciation	119.508
- Depreciation of tangible fixed assets	119.508
Difference between production values and costs	(216.375)
22) Income tax for the year	(62.557)
Profit (loss) for the year	(278.932)

Paragraph 3 pursuant to Article 49-bis of Law Decree no. 34 of 19 May 2020, converted with amendments by Law no. 77 of 17 July 2020, in relation to the development of the "Centre for Innovation and Technology Transfer in the field of Life Sciences", specifies how: "The Human Technopole Foundation management solutions, with the adoption of separate accounting for the use of the resources allocated for that purpose."

THE TABLE BELOW SUMMARISES THE INCOME STATEMENT RELATING TO THE START-UP OF CITT:

	Fiscal year 31/12/2020
A) Value of production	90.775
5) Other revenues and income - Contributions	90.775
B) Costs of production	90.775
7) Expenses for services	59.553
9) Personnel costs	31.222
- Wages and salaries	23.698
- Social charges	5.929
- Severance pay	1.222
- Pensions and similar benefits	373
Difference between production values and costs	-
22) Income tax for the year	-
Profit (loss) for the year	-

These financial statements, comprising the balance sheet, the income statement, the notes to the financial statements and the cash flow statement, give a true and fair view of the financial position and results of operations for the year and correspond to the accounting records.

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