DIRECTORY 2012

GENOPOLE®

LABORATORIES
INFRASTRUCTURE
COMPANIES

genopole®

SUCCEED TOGETHER IN BIOTECHNOLOGY

MORE INFORMATION

GENOPOLE®'S WEBSITE

www.genopole.fr

Our website describes what's happening on the biopark in words and pictures. It provides an accurate snap-shot of life on the campus and contains detailed information on the biocluster's activities and stakeholders.

You can view all the Genopole® press releases, get the latest news from campus labs and companies and learn about events on the biocluster.

GENOPOLE® IS ACTIVE IN SOCIAL NETWORKS

A Facebook page called "Genopole Réussir en biotechnologies" provides regular news of website updates and, more broadly, the scientific discoveries and societal & ethical issues raised by new fields of investigation in the life sciences.

www.facebook.com/pages/Genopole-Réussir-en-biotechnologies/175395621643?ref=ts

Genopole® also has a Facebook page called "Les Cafés du gène", dedicated to the public understanding of life science.

www.facebook.com/pages/Les-Cafés-du-Gène/172168977373

You can also view a series of videos on our website or at:
www.youtube.com/user/Genopole

Our presentations are available on SlideShare:
www.slideshare.net/genopole/

And you can keep up with our news at Twitter:
http://twitter.com/#!/Genopole

CONTENTS

GENOPOLE®
FRANCE'S LEADING BIOCLUSTER

Genopole® is France's leading biocluster and has a special focus on biotherapies. It is located just south of Paris (in the towns of Évry and Corbeil-Essonnes).

For the last 14 years, the campus has been growing steadily around the Genethon lab operated by the French Muscular Dystrophy Association (Association française contre les myopathies, AFM) and is currently home to 21 academic labs, 73 biotech companies and university teaching facilities and research institutes.

Since the creation of Genopole® in 1998 (under the impetus of the AFM-Téléthon and with support from the French government and local authorities), the goal was to build a research cluster around the Genethon lab, Genoscope (the French National Sequencing Center) and the French National Genotyping Center. The biocluster now encompasses research labs, biotech companies, technical facilities and teaching and training facilities. Genopole®'s mission is to coordinate and stimulate these strengths. The Genopole® biocluster brings together research laboratories, biotech businesses, technology platforms and education facilities in the field of life sciences. Its role is to unite and guide the campus' talents to invent tomorrow's healthcare and bring innovation to the environmental sector.

GENOPOLE®'S MISSIONS:

- Building and coordinating a research cluster in genomics, post-genomics and related sciences.
- Promoting the growth of the biotech industry by creating or attracting innovative companies and providing them with business support and real estate solutions.
- Reinforcing a life science teaching and training cluster, in collaboration with the University of Évry Val-d'Essonne (UEVE).
- Creating favorable conditions on campus for cross-fertilization between skills.
- Disseminating scientific and cultural information to the general public and contributing to societal debate on issues in genetics research.

genopole®
SUCCEED TOGETHER IN BIOTECHNOLOGY

GENOPOLE®: KEY FIGURES

- **21** academic laboratories
- **73** biotech companies
- € **292,7** million in funds raised by Genopole® portfolio companies
- € **139** million in turnover estimated for 2011 and € **130** million in turnover for 2010 (generated by **35** companies)
- **3** companies listed on the stock market
- **31** products, from the regulatory preclinical phase through to market launch
- **18** shared-access technology platforms and facilities
- Genopole® represents a total of **1,826** direct jobs on the Évry site and **2,107** for the area as a whole. Major real estate developments cover a total of **91,929** square meters.

GENOPOLE® OPERATES WITHIN A HIGH-QUALITY SCIENTIFIC ENVIRONMENT

Genopole® is situated within a dense, high-quality scientific environment at the heart of the Essonne county, with universities (the University of Évry-Val-d'Essonne and the University of Paris Sud 11 in Orsay), research laboratories, elite haute école engineering schools (Polytechnique, Supélec, the Institut des hautes études scientifiques, etc.), government and not-for-profit research institutes (CEA, CNRS, Institute Curie, ONERA, etc.) and major scientific facilities (e.g. the Soleil Synchrotron and the NeuroSpin imaging facility). Genopole® accounts for over a quarter of the Paris Ile-de-France region's public- and private-sector research stakeholders.

This high density of research labs and hi-tech companies is set to grow still further, as a result of forthcoming development in the Saclay area. In fact, Genopole® is located within a "biotech valley" south of Paris and works in synergy with the world-class Medicen Paris Region cluster (dedicated to innovative healthcare technologies and novel therapies). The Genopole® biocluster also benefits from the general attractiveness

of the Paris Ile-de-France region –Europe's leading region for science, in terms of European patent filings. The Paris Ile-de-France region is home to no fewer than 300 public- and private-sector research laboratories and about 200 biotech companies (accounting for 50% of the French total), ranking it third in Europe. Genopole® benefits from one of the highest concentrations of biotech companies in France. The Ile-de-France Regional Council has mandated Genopole® to coordinate the European Biotechnologies Common Tools (Bio-CT) project with four other European bioclusters (in Berlin, Barcelona, Turin and Debrecen), with a view to sharing expertise and tools for project maturation.

GENOPOLE® IS AT THE HEART OF SCIENTIFIC RESEARCH

Genopole® encompasses 21 research labs. Most specialize in genomics, post-genomics and biotherapies (70%) but there are also skills in biophysics/biochemistry (10%), bioinformatics/biomathematics (10%), the engineering sciences (5%) and clinical research (5%). The majority of these labs are administered or accredited by France's national research institutes (CNRS, INRA, CEA and INSERM). This research firepower makes Genopole® the leading French biocluster for genome sequencing, genotyping and human stem cell research, as well as for applications of this fundamental life science research, such as gene therapy of rare genetic diseases and functional genomics in crop species.

GENOPOLE® IS AT THE FOREFRONT OF SYNTHETIC BIOLOGY

Genopole® is one of the few clusters in France to have committed to synthetic biology–an emerging discipline at the interface between genetic engineering and engineering sciences that consists in designing and building new biological circuits with functions that are absent in nature. The economic stakes are high and synthetic biology has many applications in the fields of healthcare (e.g. vaccines), the environment (remediation) and energy (biofuels).

Genopole® has created an Institute of Systems & Synthetic Biology (iSSB) to catalyze research in this new field. A synthetic biology facility started operating in 2010. The iSSB hosts five research groups (including biologists, computer scientists and physicists) and has a biological resource center (for DNA and cell samples), an automated molecular biology facility and a bioinformatics platform based essentially on novel software developed in-house. The Institute currently operates 19 research contracts (including seven European Union collaborations). In the summer of 2013, the iSSB will move into the University of Évry-Val d'Essonne's new Institute of Biology.

GENOPOLE®
FRANCE'S LEADING BIOCLUSTER

In parallel with synthetic biology, the Genoscope lab (headed by Dr Jean Weissenbach) is developing a chemical approach with a view to discovering extremophile enzymes for use in new biocatalytic pathways.

GENOPOLE® SERVING BIOTECH COMPANIES

The Genopole® biocluster is home to a range of start-ups (half of which were founded by public-sector researchers) seeking to turn scientific knowledge into a drug, a medical device or innovative products in the agricultural or environmental sectors. The Genopole® Enterprises team (seven project managers) provides start-up and business development support to campus companies. This support can be managerial (strategy), logistic (premises and scientific facilities) or financial (business development and fundraising). To address its companies' accommodation needs, Genopole® offers real estate solutions that range from an office (from 20 to 150 square meters – just right for recent start-ups), to much larger office/lab space (from 200 to 1200 square meters) for more mature companies. Other plots around Évry (notably in the town of Lisses) are available. Genopole® has also financed the construction and operation of 18 technical facilities (including a cell irradiator, a transmission electron microscope and a high-throughput screening platform), all of which are available for use by campus labs and companies.

In addition to its longstanding partners (such as the Essonne Chamber of Commerce and Industry (CCIE) and the Essonne Economic Development Agency (AEE)), Genopole® Enterprises interfaces with the skills of the Ile-de-France Innovation Center (CFI). A CFI advisor holds a monthly clinic on campus and (in collaboration with Genopole® Enterprises project managers) can help companies to apply for funding from the Regional Innovation Fund and Oséo (the French state innovation agency).

Genopole® has accredited 125 companies since its creation. The biocluster currently hosts 73 companies.

A RANGE OF SHARED SERVICES

Genopole® offers even more help to portfolio companies by providing them with shared services. These notably include IT services: secure networks, website and e-mail hosting and management, update management and access to electronic business databases.

Furthermore, by joining the BioSupport employers group, biocluster companies can access an even wider range of services, including access to a part-time administrative and financial director, quality assurance and IT maintenance.

GENOPOLE®–A KEY PARTNER FOR THE UNIVERSITY OF ÉVRY VAL-D'ESSONNE (UEVE)

Genopole® supports the emergence of new academic sectors in life sciences and hosts a hundred or so PhD students in its labs. It has forged a close collaboration with UEVE –a Genopole® founder member that has never ceased to reinforce its commitment to the biocluster's research activities. A dozen research groups (most of which are joint units with the CNRS, INSERM, INRA and CEA national research institutes) form the UEVE's Department of Biology (awarded a grade "A" ranking by the French Agency for the Evaluation of Research and Higher Education (AERES)). The research fields include biotherapy, stem cells, genomics, post-genomics, bioinformatics, biomaterials and synthetic biology. In 2009-2010, the UEVE created a Master's in Systems and Synthetic Biology, in collaboration with the iSSB. In order to reinforce the campus's attractiveness, the UEVE opened an Institute of Biology in 2011. The Institute will encompass all the university's existing biology research groups and some new ones. The Institute will also provide high-quality teaching and training in genomics and post-genomics as applied to healthcare, the environment, bioinformatics and complex systems engineering. It will host 500 students and 200 researchers and lecturers in bioinformatics and biomathematics (i.e. "dry biology").

GENOPOLE®
FRANCE'S LEADING BIOCLUSTER

GENOPOLE® – A STAKEHOLDER IN LOCAL AND SCIENTIFIC LIFE

Genopole® is an active stakeholder in the Évry Center Essonne area's economy. Along with the UEVE and several local engineering and business schools, Genopole® helped to found the Évry-Val-de-Seine Science & Education Cluster (PSEVS), which develops university teaching and research activities in and around Évry. The cluster also participates in civic debate *via* a year-round series of events, including the "Gene Café", French National Science Week, seminars, debates and the "DNA School" workshops in collaboration with Genethon. During these meetings, campus scientists explain their research, exchange points of view with the public and address potential concerns related to research in the field of genetics. This is one of the biocluster's clear missions: to help disseminate scientific information, address controversial issues raised by scientific research and place life science in the context of the human and social sciences. In 2010, Genopole® started to organize a five-year cycle of "Life Science and Society" seminars, in collaboration with the Ile-de-France Institute for Research, Innovation and Society. Qualified persons from various horizons (researchers, sociologists, lecturers and journalists, for example) discuss the ethical problems raised by advances in science (synthetic biology, stem cells, GMOs, nanotechnology, biologics, etc.) and try to define ways of implementing constructive dialogue between the world of science and the general public so that people can form an educated opinion.

NEW DEVELOPMENTS ON THE BIOCLUSTER

For 13 years now, Genopole® has continually demonstrated its acknowledged expertise in the healthcare sector. Genopole® is pursuing this strategy as the age of personal, genetic medicine dawns, with progress in cell therapy, gene therapy and nanotechnology. It is now possible to sequence a patient's entire genome relatively cheaply; this will enable us to evaluate risk factors and choose the most effective treatments and administration regimens. Genopole® is fostering the development of personalized medicine. However, the biocluster is not limited to the medical field and Genopole® members are variously working on yellow biotech (the environment), green biotech (agronomy) and white biotech (industry and bioenergy).

In fact, Genopole® has addressed the issue of sustainable development by launching a business plan competition for innovative greentech start-ups. Genopole®'s third development theme is its international dimension; the biocluster has committed to pro-actively prospecting for biotech companies worldwide.

GENOPOLE®'S AMBITIONS

After 14 years of existence, France's leading biocluster is developing a dynamic strategy for 2020-2025 focused on the progression of personalized medicine and innovations in environmental protection. Thanks to the steadfast support of its partners and founding members, Genopole® has become France's leading biocluster dedicated to research in genomics and genetics, and to the development of biotechnologies. Today, Genopole® is finding new paths of development and identifying sectors with great promise for the future.

Its horizon 2025 strategy is built upon a creative vision of values:

- For science: The Genopole® model, which unites research labs, biotech companies, technical platforms and learning facilities, is evolving to include mini-clusters within the site. Genopole® will thus be able to contribute to the creation of new activities in France in future-looking sectors such as human pluripotent stem cells, biomanufacturing, synthetic biology and telemedicine.
- For business creation: Genopole® is proud to have implemented in France a unique process for accompanying creators of biotech startups. A team of project managers provides guidance and assistance to solidify the initial concept, mobilize the necessary competencies (legal, managerial, scientific, etc.) and raise capital (seed funds, angel and venture capital investors, government subventions, etc.). Today, Genopole® wishes to extend the reach of its know-how to more mature companies to ease their development and facilitate their passage to a larger form of business with the additional objectives of maintaining their presence on the site and stimulating job creation.
- For the territory: Genopole®'s image contributes to those of the region and the nation. The biocluster is bringing new competencies aboard to increase its international visibility and renown, particularly in China, the United States and Canada, to favor the arrival of foreign businesses on the site.
- For society: Another unique aspect of Genopole® is its efforts to share knowledge with the public, in particular to address increasing concerns for ethical issues raised by scientific progress.

GENOPOLE®'S DEVELOPMENT PROJECTS

A HOSPITAL-INTERFACED CLINICAL AND TRANSLATIONAL RESEARCH CENTER (CRCT)

The South Ile-de-France Medical Center (the CHSF, with 1,017 beds, 20 operating theaters and 130 consultation rooms) opened its doors, opposite the Genopole® biocluster. The CHSF is the second largest hospital campus in the Paris Ile-de-France region. Genopole® has seized this opportunity to create a Clinical and Translational Research Center (Centre de recherche clinique et translationnelle, CRCT) with the CHSF and the AFM-Téléthon.

From the bench to the bedside and back, the CRCT will accelerate the transition from lab research to applications in the medical sector and help disseminate innovations in patient care. Researchers, companies, physicians and patient associations will interact and work together under the same roof, with a view to improving the entire healthcare chain. Without being too restrictive, the CRCT will give priority to locally developed gene and cell therapy research projects–particularly rare genetic diseases (in collaboration with the French Muscular Dystrophy Association AFM-Telethon) and chronic diseases such as diabetes or cardiovascular and osteoarticular diseases.

The CRCT will start operating in 2013, in a 300m² annex within the hospital itself and will subsequently deploy to a 2,700m² building next to the Genethon Bioprod facility. The €16,5 million required to fund the CRCT will be provided by the Ile-de-France Regional Council (€10 million), Essonne County Council (€5 million) and the European Regional Development Fund (€1,5 million).

BUILDING CYTOPOLIS – "STEM CELL CITY"

The development of stem cell research and its valorization via new therapies is a priority axis at Genopole®. The purpose of the scientific, medical and industrial hub Cytopolis is to explore and develop the potential of stem cells for *in vitro* pathology modeling and regenerative medicine. The hub will benefit from the presence of other entities within the biocluster:

- I-Stem (Inserm, UEVE, AFM-Telethon), a European leader in human pluripotent stem cell research, the Center for Stem Cell Studies (CECS, AFM-Telethon), the Laboratory for the Genomics and Radiobiology of Keratinopoiesis (CEA) as well as the Inserm unit Stem Cells and Cardiogenesis, focused on heart disease;
- The Sud-Francilien Hospital Center located close to Genopole®;
- The Clinical and Translational Research Center;
- The CellMill biomedical platform of EctyCell, an affiliate of Cellectis. CellMill will provide an iPS cell bank comprising numerous diseases. The objective of CellMill is to industrialize iPS cell cultures for the development of cellular models that represent the physiology, pathology and genetic diversity of human disease. The cells will serve as tools not only for fundamental research, but also for molecular screening in pharmaceuticals and cosmetics;
- The Translational Research & Development Institute (IRD-T), whose purpose is to attract academic laboratories and resolve challenges in the industrial and medical application of stem cell technologies. Indeed the growth of cellular biotherapies and the industrialization of cellular models will profoundly change life sciences. It is thus necessary to start studying today the path toward industrialized cellular products and the automation and miniaturization of processes.

BEYOND WORK: A BIOCLUSTER FOR LIVING, PLAYING AND INTERACTING

The success of scientific clusters such as Genopole® depends on the synergies created between the various laboratories, companies and platforms. With this in mind, the SEM* Genopole® is creating a life center on the campus. Situated along the N7 national roadway, the 20,000m² site will offer food services, a gym, numerous businesses (newspaper stand, bar, pharmacy, bank, tailor, florist, etc.), a hotel, a residence for researchers and physicians and more. The life center is scheduled to open in late 2014.

BECOMING A CENTER OF EXCELLENCE FOR BIOMANUFACTURING

The marked emergence of biologics and biotech-derived drugs has prompted Genopole® to commit to biomanufacturing. Several projects in this field have been launched. A 1,300m² biomanufacturing center is being developed at the very heart of Genopole® for the custom production of research, preclinical and ultimately clinical batches of recombinant proteins, and more particularly monoclonal antibodies.

Genopole® has also invested €8 million in the AFM's Genethon Bioprod vector biomanufacturing facility. This unit will make France one of the world leaders for the production of clinical-grade gene therapy products. Furthermore, Genopole® has signed an agreement with the Quebec-based vaccine company Medicago on the opening of a research lab on the biocluster in 2012–the first step towards establishment of a commercial vaccine production facility.

DEPLOYING A DNA ENCAPSULATION FACILITY

Currently, DNA is conserved mainly using cryopreservation (at -20°C or -80°C). However, this technique does not protect DNA from free radical damage and thus does not ensure the long-term integrity of the entire DNA molecule. Furthermore, for large collections, cryopreservation results in large operating and maintenance costs, and the technique is vulnerable to equipment failures.

To address these issues, Genopole® has acquired the DNAShell® preservation technology. This alternative storage method was developed by the Genopole® company Imagene. DNAShell® provides very long-term DNA preservation at room temperature via an anhydrous and anoxic (absence of water and oxygen) minicapsule. The DNA molecule is thus protected from degrading agents. With this new technology, DNA integrity can be preserved for decades—and possibly centuries—at low costs.

Scheduled for service startup in 2013 by Genopole®, the fully automated high-throughput DNA extraction and encapsulation facility will be able to process a thousand samples per day, thus responding to the needs of biobanks and other national biological resource centers.

* Société d'économie mixte; a type of public-private partnership

THE GENOPOLE® TEAMS

To provide researchers and entrepreneurs with a comprehensive range of on-site resources and support services, Genopole® has five teams of expert staff: Research/Enterprises/Communication/ Global Infrastructure/International.

KEY MISSIONS

- Building and coordinating a research cluster in genomics, post-genomics and related sciences.
- Promoting the growth of biotech *via* start-up support, business development and relocation services.
- Reinforcing a life science teaching and training cluster, in collaboration with the UEVE.
- Disseminating scientific and cultural information.

PRESIDENT

Thierry Mandon
President of Genopole®,
Deputy of Essonne
Mayor of Ris-Orangis
mandonthierry@gmail.com

GENERAL MANAGEMENT

Pierre Tambourin
Chief Executive Officer
pierre.tambourin@genopole.fr

Naceur Tounekti
Deputy Director
naceur.tounekti@genopole.fr

INTERNAL RESOURCES DIRECTORATE

Catherine Fournet
Director, Internal Facilities and Operations
catherine.fournet@genopole.fr

GENOPOLE® RESEARCH [PAGE 13]

Pierre Tambourin
Chief Executive Officer
pierre.tambourin@genopole.fr

GENOPOLE® ENTERPRISES [PAGE 14]

Éric Lameignère
Director, Genopole® Enterprises
eric.lameignere@genopole.fr

GENOPOLE® GLOBAL INFRASTRUCTURE AND PLATFORMS [PAGE 16]

Emmanuel Dequier
Director, Global Infrastructure and Platforms
emmanuel.dequier@genopole.fr

GENOPOLE® INTERNATIONAL [PAGE 17]

Éric Lameignère
Director, Genopole® Entreprises
eric.lameignere@genopole.fr

Gabriel Mergui
Consultant for international relations
gabriel.mergui@genopole.fr

GENOPOLE® ENGINEERING [PAGE 18]

Emmanuel Dequier
Director, Genopole® Engineering
emmanuel.dequier@genopole.fr

GENOPOLE® COMMUNICATION [PAGE 19]

Nicole Chémali
Director, Communication and Public Relations
nicole.chemali@genopole.fr

GENOPOLE® RESEARCH

Genopole® Research's mission is to (i) reinforce the biocluster's research strengths, (ii) structure and coordinate scientific life within the cluster and (iii) contribute to the development of new academic sectors.

The Genopole® Research team provides research groups and individual researchers with opportunities for developing their research and exploiting their results. Our dedicated team and tools enable researchers to move into functional, customized lab space. Genopole® can provide support and funding for taking on staff and buying equipment, as well as access to a range of shared-access facilities and a high-quality program of scientific events.

- Genopole® Research implements a pro-active policy for attracting top-class researchers and research groups to the biocluster.

- Genopole® Research supports fast-expanding research programs on:
  - stem cells and biotherapies;
  - synthetic and systems biology;
  - proteomics and metabolomics;
  - biomaterials;
  - and many other topics.

- Genopole® Research also fosters the emergence of new scientific leaders: in 2001, Genopole® created its ATIGE grants to enable young researchers to set up and grow a group within an academic laboratory on the Genopole® biocluster. After a call for research proposals, the ATIGE recipients are selected by an independent review committee. Fellows receive a project grant of €76,500 per year for three years.
  Since 2001, a total of 23 ATIGE fellowships has been awarded.

- Genopole® Research also promotes the "reverse brain drain" by helping French-trained researchers to move back after doing their postdoc work abroad. Candidates are selected on the basis of scientific excellence and, to date, 70 postdocs have thus received a grant-in-aid of €57,000 per year for two years, in order to undertake a research project on the Genopole® campus. After these two years, all the recipients have found positions in an academic lab, a company or a teaching institution.

- Genopole® Research coordinates scientific events with biocluster stakeholders and their off-campus partners by promoting interdisciplinarity and mutual knowledge of research activities (notably for PhD students and postdocs). Genopole® Research helps to fund and organize a rich program of high-level scientific events and meetings: colloquia, international symposiums, workshops, joint clinical & fundamental research days, summer schools, multidisciplinary workshops, think tanks and much more.

- Genopole® Research contributes to the development of new academic fields, the constitution of joint national research institute/university units and the creation of the Institute of Biology, in collaboration with the UEVE.

GENOPOLE® ENTERPRISES

Genopole® Enterprises's mission is to promote the creation of hi-tech companies and provide business support from the first day (the genesis of the business idea) through to the successive funding rounds. The goal is to transform the results of life science research into drugs or industrial products, build a truly world-class biocluster and contribute to the emergence of French biotech.

PERSONALIZED PROJECT SUPPORT

The Genopole® Enterprises team is made up of experienced project managers with complementary backgrounds. It covers all the operational phases in business creation and development. Genopole® works closely with other business support organizations and the financial community to provide budding or experienced entrepreneurs with scientific, managerial, logistic and financial assistance. A committee of independent experts helps the Genopole® Enterprises team to evaluate and refine business plans. Genopole® portfolio companies and entrepreneurs are also eligible to receive pre-seed finance from the G1J Ile-de-France pre-seed fund.

GENOPOLE® ENTERPRISES IS ACTIVE IN FOUR MAIN AREAS

- Helping entrepreneurs to transform their ideas into market-validated companies: fundraising, industrial alliances and turnover generation.
- Encouraging existing companies to move to the top-class Genopole® campus.
- Promoting the development of Genopole® portfolio companies: winning international business, in- and outlicensing operations, product and service commercialization, etc.
- On-site networking, with monthly business clubs for promoting dialogue on key corporate issues.

ACCREDITATION: A SIGN OF EXCELLENCE

Before receiving financial and project support from Genopole®, each candidate for business incubation is evaluated by Genopole® Enterprises and undergoes validation by a committee of independent experts in business, finance and science. Accredited companies obtain full access to Genopole® services and a special network of business development partners. Established companies wishing to benefit from preferential access to the biocluster's environment and facilities can also apply to the Genopole® Executive Board for accreditation.

Since 1998, Genopole® has initiated or supported the creation and the development of 125 companies.

THE G1J ILE-DE-FRANCE PRE-SEED FUND

PROVIDING BIOTECH COMPANIES WITH EARLY-STAGE FUNDING

G1J Ile-de-France is a biotech-dedicated, pre-seed fund that was set up in collaboration with France's Caisse des Dépôts et Consignations state savings and investment bank. Over the period 2000-2011, the fund invested €2,4 million in Genopole® portfolio start-ups and has leveraged investment totaling €163,8 million in 30 companies.

Since mid-2008 (and an additional €5 million round of fundraising), the G1J Ile-de-France has extended its activity to early-stage investment in innovative companies throughout the Paris Ile-de-France region.

Thus, G1J Ile-de-France works hand-in-hand with all the region's company incubators to promote the emergence of promising projects which, thanks to early-stage funding and support, will be able to attract investors at the various steps in corporate life. Since 2010, management of the portfolio was entrusted to CapDecisif Management.

G1J IdF can invest up to €300,000 per company (in equity and/or as share warrants).

G1J ILE-DE-FRANCE'S SHAREHOLDERS

- CDC Entreprises FPMEI & FFI-B
- Ile-de-France Regional Council
- MGEN
- Groupe Industriel Marcel Dassault (GIMD)
- Banque Populaire Rives de Paris
- Société Générale/Franpart
- The French Muscular Dystrophy Association (AFM-Téléthon)
- Merck Serono Biodevelopment
- Crédit Agricole Ile-de-France
- Investissement Québec
- Fonds des travailleurs québécois (FTQ)
- Essonne Chamber of Commerce & Industry
- Crédit Agricole Capital Investissement & Finance
- Biogemma
- Matignon Développement 3
- Laboratoires Servier
- Accor
- IBM
- Safidi/Groupe EDF
- Agro Partenaires Participations 2

Contact:
Gilles Avenard, **President of the Executive Board**
g1j@genopole.fr

GENOPOLE® GLOBAL INFRASTRUCTURE AND PLATFORMS

The "Global Infrastructure and Platforms" department provides the biocluster's scientific and industrial community with costly research infrastructure and breakthrough equipment. The 18 shared-access technical facilities have been designed to meet the research needs of campus laboratories and companies and boost the biocluster's attractiveness as a place for doing science and business.

THE GENOPOLE® INFRASTRUCTURE TEAM:

- Identifies the needs of campus companies and labs and then drives the creation of shared-access facilities and services. A DNA encapsulation facility is on the way and the "L2A2" extension of the Center for Exploration and Experimental Functional Research (CERFE) is planned.
- Defines and monitors criteria in terms of the accessibility, marketing and quality of the facilities and checks that the latter are self-financing.
- Monitors and optimizes the facilities' operational quality.
- Coordinates measures for increasing use of the various platforms.
- Establishes a network between companies and laboratories, with a view to boosting competitiveness and increasing the efficiency of technology transfer.
- Provides shared access to semi-heavy equipment.
- Coordinates the biocluster's technical activities by organizing training workshops for site staff and thematic seminars on a particular technology or instrument.

GENOPOLE® INTERNATIONAL

Thanks to the quality of its research skills and infrastructure and the dynamism of its life science businesses, the French biotech industry is now ranked 3rd in Europe. As France's leading biocluster, Genopole® has contributed significantly to this success. The biocluster was accredited by the Paris Region Economic Development Agency (ARD) and the Ile-de-France Regional Council as a "Paris Region International Business Location". Since the creation of the cluster in 1998, the Genopole® team has acquired experience and expertise that are often requested by other bioclusters (mostly newly ones) around the world. Genopole® International works in close collaboration with the Medicen Paris Region cluster, the Essonne Economic Development Agency regarding prospecting missions in the USA and Japan, the Essonne Chamber of Commerce and Industry and the Paris Region Economic Development Agency (ARD). It has three major objectives:

1/ BUSINESS DEVELOPMENT

- Helping start-ups to grow their business internationally.
- Helping companies identify and implement international collaborations by attending the sector's major events: BIO, BioMed, BioSquare, BioVision, BioJapan, BioForum Shanghai, EU-MIT Career Fair (for French expats), etc.

2/ MARKETING THE BIOCLUSTER

- Raising awareness of Genopole® member labs and companies and the biocluster's economic and institutional partners with the international biopharmaceutical industry, foreign research organizations, investors and bioincubators.
- Consolidating existing relationships and collaborations.

3/ BECOMING A KEY PLAYER IN THE EUROPEAN RESEARCH AREA

- Coordinating or participating in European projects: Natibs , BioLink and Bio-CT, a multicluster project which seeks to pool management tools and expertise for technical facilities, the "reverse brain drain" and the maturation of innovative life science start-ups.
- Encouraging French-trained expat researchers or entrepreneurs to return to France.

GENOPOLE® DEVELOPING EXCHANGES WITH CHINA

As part of the twinning relations between the Essonne Department and the city of Wuhan, China (in the province of Hubei, west of Shanghai), Genopole® has entered into a partnership with the Wuhan Biolake cluster, one of the three, government-identified Chinese pilot sites for biotech development.

Genopole®'s signature on the Sino-French framework agreement was the first of its kind with Wuhan. The partnership encompasses marketing and operational support (location, raising capital, establishing R&D units, etc.) for the establishment of Chinese biotech companies in France, and French biotech companies in China. In March 2012, Genopole® had the pleasure of welcoming a delegation from Wuhan; its members had come to France to sign a collaboration agreement with UbiFrance, a French agency for international business development. Then, in April 2012, Genopole® was present for the inauguration of the Sino-French biotechnology center created within the Biolake biopark.

GENOPOLE® ENGINEERING

Genopole® is continuously working to enhance its international profile and has forged some close collaborations with various bioclusters abroad. Several countries (notably developing ones) wishing to develop bioparks or biotech clusters have asked to access Genopole®'s expertise. The prominence of these requests and Genopole®'s will to acquire an international dimension prompted the creation of the Genopole® Engineering division.

Several collaborations have already been implemented:

SOUTH AFRICA

Genopole® signed its first ever international collaboration with South Africa. The project involved hosting and training a manager from Pretoria's biopark. Since then, and in response to a request from the Ile-de-France Regional Council, Genopole® Enterprises has been reviewing the viability of business plans generated by the Egolibio biopark in Johannesburg.

SAUDI ARABIA

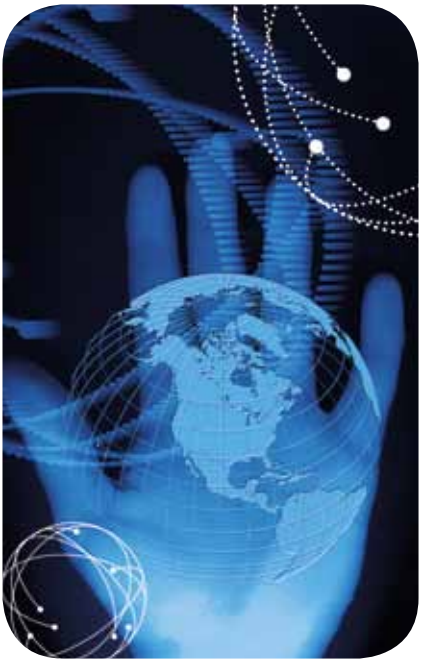
In 2008, under the auspices of the French Ministry for Research and Higher Education, Genopole® signed cooperation contracts with two Saudi Arabian universities. These contracts followed on from the framework agreement signed by French President Nicolas Sarkozy on January 13, 2008, during his visit to Saudi Arabia, with a view to developing academic, research-based collaborations and sharing skills.

POLAND

In 2008, Genopole® signed a memorandum of understanding with the LifeScience Cluster at the Jagiellonian University in Krakow, Poland. It covers development support for the Polish cluster, notably in terms of setting up infrastructure projects and seed funds. In February 2012, Genopole® was chosen to host, train and accompany a team from the Cracow (Poland) biocluster. This activity was financed via a project within the European Union.

TUNISIA

In late 2009, Genopole® signed a draft cooperation project with the Sidi Thabet Technopole, a technology park dedicated to biotech and pharmaceuticals located near Tunis. The agreement covers Genopole®'s help with implementing joint research programs and technical facilities–particularly in the field of biomanufacturing, animal facilities and biological resource centers. Two missions have been launched within a program for the deployment of a biomanufacturing center in the Sidi Thabet Technopole in Tunisia.



GENOPOLE® COMMUNICATION

Promoting the biocluster and its stakeholders and contributing to a better understanding of the ethical issues raised by progress in genetics.

THE COMMUNICATION TEAM'S MISSIONS ARE AS FOLLOWS:

RAISING GENOPOLE®'S PROFILE

Reinforcing the attractiveness of the biocluster through:

- Organizing the attendance of biocluster companies and labs at major national and international events in healthcare and biotech (EuroBiO, BIO, etc.).
- The organization of a competition for biotech startups in the environmental, agronomic and industrial sectors.
- Media coverage: drafting and circulation of press releases, organization of press conferences.
- Marketing material: brochures, annual reports, directories, corporate videos, the website, newsletters, etc.
- The organization of dedicated events on the biocluster: inaugurations, visits, seminars, colloquia, etc.

DEVELOPING A CAMPUS CULTURE

Creating and accentuating a sense of belonging to Genopole® and promoting dialogue between campus stakeholders *via*:

- The Genopole® website and extranet.
- Organizing the "Génofolies" campus festival.
- Contributing to the "Forum" campus newsletter.

PROMOTING LIVELY, SOCIALLY RESPONSIBLE COMMUNICATION

Circulating scientific information to the general public by:

- Organizing an annual "Life Science in Society" colloquium, dedicated to the ethical questions raised by genetics research.
- Organizing the "Junior Gene Café" debates for the general public and researchers.
- Coordinating campus events as part of France's annual Science Festival: open days at labs and companies, events for the general public, etc.
- Involvement in civic activities and information provision, in partnership with a range of organizations: the "Knowledge Bank" with the Essonne County Council, the "Ethics Workshop" with Évry City Hall, etc.
- Support for educational initiatives, such as Genethon's "DNA School".

GENOPOLE® REAL ESTATE

With 91.929 square meters dedicated to research and biotech, Genopole® offers diversified real estate solutions in an advantageous environment:

- the *Gare de Lyon* main train station in Paris is 35 min away (*via* the RER D light railway);
- Paris Orly international airport is at 20km away by car and Paris Roissy international airport is 70km away;
- an intercompany restaurant;
- a convention center with a 700-seat plenary room;
- access to an ultra-high broadband IT network;
- a park and landscaped areas;
- shopping malls nearby.

Genopole® can provide research providers and academic laboratories with operational, fitted-out premises.

GENOPOLE® HAS DEVELOPED A COMPREHENSIVE REAL ESTATE OFFERING:

- free office space for budding entrepreneurs;
- structured support with setting up a business, thanks to France's first biotech-dedicated, ISO 9001-2000-certified incubator (run by the Essonne Chamber of Commerce and Industry). The incubator can also provide entrepreneurs with office space and equipped, BSL1/BSL2 labs in modules ranging from 9 to 100 square meters, together with facilities management services (secretarial assistance, reception, maintenance, janitorial services and round-the-clock security services);
- office and lab accommodation for mature companies, organized by SEM Genopole®.

The SEM Genopole® real estate company leases 25,500 square meters of space in eight different buildings fitted-out for research or production activities. This modular real estate offering covers needs ranging from 200 to 3000 square meters. SEM Genopole® also has 8,500 square meters of real estate reserves available for new-build projects.

FIVE REAL ESTATE PRODUCTS ARE AVAILABLE:

- floor space only (unfitted);
- custom-fit floor space, equipped according to a company's business plan and needs;
- turn-key office space and BSL1 /BSL2 labs;
- technical facilities with shared access to equipment (glass wash rooms, cold rooms, meeting rooms, cafeteria, storage space, etc.);
- office space at the business center.

The custom-fit premises are specifically equipped for biotech activities and feature:

- lab space with different biological safety levels, as required;
- refrigeration and air treatment plants (from standard to HEPA levels).

SEM Genopole® provides or arranges a number of facilities management services, notably for:

- on-site security (closed circuit TV);
- security staff (at night and weekends);
- access control;
- air conditioning maintenance.

Lastly, the nearby Leonardo de Vinci business park in the town of Lisses (developed by the Évry Center Essonne Metropolitan Area and the Paris Region Real Estate Authority) offers companies needing more space a range of plots (from 5,000m² to 10 hectares) in a high-quality environment on the edge of a wooded area.

Genopole®
Guy-Noël Doussin
Real Estate Operations Manager
guy-noel.doussin@genopole.fr

CCIE-Genopole® Enterprises Company Incubator
Marie-Noëlle Decarreaux
Incubator Manager
mn.decarreaux@essonne.cci.fr

SEM Genopole®
Fabrice Taratte
Chief Executive Officer
contact@semgenopole.fr