



THERAPEUTIC FOCUS

DISCOVER A VIBRANT LIFE SCIENCE COMMUNITY



While Biopôle is open to all therapeutic areas, the main focus is on bringing together partners developing innovative solutions in the fields of oncology, immunology and personalized medicine. These solutions can cover a wide spectrum, from diagnostics to therapeutics, medical devices, nutrition and digital health.





SWITZERLAND'S CAPITAL FOR CANCER RESEARCH

Cancer diagnosis and therapy are a major challenge worldwide, and a key focus area for Switzerland and the Canton of Vaud.

The Swiss Cancer Center of Lausanne is one of the country's leading oncology centers, and among the 51 centers affiliated with the European Organization for Research and Treatment of Cancer (EORTC). It provides treatment for all adult cancer-related pathologies. Moreover, the center carries out research in partnership with several widely renowned local institutions. For example, the Institut Suisse de Recherche Expérimentale sur le Cancer (ISREC) (Swiss Institute for Experimental Cancer Research) has 40 years' experience in the study of carcinogenesis and related processes. The Ludwig Institute for Cancer Research, incorporated within the University of Lausanne (UNIL), will be expanding into new, dedicated

facilities at Biopôle. The Agora, an integrated center dedicated to cancer and soon to be inaugurated by the Cantonal University Hospital (CHUV) in 2016, will have expertise ranging from basic to clinical research through so-called translational research, making it possible to move rapidly from a concept developed in laboratories to therapeutic improvements at the patient's bed.

Companies already on-site at Biopôle include [ADC therapeutics](#), [Ariad Pharmaceuticals](#) and [Novigenix](#), all of which are active in oncology and have diagnostic and therapeutic solutions on the market or in clinical development. In Lausanne, Debiopharm is a globally-recognized company with a strong focus on cancer.



WORLD LEADER IN IMMUNOLOGY AND INFECTIOUS DISEASES

The Lausanne Area is a world leader in research and treatments for infectious diseases.

Malaria and tuberculosis are at the core of the Swiss Institute for Vaccine Research's work. 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 from the UniL, the Ludwig Institute for Cancer Research, and the Global Health Institute of the EPFL.

The Lausanne Area is notable for the development of an anti-AIDS vaccine, and the CHUV has a long tradition of treating patients with HIV. The hospital is responsible for coordinating the Swiss HIV Cohort Study (ESHV), a network of seven centers that monitor over half of the sero-positive cases in Switzerland. The ESHV database is one of the most complete in the world and has contributed towards changes in the international recommendations on the treatment of patients. Also located in the area is the EuroVacc Foundation, which is developing the European Commission-funded research program "European Vaccine Effort Against HIV/AIDS".

Biopôle is home to a number of companies active in immunology, including the likes of [Anergis](#), [Mymetics](#) and [Preclin BioSystems](#), to name a few.

These Lausanne-based centers of excellence in immunology and vaccine therapies deliver major innovations in the field of immune-oncology and represent a promising approach to the treatment of cancer.





AT THE LEADING EDGE OF PERSONALIZED MEDICINE

Personalized diagnostics and treatments put the patient at the heart of all medical endeavors.

Personalized medicine is a medical model that separates patients into different groups - with medical decisions, practices, interventions and/or products being tailored to the individual patient based on their predicted response or risk of disease. While the tailoring of treatments to patients dates back at least to the time of Hippocrates, the term has increased in usage in recent years due to an improved understanding of diseases at the molecular level.

Advances in personalized medicine, which include digital dimensions to health, have created novel approaches to treatment which are specific to the individual, their genome and lifestyle.

In the Lausanne Area, this effort is lead by the CHUV's Institutional Biobank that has collected organic samples, as well as detailed phenotypic data, from more than 20,000 patients with the aim of improving our understanding of diseases and responses to treatment. This tailored approach to treatments is also core to the work of the department of oncology.

In addition to the CHUV's initiatives, a number of companies at Biopôle are developing a range of personalized health applications, including [Actigenomics](#), [Biomapas](#), [Nestlé Health Science](#), [Outsourcing Development](#) and [SimplicityBio](#).





AT THE INTERSECTION OF NUTRITION AND HEALTH

Our environment, and notably what we eat, are both well-known to have a major impact on our health.

Convinced that personalized nutrition contributes towards wellness and health, a nutrition cluster lead by Nestlé aims to contribute to the fight against chronic 21st century diseases such as obesity, diabetes, cardiovascular disorders, and those related to an ageing population.

Nestlé is renowned 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 Biopôle. More than three hundred dedicated scientists work primarily on creating functional food items, including the yogurt LC-1, which acts against the bacteria responsible for gastric ulcers, *Helicobacter Pylori*.

The multinational firm has gone even further by deciding to focus on health nutrition, a new sector positioned at the intersection of pharmacy and food products. In October 2010, it launched a new subsidiary, Nestle Health Science (NHS), headquartered at Biopôle. NHS offers a range of nutritional solutions for general health concerns or specific health conditions, following self-diagnosis or advice from healthcare professionals. With direct links to established pharmacies, nutritional solutions are easily accessible to consumers and available without a prescription.

Through its presence, NHS complements the work of other actors at Biopôle, including the likes of the [Swiss Vitamin Institute](#), and the start-up [Actigenomics](#).



A world leader in **CANCER**
diagnostics and therapy



NUTRITION
for all-round health



PATIENTS at the heart
of all medical endeavors



Developing
INNOVATIVE
solutions



Bringing together
PARTNERS



PERSONALIZED
approach to treatment



Center of excellence in
IMMUNOLOGY
and infectious diseases

biopôle

Biopôle SA
Route de la Corniche 4
1066 Epalinges - Lausanne
Switzerland
T: +41 21 651 90 00
info@biopole.ch
www.biopole.ch

