biopôle



A Park Dedicated to Life Sciences





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Your Global Life Science Center

We are pleased to introduce you to Biopôle Park, a site specifically designed to meet the needs of life science companies and organizations. Biopôle is located in Lausanne, Switzerland, in the heart of Europe, just thirty minutes from the Geneva International Airport and easily a short drive, train ride, or flight to all major international capitals. Located in one of the most concentrated life sciences networks in the world, Biopôle offers a strategic location for the development of your activities, from sales and service, clinical and regulatory oversight, and research and development to managing your global operations. Whether you are currently gathering information or need to implement a rapid set-up, our international team is available to assist you. We look forward to working with you.

Welcome to Biopôle.

Jean-Marc Tissot Chairman

Editorial

Biopôle: A Planned Development

Biopôle is a site developed through a public private partnership in order to provide dedicated and flexible life science offices and labs within the established life science hub of the Lausanne area.

Due to demand for the site, we are now expanding to offer more space, and expect to have over 3,500 life science specialists working at Biopole in the near future.

From large biotech companies and CROs to innovative start-ups, Biopôle is growing to meet the practical needs of the evolving life science community in Switzerland, Europe, and the US and Asia. We are a center, a "campus", allowing your company to engage with world class research and scientists, globally recognized life science companies and thought leaders, while remaining a one stop shop for managing your European life science business, from the lab to sales and delivery.







Strengths of the Lausanne Area A Vital Center for Life Sciences

- ightarrow Cancer
- \rightarrow Neuroscience
- ightarrow Infectious Diseases & AIDS
- ightarrow Medical Technology
- ightarrow Health, Nutrition and Nutriceuticals
- ightarrow Metabolic Diseases
- ightarrow Cardiovascular

The Lausanne Area: A Vital Center for Life Sciences

Lausanne is a global leader in the fields of biotechnology, pharmaceuticals, and medical technology. With the University of Lausanne (UNIL), University Teaching Hospital, (CHUV), and the Swiss Federal Institute of Technology (EPFL) all located within a few miles of one another, the Lausanne Area is an internationally recognized center of excellence in both basic and applied research.

Innovation originates from close ties between academic research and industry, as well as a system that supports and facilitates commercialization. Swiss institutions have long worked in a mutually beneficial way with companies; our region offers a variety of incentives and traditions that make technology transfer and commercialization occur with ease. This atmosphere, combined with a generally business-friendly environment, is one of the reasons why many life science companies are already located here, and why Switzerland is now ranked the most competitive nation in the world by the World Economic Forum. The Swiss economic landscape is diversified in terms of size and sector, with a heavy concentration of high technology companies as well as large multinationals such Autodesk, Edwards Lifesciences, Medtronic, Merck-Serono, and Stryker, small and medium-sized businesses, and entrepreneurial start-ups.

The region also owes its vitality and dynamism to its central geographical location. Lausanne, near Geneva, the location of many leading multinationals, is also near the major medical technology centers of Neuchâtel and the Jura, which first gained acclaim for watch-making and subsequently developed a world-renowned microtechnology and microelectronics industry. Lausanne is within easy reach of the biomedical centers of Basel, Lyon, and Milan and a short trip from all the European capitals.

\rightarrow Cancer: Lausanne, Switzerland's Capital for Research



Lausanne is the Swiss center for cancer research. The Cancer Center, based at the CHUV, is one of the country's leading oncology centers and among the fifty-one centers affiliated with the European Organization for Research and Treatment of Cancer (EORTC). The Cancer Center provides treatment for all cancer-related pathologies in adults; it carries out research in partnership with several highly regarded institutions, including the Swiss Institute for Experimental Cancer Research (ISREC), which has forty years of experience in the study of carcinogenesis, and the Ludwig Institute for Cancer Research, incorporated within the University of Lausanne (UNIL). The Agora, a future cancer

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center, will cover all aspects of cancer research from basic and clinical research through translational research. Agora's goal is to more rapidly move a laboratory-developed concept into therapeutic improvements at the patient's bedside.

Oncology is also one of the leading fields of Debiopharm, with a focus on the development of innovative therapies and prescription drugs that target unmet medical needs. While oncology is the group's main area of expertise, in addition, the Debiopharm Group develops or co-develops drugs for specific indications in other therapeutic areas such as infectious diseases, pain, metabolic diseases, and immune-mediated diseases.

Diagnoplex is developing non-invasive cancer screening tests. Its lead program targets colorectal cancer (CRC; the non-invasive CRC test "*COLOX*" will be made available as a ready-to-use clinical laboratory kit.





Neuroscience: the Lausanne Brain

Lausanne is a leading innovator in the field of neurosciences. The core center of research is located in the Brain Mind Institute of the Swiss Federal Polytechnical School – Lausanne (EPFL). The prestigious IBM project *Blue Brain*, intended to simulate the human brain by computer, is located at the Institute's laboratories. The Institute pursues advanced research; it is particularly focused on neurological and psychiatric illnesses and on studying the mechanisms that lead to the development of Parkinson's, Alzheimer's, and autism.

Alzheimer's is at the center of AC Immune's work. The biopharmaceutical company, which was named "best biotechnology company of 2009" by the World Economic Forum, is viewed as a leader in developing therapies and vaccines against this degenerative disease.

Aleva Neurotherapeutics is developing innovative implants made of a series of micro-electrodes to electrically stimulate the brains of patients suffering from Parkinson's.

Infectious Diseases: \rightarrow from Tuberculosis to Malaria

The Lausanne area is a world leader in research and treatments for infectious disease. Malaria and tuberculosis are at the core of the work of the Swiss Institute for Vaccine Research, created in 2007 with a grant of \$15 million from



the Bill & Melinda Gates Foundation. The Institute brings together teams from the CHUV, the Faculty of Biology and Medicine of the UNIL, the Ludwig Institute for Cancer Research, and the Global Health Institute of the EPFL. In fact, the latter possesses one of Switzerland's largest high-security (level P3) laboratories, enabling the study of highly virulent pathogenic agents.

Lausanne also hosts the headquarters of the Swiss Malaria Foundation. This non-governmental organization supports projects aimed at improving the diagnosis and treatment of parasitosis, which causes between one and three million deaths a year, mainly in sub-Saharan Africa.

AIDS Driving Vaccine Development

The University Hospital of Vaud (CHUV) has a long tradition of treating patients infected with HIV. The hospital is responsible for the coordination of the Swiss HIV Cohort Study (ESHV), a network of seven centers that monitor over half of the zero-positive cases in Switzerland. It also hosts the ESHV's database, one of the most complete in the world, which has already contributed to modifying the international recommendations on the treatment of patients. The Cohort also participates in basic research by studying the genetic aspects of the development of AIDS and the emergence of resistance to treatment.

The Lausanne area is also distinguished by the development of an anti-AIDS vaccine. The CHUV's Immunology and Allergy Department is a center of excellence with an international reputation. Also located in the area is the EuroVacc Foundation, which is developing the European Commissionfunded research program "European Vaccine Effort Against HIV/AIDS.'

Mymetics, established in the Biopôle, has a novel approach to prevention of HIV that consists of blocking the entry of the virus into the mucosal layer. This approach has already succeeded in protecting macaque birds against infection, and the first clinical trial appears promising.

Medical Technology: Implants, Prostheses and Other Devices



The development of implants, medical devices, and surgical materials requires close collaboration between doctors, life science specialists, and engineers. In this domain, the Lausanne region has an unusually strong history of developing and manufacturing high-quality innovative products with global recognition. Medtech companies utilize close relationships with academic institutions to develop their future products and then collaborate with the university hospital to test new medical technologies. The Interinstitutional Center of Translational Biomechanics (CBT),

at the EPFL (Swiss Federal Institute of Technology), and its affiliation with the CHUV are focused on industry and institutional collaboration to improve patient care. Industry affiliations include companies such as Medtronic, Roche Pharma, Bosch, Stryker, and Zimmer.

Frequent and productive collaboration explains why numerous companies in this sector have established themselves in or near the Lausanne area. One can find global leaders such as Medtronic or Stryker – one of the world leaders in prostheses and implants - but also smaller companies such as Sensimed, which is developing an 'intelligent' contact lens that monitores eye pressure for glaucoma detection. The start-up Biocartis, co-founded by EPFL Prof. Phillope Renaud, plans to bring to market in 2012 a versatile and compact molecular diagnostic platform whose ease of use and operational characteristics will lower the entry barrier to molecular diagnostic testing.





The food giant Nestlé is renowned throughout the world for its food and drink products. Less well known is the fact that the Swiss multinational has established its Research Center (CRN) just minutes from the Biopôle. More than three hundred dedicated scientists work mainly on creating functional food items, including the yogurt LC-1, which acts against the bacteria responsible for gastric ulcers, Helicobacter Pylori.

CRN researchers collaborate closely with those of the EPFL, where Nestlé has created several professorships in the fields of obesity, the physiology of taste, and the relationship between nutrition and the brain. The multinational firm has gone even further by deciding to focus on health nutrition, a new sector positioned at the intersection of pharmacy and foodstuffs. To this end it created, in October 2010, a new subsidiary, Nestlé Health Science, whose research center is located in the Innovation Quarter of the EPFL.

Convinced that prevention comes through personalized nutrition, Nestle hopes to contribute to the fight against such chronic 21st-century diseases as obesity, diabetes, cardiovascular disorders, and others related to an aging population.



Metabolic Diseases: Diabetes and Obesity



Diabetes and obesity are the focus of numerous researchers at the UNIL and the CHUV, who have received awards from the Swiss Society of Endocrinology and Diabetology. They are also among the main research priorities of the BioMedical Imagery Center, created by the academic institutions of Lausanne and Geneva. The research carried out in these different centers covers a broad spectrum, as it relates both to the genetic causes of these pathologies and to the biological dysfunctions that are responsible for their development.

Regarding the treatment of severe obesity, Endoart, a start-up from the EPFL, developed its remotely adjustable gastric band at the Lausanne campus. Having become the leader in this field, Endoart was acquired by the American company Allergan, which then established a center of excellence in research and development in the area. In the treatment of diabetes, two Lausanne-based companies have developed



particularly innovative insulin pumps. Medtronic created the first pump capable of automatically interrupting the administration of insulin, and Debiotech created the first miniaturized device capable of being mounted on a disposable patch.

\rightarrow Cardiovascular: From the Origins of the Disease to Pacemakers

The Lausanne region is a center of excellence and innovation in the cardiovascular field due in great part to CardioMet, founded in October 2005 by the CHUV and the Faculty of Biology and Medicine of UNIL. CardioMet provides patients with state-of-the-art services for cardiac and vascular surgery and encourages the cooperation of basic and clinical research.



To gain better understanding of the origins of cardiovascular disease, the CHUV has also launched the CoLaus (Cohorte Lausannoise) program, which is the largest prospective study in this field in Switzerland. Its aim is to identify the physical as well as the genetic, psychological, and environmental risk factors involved in the development of cardiovascular diseases.

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The Lausanne area hosts Medtronic's regional headquarters for Europe, Canada, and emerging countries. A world leader in medical technology, Medtronic is highly regarded in the cardiovascular field, producing pacemakers and implantable defibrillators.



- ightarrow Biopôle Site Availabilities
- ightarrow Working & Living Environment





Join a Competitive Region: Cutting Edge Environment



Switzerland devotes nearly 3% of its GNP to research and, accordingly, was recently ranked first on the World Economic Forum's Most Competitive list due to innovation, technological readiness, excellence of academic institutions, and industry collaboration. The Geneva Lake Region has recorded an average growth rate of 4% since 2004. Due to several world-renowned companies and institutions, the Lausanne area is one of the most dynamic in Europe with respect to research and development. The University of Lausanne (UNIL) and the Ecole Polytechnique Fédérale de Lausanne (EPFL) constitute Switzerland's largest university campus with over 25,000 students and researchers. The State of Vaud offers more than 200 professional





tutions,	training programs and boasts four universities and
urope	eleven specialized schools for advanced studies,
iversity	including prestigious post-graduate training courses.
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Companies and Institutions







Academic Institutions

CHUV – Centre Centre Hospitalier Universitaire Vaudois (University Hospital of Vaud) ECAL – Ecole Cantonale d'Art de Lausanne (Cantonal School of Art of Lausanne) EHL – Ecole Hôtelière de Lausanne (Hotel School of Lausanne) EPFL – Ecole Polytechnique Fédérale de Lausanne (Swiss Federal Institute of Technology) HEIG-VD – Haute Ecole d'Ingénieur et de Gestion du Canton de Vaud (School of Business and Engineering Vaud) IMD – International Institute for Management Development UNIL – Université de Lausanne (University of Lausanne)

Biotech and Pharmaceuticals

AC Immune Actigenomics Adipogen Altacare Anergis Angiotech Switzerland

Baccinex BASF Orgamol Pharma Solutions Baxter Bioscience Manufacturing Cardinal Health Switzerland Celgene International Debiopharm Dompé International EffRx ExcellGene Ferring Pharmaceuticals Glenmark Pharmaceuticals Human Genome Sciences IHMA Lonza Biopharma Merck Serono Mymetics Management Neurochem International (Limited) Novartis Consumer Health Preclin Biosystems Sintectica-Bioren Sochinaz (Bachem Group) Stemedica International TRB Chemedica Xigen Xytis Pharmaceuticals

Medical Technology

Angiotech Switzerland Axis Biodental Beckman Coulter Eurocenter **Bien-Air Surgery** Biosensors Europe CLA Clinical Laboratory Automation Cytyc Europe Debiotech Dentsply Maillefer Diagnoswiss Edwards Lifesciences FKG Dentaire Intuitive Surgical Invacare International Johnson & Johnson LaserMed Medtronic Europe Microvu Stryker Swortec Symbios Orthopédie Synthes Raron Valtronic Technologies (Switzerland)



ATI Stellram Biwi CLA Clin Colibrys Danaher Dixi/Mor EM Micro Etel Fischer Innovativ Intersem Ismeca E Semicon Lamina Lemo Lyncée Te Marvell MBBS Melexis MicroCh Mikron Mimotec PX Group Rüeger Semtech Sigatec Sylvac TESA Thermo Electron Willemin-Macodel

Micro/Nanotechnology

ical Laboratory Automation	
(Switzerland)	
Motion	
i Seiki	Information and Communication Technology
pelectronic-Marin	Active Metrics
	Autodesk
Connectors	BBT Software
e Silicon Isi	BDGB Enterprise Software (Brainware)
na Sensoric	Cisco Systems International
Europe	Kudelski Group
ductor/Komax	Globaz
Technologies	Logitech Europe
	Nexans Switzerland
ec	Orange Communications
Switzerland	Polaris Software Lab
	Quark Media House
Technologies	Reynolds and Reynolds
emical Systems	Salesforce.com
	Siemens Switzerland
	Swissquote Bank
C	Yahoo!
Neuchâtel	









A1 Building – Window (20,000 sqm/215,200 sqf) The Window area is the entry point of the Biopôle Park. It is composed of three main buildings and Biopôle offices are located here.

A2 Building – Corniche (24,000 sqm/258,300 sqf) The Corniche area is dedicated to high-tech buildings. The aim of this area is to house R&D activities in high-end biotech and life science activities. Biopôle's incubator is located here.

A3 Building – Valmont (23,000 sqm/247,500 sqf) The Terrace is designed to allow for further development and customization. Depending upon client demand and requirements, the site can offer office space or laboratories.







With over 80,000 sqm/861,000 sqf of space, Biopôle is one of the largest parks in Switzerland and Europe dedicated solely to the life sciences.

Companies from the United States, China, France, and the United Kingdom have located at Biopôle because the site is both an innovation center for life science and a central, secure, and efficient business location.

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Biopôle's Offer

A4 Building – Plateau (13,000 sqm/139,900 sqf)

The Plateau area is already fully leased and the building will be in operation starting 2012.

RCE – Centre de Recherche Epalinges

In operation since 1977, this world class center hosts such institutes as the Ludwig Institute for Cancer Research, the Department of Biochemistry of University of Lausanne, the Swiss Vaccine Foundation, and the University of Lausanne – Center of Immunology. Please note that the RCE is not managed by Biopôle.

Site Amenities

Superbly served by metro, rail, motorway, and air, the Biopôle also features its own parking lot, boutiques, hotel, restaurant, and bank on site.







Highly Educated Workforce and Intellectual Environment

With its high-quality public school system and a wide range of international level private schools, the Lausanne area offers families of companies located in the region many excellent options. The Swiss educational system is ranked highest in Europe, second on the world scale, and the level of science teaching in schools is highly rated (Source: IMD/OECD).

Switzerland is rated first in Europe and second in the world at meeting companies' expectations for quality of education. The Lausanne region boasts an international and highly educated population that features a high percentage of PhDs within the population. Finding the best employees and providing them a family-friendly environment is a key factor in our region's success.

Quality of Life

Lausanne and the surrounding region is a cultural magnet boasting world class restaurants, museums, and music festivals. Just minutes away are the worldfamous Alps, a stunning countryside for hikes and skiing at world-class resorts. A short train ride or drive takes you to neighboring France, Germany, or Italy for a daytrip or weekend holiday.

Reliability and Stability

Switzerland enjoys a world reputation for the quality of its services as well as its security, professionalism, and reliability. It is often ranked as a world leader in development, maintenance, efficiency, and distribution of its infrastructure. The recent opening of the M2 metro,



whose flagship building – a gateway to the Biopôle site – is a perfect example of this. Society is stable and functions well. Strikes are very rare and the government has jurisdiction in overseeing labor disputes.

Buildings that Meet Your Expectations

In terms of real estate and construction know-how, Switzerland leads the way with some of the world's most advanced international environmental standards. Swiss architects are called upon globally to create and implement the most innovative and demanding designs. Clean rooms, laboratories, and technical installations specific to your activities can be developed and built to optimal specifications at the Biopôle site.

Biopôle Park: Expanding to Meet Your Needs

Biopôle puts at your disposal broad experience in project and construction management in the life sciences. Flexible administrative offices are also available to meet your company's changing needs. We offer a mix of industrial, R&D, and administrative activities. More than 5,000 sqm (16,000 sqf) of new space will be coming online in 2012.







Be a Part of Switzerland's Largest Life Science Park

www.biopole.ch

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