



Press kit

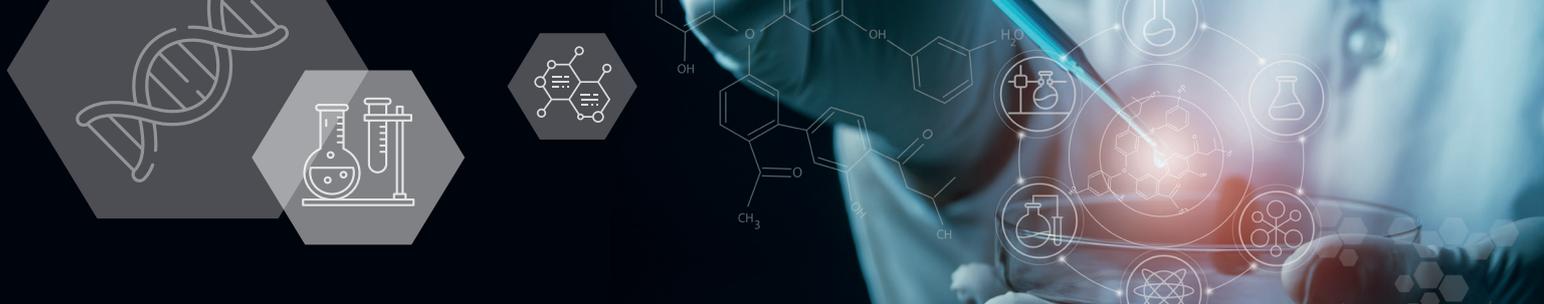
March 30, 2021

Institut Curie:
an original integrated
start-up incubation
model

**Innovation driving
the fight against cancer**

ENSEMBLE, PRENONS
LE CANCER DE VITESSE





Editorial by Prof. Alain Puisieux

Director of Institut Curie Research Center

Since its founding by Marie Curie 100 years ago, Institut Curie has cultivated a rich intellectual heritage that's constantly developing to assist understanding, knowledge and the fight against cancer. This excellence thrives in basic research, firmly rooted in translational research and flourishing in clinical research.

Research constitutes a continuum. By supporting basic research, we naturally develop effective translational research, which is the basis of an inestimable source of innovation to meet the scientific, technological and medical challenges posed by cancer.

My goal is therefore to support this vision, **by consolidating interactions between scientific disciplines and strengthening ties between researchers and clinicians.** An example of this is the creation of mixed research units based on different disciplines, with the recruitment of young researchers at the interface of these disciplines, working together to answer the same question.

Over the course of these very unusual last few months, our researchers have demonstrated their creativity and their commitment with around twenty Covid-19-related projects. The current health crisis illustrates that it is companies working with biotechnology derived from academic research that can offer the most innovative solutions. This is the model we wish to promote at Institut Curie by supporting the founding of companies that will develop our work into concrete applications for patients. **Institut Curie's Incubation Program is a core component of this strategy.**

With the Institut Curie Hospital Group, we are working to firm up an integrated "internal one-stop-shop" vision, to offer researchers and physicians all the tools needed to develop their projects. **The next medical and scientific program will support this ambition.**

Our future and the current dynamic are clear: to support this unique model, which gives real and persuasive results, while seeking the best balance and defending a demanding set of ethics. This is what will shore up **Institut Curie's unique role as a start-up incubation model, and promoter of French innovation.**

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An integrated incubation program, transforming research into innovation to serve patients

A clearly-stated ambition

Since 2016, Institut Curie, a leader in the fight against cancer, **has had an ambitious strategy for the development of research and partnerships with companies that innovate in health.** This new area of strategic focus, led by the Technology Transfer Office, involved not only an overhaul of the strategy for identifying and incubating inventions but also the writing of a policy for the creation of start-ups resulting from engagement with its technologies.

This latest initiative, manifested by the introduction of a dedicated start-up division, supports company creation projects originating from Institut Curie, in three main areas:

- entrepreneurship awareness,
- identification and maturation of start-up projects,
- structuring of company creation projects.



*With this integrated incubation program, through the creation of companies, Institut Curie strengthens its unique positioning, by accelerating the transformation of research results into innovative care **for patients**, a model that is rare in France.*

Amaury Martin, PhD,
Director of Institut Curie's Technology Transfer Office

FEATURE

How does Institut Curie transform research into innovations?



INTERNATIONALLY RENOWNED
scientific and medical
EXPERTISE



3,600 RESEARCHERS, PHYSICIANS AND HEALTH PROFESSIONALS
who work to further knowledge and together propose innovations for the medicine of the future



A dedicated **TEAM** to bolster the technology transfer, through **4 KEY ACTIONS:**

- Identify and evaluate inventions
- Protect and consolidate inventions
- Develop innovations in partnership with companies
- Support the creation of start-ups

Institut Curie's Incubation Program

The Incubation Program's goal is to **encourage the transfer of technologies** developed in Institut Curie through **start-up business development**. It facilitates the maturation of innovative project ideas through the provision of services that focus on the early stages of future business planning, from identification to creation and development.

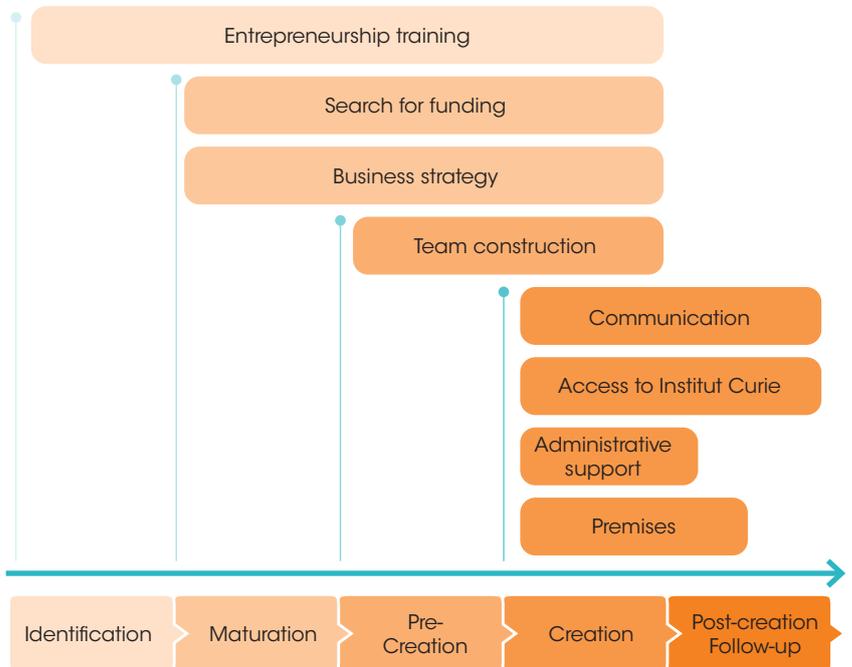
The program offers support to Institut Curie's physicians and researchers to help launch their start-up in the best possible conditions, and avoid some of the main pitfalls that cause start-ups to fail (no market, no economic model, etc.). This support involves the signing of a **support agreement** describing the personalized objectives of the support from the start-up division.

Researchers and health professionals enjoy turn-key, personalized support

Institut Curie's Incubation Program offers researchers and health professionals an array of services to transform research into innovations to serve patients:



- **Entrepreneurship training:** supporting teams as they develop skills
- **Search for funding:** obtaining aid and meeting a network of private investors
- **Define the business strategy:** defining an initial business plan describing the financial and sales strategy, carrying out a market study, confirming the most relevant clinical indication
- **Create the team:** identifying individuals with suitable backgrounds to build the team or to lead the business
- **Work space:** making contacts with partners who can suggest premises
- **Communication:** helping raise the company's profile
- **Administrative support:** legal support for drafting bylaws and shareholder agreement, introduction of scientific competitive exam for public officials
- **Preferential access to laboratories:** beneficial financial terms in the R&D contracts between the company and Institut Curie (if Institut Curie is co-founder)



*Beyond the list of services, our ambition is to provide researchers and physicians with **truly personalized support**. The key to successful incubation lies first and foremost in **the proximity** between the teams and in its **adaptability** to the project.*

Amaury Martin, PhD



The Curie incubator: the next steps for raising the profile of French research through enterprise creation

To sustain this momentum that began a few years ago, and ultimately to help combat France's leading cause of death and boost French research, Institut Curie will strengthen its support for entrepreneurship through several short-term strategies:

- **Invest financially** in the share capital of companies when they are created
- Increase availability of **dedicated work spaces** to accommodate companies in their acceleration phases
- Stimulate **project conceptualization**, particularly in the field of medical devices, health technologies, eHealth, and patient support, and promote start-up creation based on filed patents in a more systematic way
- **Accelerate start-up** growth: solutions for prototyping, regulatory solutions, access to resources within the pharmaceutical industry

Our commitment is to simplify the work of researchers wishing to create companies, by **coordinating our actions** with the dynamic of Carnot Curie Cancer, those of our CNRS Innovation, Inserm Transfert partners, or the actions coordinated with PSL University such as PSL Tech Seed and PSL Tech Acceleration.

Amaury Martin, PhD



FIGURES

5.3
billion dollars

Risk capital financing in Paris reached a record 5.3 billion dollars in 2020, putting France in the leading position in the European Union for investment in start-ups in the start phase.

(Study by NGP Capital - March 2021)

1/10

In 2021, one in every 10 fixed-term employment contracts will be signed with a start-up, and already half a million people in France work for one of the 10,000 start-ups launched in France.

(Study by SyntechNumérique - March 2021).

52%

of HealthTechs have their origins in public research.
(France HealthTech Panorama 2020 from France Biotech)

7th

France is nonetheless in 7th position among European countries in terms of sales generated by health Biotechnologies.

(Biotech Skills Plan LEEM 2020)

An assessment that points to exponential growth

START-UP INCUBATION AT INSTITUT CURIE

Figures that confirm a winning strategy for cancer patients as well as for French research

27

Start-ups created since 2002



4

Start-ups created in 2020



95%

Five-year survival rate



224

Number of jobs created



>€160 M

Total turnover since creation



>€265 M

Total amount raised since creation



>50

Products and services on the market



8

Clinical trials in progress



“Four years after the launch of the new technology transfer strategy, and two years after launch of the Start-Up division, the assessment is highly satisfactory with growth indicators that convey **an underlying momentum**. Institut Curie is in the process of becoming a **BioCluster recognized** for its research and care, but also for its ability to transform this innovation into entrepreneurial success.”

Amaury Martin, PhD

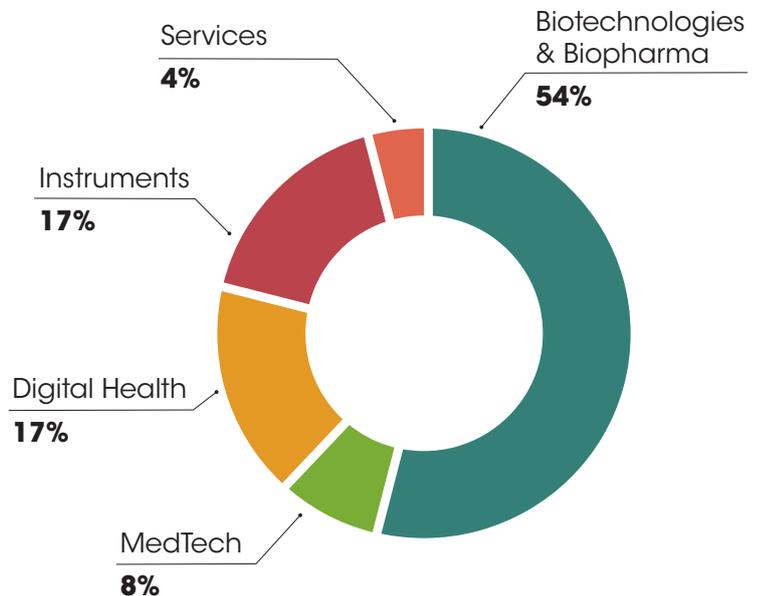


*The results are the outcome of the work of **a dedicated** team, of motivated researchers and doctors within a Tech Transfer Committee, and of support from governance in the form of an investment commission that enables equity investment.*

Amaury Martin, PhD

Breakdown of the portfolio

(on 03/30/2021)



8 projects in incubation

(on 03/30/2021)

ASSETS AND SPECIFIC FEATURES OF INSTITUT CURIE'S INCUBATION MODEL

A 360° APPROACH which features its unique ties with Inserm, the CNRS and Universities, Intellectual property management, internal support for maturation, a partner-based research strategy backed by Carnot Curie Cancer and start-up incubation

AN INTERNAL PROGRAM that promotes a close and trusting relationship between the teams

DAILY INTERACTIONS BETWEEN PHYSICIANS AND RESEARCHERS that help identify the most promising therapeutic options and **access to data**

A QUALITY-BASED GOAL:

no creations if the project is not mature enough or is not funded

A BROAD NETWORK OF PARTNERS:

investment funds, business angels, experts, potential CEOs, benefit from the dynamics of PSL University

A desire TO MAKE EQUITY INVESTMENT IN COMPANIES

to support their development



Focus on

One Biosciences: *Single Cell* technologies to serve patients

Co-founded by Céline Vallot, a researcher at Institut Curie and Home Biosciences - the first venture builder dedicated to biotechnologies in Europe - One Biosciences is a pioneering start-up for the design of new therapeutic approaches based on the power of single cell¹ analysis technologies. The start-up plans to become a leader in precision medicine for complex diseases, in particular cancer.

A meeting of the minds

Since November 2019, the teams in the Technology Transfer Office at Institut Curie have supported and overseen the creation of the start-up, which began operating in July 2020. One Biosciences is headed by Magali Richard, co-founder of Home Biosciences with David Schilansky. Since they met as students at the École Polytechnique, Céline Vallot and Magali Richard have crossed professional paths many times and had the opportunity to exchange their ideas, before together creating One Biosciences through Institut Curie's personalized program. *"What we have created is a new, hybrid type of biotech. At the heart of One Biosciences lies data and our ability to create intellectual property based on data analysis, i.e. computational know-how and licenses."*

Just like in its project team, made up of data scientists from diverse fields, One Biosciences wants to attract the best talent from all sectors. The One Biosciences team is housed at Agoranov, a biotech incubator specializing in data, located close to Institut Curie. The start-up enjoys access to a state-of-the-art single-cell analysis and sequencing platform, along with unique computational know-how from Institut Curie.



Single-cell approaches signal a major paradigm shift, since they enable a level of precision which is unprecedented for understanding living organisms on a brand new scale. We can now confront problems whose origins and mechanisms we did not previously know, to explore new therapeutic solutions for diseases that are difficult to treat.

Céline Vallot, head of the CNRS "Dynamics of Epigenetic Alterations in Cancer" team at Institut Curie, expert in epigenetics and in multi-omic data analysis.

Single-cell technology and data for discovering new biomarkers

In concrete terms, *Single-cell* technology allows us to separate cell samples and measure gene expression in each cell. By mapping the identity of cells and their history, it is easier to understand, at each moment, how cells develop in a tumor and resistance to treatment. *"The idea of One Biosciences is to achieve synergy between Single-cell studies and the power of data sciences, to ultimately discover new biomarkers and therapeutic targets,"* explains Céline Vallot.

A promising future

Over the course of the next months, One Biosciences will pursue its technological and computational developments in order to be able to study large patient cohorts, and thus shore up research collaboration projects with clinical centers of excellence, with the aim of building a portfolio of potential targets with them, in oncology and in health more broadly.

1. These technologies, using microfluidics techniques, enable us to perform single-cell analysis, thus offering completely new prospects for both basic research and medical applications.



A selection of success stories

Biotechnologies, precision medicine, radiotherapy, instrumentation... the business sectors of start-ups originating from Institut Curie are varied, as are their applications and their technologies.

Illustration through a selection of successes...

	<p>Year of creation: 2006</p>	<p>Business sector: Biotechnologies & Biopharma</p>
<p> onxeo.com</p>	<p>Description: Onxeo designs and develops new cancer medications by targeting the tumor DNA repair functions.</p> <p>Technology: AsiDNA™ disrupts and exhausts the tumor cells' ability to repair their DNA, by acting upstream of the DNA's multiple repair pathways.</p>	<p>Target market: Oncology</p> <p>CEO: Judith Greciet</p> <p>Co-founder DNA Therapeutics (ONXEO acquisition) & Member of the Scientific Advisory Board: Marie Dutreix</p> <p>External partners: Invus Public Equities LP, Financière de la Montagne – Funders</p>
<p>Institut Curie: Responsible for the technology, institutional co-founder, R&D partner</p>	<p>Level of technological maturity → Clinical trial</p> <p> 28 employees >€100 M raised Paris</p>	

	<p>Year of creation: 2010</p>	<p>Business sector: Biotechnologies & Biopharma</p>
<p> meiogenix.com</p>	<p>Description: Meiogenix develops new genetic solutions to meet the considerable challenges of agriculture, in terms of quality, reduction in chemical usage and environmental protection.</p> <p>Technology: Targeting of natural rearrangements between chromosomes during crossover phases, for creating innovative products.</p>	<p>Target market: Agri-food</p> <p>CEO: Luc Mathis</p> <p>Scientific Co-founder: Alain Nicolas</p> <p>External partners: Kurma Partners – Investor/Bayer Cropscience & Cornell University – Strategic partners</p>
<p>Institut Curie: Responsible for the technology, institutional co-founder, R&D partner</p>	<p>Level of technological maturity → Technology development</p> <p> 5 employees >€1.2 M raised Paris</p>	



Year of creation: 2016



Business sector:
Biotechnologies & Biopharma

stimunity.com

Description: Stimunity develops biological medications to stimulate the immune system and activate it against the tumor cells or infectious diseases.

Target market: Immuno-oncology & Infectious diseases

Co-founder and CEO: Sylvain Carlioz

Scientific Co-founder: Nicolas Manel

Technology: Use of virus-like particles (VLPs) encapsulating a ligand from the STING pathway to target cells that activate the immune system.

Level of technological maturity

Pre-clinical approval

Institut Curie:

Responsible for the technology, R&D partner



5 employees



>€2 M raised



Paris



Year of creation: 2018



Business sector:
Biotechnologies & Biopharma

honing-biosciences.com

Description: Honing Biosciences develops and improves cell therapies, with a particular focus on cancer and other chronic diseases.

Target market: Immuno-oncology & Bioproduction

Co-founder and CEO: Abdelkader Bousabaa

Scientific Co-founder: Franck Perez

External partners: Elaia Partners - Principal investor

Technology: CellTune™ helps regulate the transportation of proteins in the medication cells.

Level of technological maturity

Technology development

Institut Curie:

Incubator, institutional Co-founder, R&D partner



3 employees



>€2.2 M raised



Paris



Year of creation: 2019



Business sector:
Biotechnologies & Biopharma

Mnemo Therapeutics

Description: Mnemo Therapeutics uses epigenetics to design new immunotherapy approaches.

Target market: Immuno-oncology

Co-founder and CEO: Alain Maiore

Scientific Co-founder: Sebastian Amigorena

Technology: Epigenetic reprogramming of immune cells to improve their persistence and their ability to identify tumor cells.

Level of technological maturity

Technology development

Institut Curie:

Incubator, institutional Co-founder, R&D partner



10 employees



>€7 M raised



Paris



Year of creation: 2020



Business sector:
Biotechnologies & Biopharma

egle-tx.com

Description: Egle Therapeutics develops first-in-class immunotherapies targeting immune suppressor regulatory T-cells (Tregs) for oncology and autoimmune diseases.

Technology: A translational platform to identify new therapeutic targets against Treg cells infiltrating the tumor, and modulators of antagonist and agonist proprietary Treg cells of the IL-2/IL-2R pathway.

Target market: Immuno-oncology & Auto-immune diseases

Co-founder and CEO: Luc Boblet

Scientific Co-founder: Eliane Plaggio

External partners: Takeda – Strategic partner

Institut Curie:

Incubator,
institutional
Co-founder,
R&D partner

Level of technological maturity

Technology development



11 employees



€4.6 M raised



Paris



Year of creation: 2006



Business sector:
Scientific instrumentation

fluigent.com

Description: Fluigent develops, manufactures, and markets fluid control instruments for microfluidics systems.

Technology: Microfluidic pressure-based controllers, compatible with laboratory systems on chip and with a wide variety of fluidic technologies.

Target market: Life sciences

CEO: France Hamber

Scientific Co-founders:

Jean-Louis Viovy, Dominique Stoppa-Lyon & Jacques Lewiner

External partners: Inventures, Innovation Fund- Investors

Institut Curie:

Responsible for
the technology,
R&D partner

Level of technological maturity

Marketing



55 employees



Le Kremlin-Bicêtre



Year of creation: 2016



Business sector:
Scientific instrumentation

inorevia.com

Description: Inorevia develops instruments to automate high-throughput and low volume biological analyses, through a combination of microfluidics and magnetic particles.

Technology: Magnetic forceps able to move, as needed, metallic microbeads coated with a biological material (antibodies, protein, DNA, RNA, etc.) in a circulating fluid.

Target market: Biotechnologies

Co-founder and CEO: Julien Autebert

Co-founder and CEO: Amel Bendali

Scientific Co-founders:

Jean-Louis Viovy & Stéphanie Descroix

Institut Curie:

Responsible for
the technology

Level of technological maturity

Currently in manufacture



18 employees



€4 M raised



Paris

	<p>Year of creation: 2002</p>  <p>Business sector: Digital Health</p>	
 dosisoft.com	<p>Description: DOSIsoft improves the quality and efficiency of cancer treatments by offering a range of independent, universal and complementary software programs.</p> <p>Technology: Software for patient quality assurance for external radiotherapy, personalized dose management for molecular radiotherapy treatments, and treatment planning comprising a proton therapy module.</p>	<p>Target market: Radiotherapy & Nuclear Medicine</p> <p>CEO: Marc Uszynski</p> <p>External partner: Elektra – Strategic partner</p>
<p>Institut Curie: Responsible for the technology, institutional co-founder</p>	<p>Level of technological maturity → Marketing</p> <p> 40 employees  Cachan</p>	

	<p>Year of creation: 2020</p>  <p>Business sector: Digital Health</p>	
 onebiosciences.fr	<p>Description: One Biosciences aims to identify new therapeutic targets through the analysis of data derived from single cell technology.</p> <p>Technology: Clinical Single-cell transcriptomics.</p>	<p>Target market: Oncology</p> <p>Co-founder and CEO: Magali Richard</p> <p>Co-founder and Chairman: David Schilansky</p> <p>Scientific Co-founder: Céline Vallot</p> <p>External partner: Home Biosciences - Principal investor</p>
<p>Institut Curie: Incubator, institutional Co-founder, R&D partner</p>	<p>Level of technological maturity → Technology development</p> <p> 4 employees  €870,000 M raised  Paris</p>	

	<p>Year of creation: 2008</p>  <p>Business sector: Services</p>	
 cytoo.com	<p>Description: Cytoo specializes in the discovery of targets and the selection of therapeutic candidates for the treatment of muscular and neuromuscular disorders.</p> <p>Technology: MyoScreen platform based on the use of patients' muscular cells and a "micromotive" technology promoting the differentiation of muscular cells and standardization of cell cultures.</p>	<p>Target market: Biotechnologies & Pharma</p> <p>CEO: Luc Selig</p> <p>External partners: LEV, La Financière du Faouët, JUMAD AS, CGSE Compagnie, Auriga Partners – Investors</p>
<p>Institut Curie: Responsible for the technology, institutional co-founder</p>	<p>Level of technological maturity → Marketing</p> <p> 18 employees  €14.3 M raised  Grenoble</p>	



The Technology Transfer Office (TTO)

The Technology Transfer Office at Institut Curie, headed by Amaury Martin is **a team of 18 people** working to detect, develop, protect and market inventions of researchers/physicians, to provide support for start-up creation and coordination of Institut Curie's industrial partnerships. It is also the Department in charge of managing the Institut **Carnot Curie Cancer**.

The Start-Up division:

- Jérémie Weber, head of the start-up division
- Adem Bokhari, start-up & innovation project manager

The other divisions:

- Identification/Maturation/Interfaces
- Intellectual property
- Industrial Partnerships & Licensing
- Financial Management & Process

In 2020, the TTO implemented **100 partner research contracts with companies** and generated €11 M in income. The TTO manages a **portfolio of almost 700 patents** with an annual flow of 15 new filings from 60 Invention Declarations handled. **30 transfer projects are currently in the maturation phase.**

Find out more:

<https://techtransfer.institut-curie.org>

About Institut Curie

Institut Curie, France's leading cancer center, combines an internationally-renowned research center with a cutting-edge hospital group, which treats all types of cancer, including the rarest. Founded in 1909 by Marie Curie, Institut Curie employs 3,600 researchers, physicians, and health professionals across three sites (Paris, Saint-Cloud, and Orsay), all of whom contribute to its three missions of treatment, teaching, and research. A foundation with public utility status, Institut Curie is authorized to accept donations and bequests, and thanks to the support of its donors, is able to accelerate discoveries and improve patient treatment and quality of life.

Find out more: www.curie.fr

About Carnot Curie Cancer

Since 2011, Institut Curie has been certified "Carnot Curie Cancer". The Carnot certification is a recognition of excellence awarded to academic research organizations whose quality and involvement in partnership-based research have been demonstrated. Curie Cancer offers industrial partners the opportunity to implement research collaborations utilizing the expertise of Institut Curie's research teams to develop innovative therapeutic solutions for cancer, from therapeutic target to clinical approval.

Find out more: www.instituts-carnot.eu/fr/institut-carnot/curie-cancer

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