LABORATORY TECHNOLOGY AND DIAGNOSTICS
An innovation domain of the canton of Vaud
A MAJOR PLAYER IN BIOTECHNOLOGY

Since the human genome was decoded, Vaud has played a central role in the rapid evolution of biotechnology that will transform patient care.

Switzerland is renowned as one of the best places in Europe to carry out biotechnology and laboratory technology activities. The quality of infrastructure, competitiveness, and flexible labor laws, coupled with an abundance of qualified workers trained at its universities and schools of applied sciences, make Switzerland an ideal environment. In addition, the country can take advantage of the spark provided by Basel-based giants Roche and Novartis. Many big players in laboratory technology have already established themselves in Switzerland – and particularly in the canton of Vaud – enriching the region with their dynamism and expertise.

The field of medicine has progressed rapidly since the human genome was decoded and biotechnology now plays a crucial role in diagnostics and patient care. Gene and cell therapy, artificial organs, and the development of innovative medication are all opening doors to revolutionary new treatments. They also provide us with a glimpse of a new era: that of personalized medicine, where care is specifically adapted to each patient.

A BOOMING SCIENTIFIC FIELD

The region enjoys a fertile ecosystem that stimulates research and the development of new procedures.

In the canton of Vaud, the breadth and diversity of laboratory technology players, both at the academic level and in the private sector, nourish a fertile ecosystem where high-level innovation can develop. The concentration and abundance of expertise in engineering, microfluidics, optics, biomaterials, and molecular and cellular biology have given rise to a unique synergy.

In addition, the robust Swiss economy and the assistance offered by the canton and the federal government nurtures local entrepreneurial dynamism. The Vaud region boasts a number of startups, often created on the campuses of universities and schools of applied science.

This vitality is responsible for the emergence of an impressive number of different technologies. Research centers and companies in Vaud are also involved in the development of gene therapy, cell-based assays, high-performing optical systems and diagnostic tests. They supply innovative solutions to a wide variety of health problems, from cancer to neurodegenerative diseases, allergies and infertility, displaying their remarkable capacities for invention.
Among other things, revolutionary equipment based on digital holographic microscopy (DHM). This allows for a real-time 3D observation of living cells in their natural element, without damaging them and without the need for labeling. Nanolive (created in 2013 at EPFL Innovation Park) and Lyncée Tec, provide such technology, which is quicker and cheaper than conventional microscopy. These companies supply biologists with a formidable tool, one that is advantageous in a number of circumstances; for example, with in vitro fertilization, where the choice of cells could be made directly by observation, rather than by relying on statistics.

Diagnostic tools
Treatment begins with diagnosis. Prescribing a treatment that is adapted to a patient presupposes a reliable diagnosis based on the results of biological analyses. Saliva, blood, urine and stool are elements that, when analyzed, provide valuable information on a patient’s health. To properly extract and exploit this data, it is important to have effective diagnostic tools at one’s disposal; tools that make early detection possible, so that the illness can be treated in time.

Cell-based assays
Cell-based assays, the use of living cells to carry out different experiments, are remarkably powerful tools that can be used for a large number of different applications. They provide hope in fields like regenerative medicine and the discovery of new medicine.

A number of players in Vaud are taking advantage of this potential. Among them is the Laboratory of Stem Cell Bioengineering (LSCB) at EPFL. This pioneering lab is uncovering mechanisms of stem cell fate regulation and control the micro-environments surrounding them, in order, for example, to create organoids (miniaturized and simplified organs) from them.

As a result of a collaboration in this laboratory, and inspired by its academic excellence, the QGel company was created in 2009. QGel produces synthetic gels in which cells develop as they would in their natural environment. This makes it possible to create highly reliable in vitro disease models that can be used to test pharmaceutical products or develop therapies that are specially adapted to certain pathologies.

Similarly, cell therapy, which aims to treat an organ or an organism by means of injecting cells, has the potential to revolutionize the way many illnesses are treated. Curing cancer by means of modified immune cells, treating diabetes, or regenerating an organ with the help of stem cells: all could soon become ordinary procedures. Biosafe (now owned by General Electrics Healthcare), based in Eysins, offers tools and automated solutions to prepare the biological material necessary for such therapy. The company’s work aids implementation of cell therapy and expedites development of new treatment methods.

Optics and microscopy
Observing matter at a microscopic and nanometric scale is requisite to thoroughly understanding biological mechanisms. By making cellular phenomena visible, microscopy has enabled spectacular scientific advances – and imaging methods keep getting better and better.

EPFL’s Laboratoire d’Optique Biomédicale (LOB) is contributing to these advances by working on optical functional imaging methods for applications in the life sciences and medicine. Industry has not been left behind: Vaud boasts many young companies that are developing,
The presence of multinational healthcare companies indicates the canton of Vaud’s important role in the diagnostic sector. Becton Dickinson, a major US company that specializes in medical equipment, and which invented the insulin syringe, has established its headquarters at the Terre Bonne Park in Eysins. Thermo Fisher Scientific, a major producer of analytical and diagnostic instruments, has a factory in Ecublens. Finally, Siemens’ health department is based in Renens. The presence of these powerful players is not a matter of chance and they add considerable expertise and dynamism to Vaud’s outstanding biotechnology ecosystem.

Diagnostic techniques are numerous and varied, ranging from DNA analysis to the search for specific biomarkers. Novigenix, based at the Biopôle in Epalinges, provides molecular blood tests for early cancer detection. The company offers accurate predictive solutions to effectively detect cancerous and precancerous lesions. It does this thanks to a new generation of gene expression profiles of blood cells and tumor-derived protein markers in combination with state-of-the-art mathematical analytical models. Gene Predictis is opening the door to personalized medicine with innovative genetic tests. Founded in 2005, this startup offers an instrument which, from a simple mouth swab, makes it possible to evaluate the way a person will react to one or several medications. With the help of this tool, dosages can be adapted to each patient’s profile, which could limit problems linked to drug interactions or incorrect dosages.

The company AC Immune focuses on proteins, molecules coded by DNA. A number of degenerative illnesses, such as Alzheimer’s and Parkinson’s, result from an aberrant protein structure where proteins become toxic. AC Immune’s technology relies on the development of new antibodies, vaccines and molecules that target these abnormal proteins with great precision, thereby offering new detection tools as well as therapeutic means to prevent their aggregation and implantation in the brain.

Microfluidics
Microfluidic techniques, which exploit the specific properties of extremely small volumes of fluid, are advantageous for diagnostic applications. Miniaturizing tests and analyses makes them quicker, cheaper, more flexible and greatly reduces sample and reagent volumes.

These techniques can be used for any kind of diagnosis (infectious diseases, cancer, genetics). By allowing early detection, enhanced follow-up and increased personalization of patient diagnosis and treatment, they have enormous potential for improving the treatment of certain illnesses.

In addition, the incorporation of new elements into these products, such as connectivity or data analytics, creates new opportunities. Industry players in the canton of Vaud understand this and are making good use of this promising technology.

THREE QUESTIONS TO PROFESSOR PETER RYSER, PROFESSOR AT EPFL STI AND CO-FOUNDER OF BNOVATE TECHNOLOGIES

What are the benefits to basing a company in Switzerland?
First and foremost, the brainpower, the qualifications of the labor force. Also, the ease of access to the market is another enormous advantage. When a new product is created, it is very important to have a test market for it. In the case of bNovate, there are many companies working in potable water and bottled water in Switzerland, where people are aware of the importance of clean water and you can drink the tap water. Switzerland has the skillset available to conduct research in this area. The technology bNovate uses was invented by the Swiss Federal Institute of Aquatic Science and Technology (EAWAG) in Dübendorf, which is part of the EPF network. In our case, the proximity to EPFs is important, as the method was developed here.

Speaking more generally, the tax situation is attractive, although this is not a major factor for startups, as they don’t tend to make a lot of money. However, it is appealing to profitable businesses because the taxes are much lower than in other countries. The federal aid and bank loan guarantees are also perks.

Public-private partnerships are encouraged in Switzerland. Is that an added advantage?
Yes, it’s very important. Innosuisse/CTI projects, for example, are extremely useful instruments both for private companies and for academia. Because of my position, I see both sides of things. Such tools facilitate collaboration and aid the transfer of technology. These partnerships are interesting because it turns academic research into something tangible.

bNovate’s office is located in EPFL’s PSE. What are the benefits of PSE?
Geographically, the site is well located and easy to get to. The location is convenient if experience is required and if the startup doesn’t have the necessary infrastructure. Young interns are attracted by the proximity to EPFL, which makes hiring much easier; it’s much more convenient for them to be on campus. The PSE also offers a useful network that can serve as a precious resource.
Spinomix, a company established at EPFL Innovation Park, creates cartridges engraved with microfluidic channels. Thanks to an ingenious system of magnetic beads, these cartridges facilitate the detection and extraction of target molecules from blood, urine or food samples. This promising product could, for example, be used to detect lower quantities of fetal DNA in a mother’s blood or improve the detection of trisomies and other anomalies.

Lunaphore, created at EPFL in 2014, develops tumor-analysis platforms built with microfluidic technology. These tests can be carried out in only a few minutes, whereas current techniques take hours: a small revolution that promises to perfect the reliability, reproducibility and precision of cancer diagnoses.

Finally, Vaud company Abionic has developed a screening platform that can test for allergies from a single drop of blood in record time.

Software
The rapid development of new technologies means laboratories are now capable of handling enormous quantities of samples, generating a breathtaking volume of data. Consequently, organizing, analyzing and interpreting this data requires new tools. Here too, French-speaking Switzerland is demonstrating its inventiveness, offering a number of innovative solutions to support scientists in their research.

Saphetor, for example, has developed a platform that facilitates the interpretation of genetic sequencing data. This tool provides tangible support to clinicians, allowing them to save time and make informed decisions as to the choice of therapies. This Lausanne-based startup has already signed agreements with the Geneva University Hospitals (HUG) and the Lausanne University Hospital (CHUV) to deploy its platform in some of their divisions.

New information systems called Laboratory Information Management Systems (LIMS) have been created to support scientists’ work. These systems enable the digitalization, management, sorting and storage of lab data with the aim of saving time and money, and increasing the data’s readability. Odysis (Lausanne) and Genohm/Agilent Technologies (headquartered at EPFL Innovation Park) offer innovative solutions in this area.

Trade fairs and conferences that can’t be missed
Switzerland plays a major role in the progress of biotechnology. A number of interesting trade fairs are hosted in Vaud, underscoring the region’s vitality and strength in this field.

NanoBioTech-Montreux is a unique conference at the frontier of micro- and nanotechnology developments for biological, chemical and medical applications. In a beautiful setting on the Lake Geneva shoreline, influential and world-renowned figures come to speak and present their most innovative research.

ILMAC, a fair focused on innovations in chemistry, pharmacy and biotechnology, first started in Bern but has created a Lausanne version near EPFL. This is thanks to the dynamism of Lausanne and its surroundings. Combining product presentations, knowledge transfer and networking, this new event fills a gap in the French-speaking Swiss market, offering visitors a wealth of new discoveries.

Lausanne also plays host every year to Lab Innovations, an event bringing together research specialists in the fields of chemistry, pharmaceutics, biotechnology and life sciences.

8 billion
the cost of the health in Vaud for 2018 (CHF).
SWITZERLAND, AN ENVIRONMENT OF EXCELLENCE

Like its emblematic army knife that can do just about anything, Switzerland has a wide variety of assets that make excellence in innovation possible.

Located at the heart of Europe, Switzerland is a neutral, politically stable country blessed with first-rate infrastructure. It is an ideal place for a business or organisation to establish itself. Attractive tax rates, flexible labor laws and economic dynamism add to the country’s charms and are much appreciated by businesses and institutions.

The canton of Vaud, located at the junction of major rail and road routes, and near Geneva International Airport, is a central region, one that is open to the world and easy to get to. The presence of universities and internationally renowned schools of applied science, boasting quality training and cutting-edge research, is an advantage that adds to the high level of innovation and productivity. Moreover, the excellent quality of life makes Vaud an attractive place for a highly-qualified and cosmopolitan workforce.

It is not surprising that numerous cutting-edge businesses have established themselves in the canton of Vaud, further enriching the region’s economic strength.

INVESTING IN THE BEST

Switzerland boasts excellent scientific productivity. Vaud is one of Europe’s leading biomedical research clusters.

Research is a national priority in Switzerland. The country invests 2.9% of its GDP in R&D, one of the highest rates in the world. A number of public programs and special funds have been set up to encourage research and this approach has resulted in exceptional scientific productivity at a global level. The country is number one in terms of scientific publications per one million inhabitants, number one in citation rate per publication (an important way of measuring a country’s scientific impact) and shares top spot for the number of patent filings per million inhabitants.

Life sciences

The region is home to the largest university campus in Switzerland, renowned research centers like EPFL, UNIL, CHUV and HEIG-VD, and some 360 companies, employing over 16,000 people working in the life sciences.

The presence of a number of scientific parks and incubators like the Biopôle in Epalinges, EPFL Innovation Park and the Y-PARC in Yverdon-les-Bains supports large and middle sized companies, along with an impressive number of innovative startups, providing them with cutting-edge equipment and infrastructure.

Two major institutions support scientific research. On one hand, the Swiss National Science Foundation supports over 3,200 fundamental research projects annually, with the goal of developing scientific research and supporting its network on the international stage. On the other hand, Innosuisse (formerly CTI) encourages research and development collaborations between the public and private sectors by financing up to 60% of project costs.

More specifically, special funds designed to encourage innovation in laboratory technology are available. The Nano-Tera initiative aims to put Switzerland at the forefront of a new technological revolution: using engineering and information technology to improve health and security, and to improve the management of energy and the environment. This partnership brings together the two Swiss polytechnic schools (EPFL, ETHZ), four universities (Neuchâtel, Basel, Geneva, Lugano) and the Swiss Center for Electronics and Microtechnology (CSEM). Nano-Tera makes grants available at all Swiss universities and research centers, and already finances research projects involving around 700 researchers and 27 industrial partners.
MAIN ACTORS OF THE LABTECH AND DIAGNOSTICS ECOSYSTEM

Below is a selection of some of the exceptional technological laboratories based in the canton of Vaud and along the Lausanne-Geneva axis (arranged by research sector).

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<td>QGel</td>
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<td>Lyncée Tec</td>
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<td>Nanolive</td>
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<td>Analytics/diagnostics</td>
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<td>Siemens</td>
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<td>Spinomix</td>
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<td>Thermo Fisher Scientific</td>
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<td>Lunaphore</td>
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<td>EPFL – Integrated Systems Laboratory (LSI)</td>
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<td>AC Immune</td>
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<td>Novigenix</td>
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<td>Genetics</td>
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<td>Gene Predictis</td>
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<td>Software</td>
<td>Data analytics</td>
<td>Saphetor</td>
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<td>Genohm/Agilent Technologies</td>
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<td>Odyssis</td>
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<td>Liquid handling</td>
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<td>EPFL – Laboratory of Microengineering for Manufacturing (LMP)</td>
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<td>EPFL – Laboratory of Microsystems (LMIS2)</td>
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RESEARCH AND DEVELOPMENT

EPFL – Bionanophotonic Systems Laboratory (BIOS)
The laboratory develops ultra-sensitive spectroscopy and sensing technologies for real-time, label-free and high-throughput detection and analysis of very low quantities of biomolecules.
bios.epfl.ch

EPFL – Interfaculty Institute of Bioengineering (IBI)
The Institute sits at the interface of life sciences and engineering. It seeks to understand basic biological principles and transform this knowledge into innovative technology platforms and clinical applications.
bioengineering.epfl.ch

EPFL – Integrated System Laboratory (LSI)
The laboratory has specific skills in technologies of circuits and systems.
lsi.epfl.ch

EPFL – Laboratoire d’optique biomédicale
The research carried out by the laboratoire d’optique biomédicale (laboratory of biomedical optics) focuses on optical functional imaging for life sciences and medicine.
lben.epfl.ch
EPFL – Laboratory of Microengineering for Manufacturing (LMP)
The laboratory does teaching and research in vision systems, the development of embedded platforms for environment surveillance, the conception of biomedical products and thick-film circuit design for sensors.
sti.epfl.ch/microengineering

EPFL – Laboratory of Microsystems (LMIS2)
The laboratory specializes in multidisciplinary research in the fields of design, simulation, fabrication, integration and application of microsystems.
lmis2.epfl.ch

EPFL – Laboratory of Stem Cell Bioengineering (LSCB)
By interfacing advanced biomaterials engineering, microtechnology and stem cell biology, the overarching goal of the laboratory is to uncover mechanisms of stem cell fate regulation.
lscb.epfl.ch

EPFL – School of Engineering (STI)
EPFL's School of Engineering brings together the departments of microengineering, mechanical engineering, materials science, electrical engineering and bioengineering.
sti.epfl.ch

EPFL – School of Life Sciences (SV)
The School of Life Sciences has for its mission teaching and research, at the interface of biology and other fields, such as basic sciences, engineering and computer science.
sv.epfl.ch

HEIG-VD – Institute for Information and Communication Technologies (IICT)
The institute focuses on applied research and development in a variety of domains.
iict.heig-vd.ch
ESTABLISHED BUSINESSES AND STARTUPS

Abionic
Abionic proposes a biomedical screening platform, making it possible to diagnose patients from a single drop of blood. abionic.com

AC Immune
AC Immune is devoted to developing personalized treatments for neurodegenerative diseases. acimmune.com

AdipoGen
The company is developing and commercializing new products (mainly antibodies and recombinant proteins) for biomedical research in the fields of obesity and diabetes, inflammatory diseases, immunology, immuno-oncology and cancer. adipogen.com

Advanced Microfluidics
The goal of Advanced Microfluidics is to develop innovative microfluidics automation for laboratories. amf.ch

Antlia
Antlia has developed the world’s most advanced and versatile implantable drug delivery pump, to provide researchers and veterinary healthcare professionals the means to achieve high quality and cost-effective animal research. ithetis.com

Be.care
The solutions proposed by Be.care make it possible to measure individual fatigue in a non-invasive way. becare.swiss

Beckman Coulter
Beckman Coulter develops, manufactures and markets products that simplify, automate and innovate complex biomedical testing. beckmancoulter.fr

Becton Dickinson
Becton Dickinson is an international technology company whose innovative solutions help advance medical research and genomics, enhance the diagnosis of infectious disease and cancer, improve medication management, promote infection prevention, equip surgical and interventional procedures, and support the management of diabetes. bd.com

BioInnovation Solutions
Bioinnovation has developed a sequencing technology for clinical and biomonitoring diagnosis. bioinnovation.ch

Biosafe
Biosafe provides enabling technologies for cell therapy and regenerative medicine applications. biosafe.ch

bNovate Technologies
bNovate has developed technology based on flow cytometry that quickly detects contamination in water. bnovate.com

Bordier Affinity Products
Bordier Affinity Products offers diagnostic tools for parasitology and mycology. bordier.ch
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<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Website</th>
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<tbody>
<tr>
<td>ChemAlive</td>
<td>ChemAlive provides an online computational chemistry platform.</td>
<td>chemalive.com</td>
</tr>
<tr>
<td>DAY medical</td>
<td>DAY medical provides a new generation of tests for blood transfusion centers and hospital blood group serology laboratories, using totally automated procedures.</td>
<td>day-medical.com</td>
</tr>
<tr>
<td>DBS System</td>
<td>DBS System has developed a platform to take micro-samples of blood, with passive plasma separation and accurate volume control.</td>
<td>hemaxis.com</td>
</tr>
<tr>
<td>DeepCube</td>
<td>DeepCube’s AI offers real-time diagnostics of viruses, cancers or other diseases.</td>
<td>deepcube.ch</td>
</tr>
<tr>
<td>DermoSafe</td>
<td>DermoSafe offers a medical device supported by a web service linking carers, patients and specialists.</td>
<td>dermosafe.com</td>
</tr>
<tr>
<td>Gene Predictis</td>
<td>Gene Predictis supplies genetic tests that make it possible to adapt medical treatments to the needs of each individual.</td>
<td>genepredictis.com</td>
</tr>
<tr>
<td>Genknowme</td>
<td>Genknowme is dedicated to transforming cutting-edge research thanks to epigenetic tests that measure the impact of lifestyle on biological age.</td>
<td>genknowme.ch</td>
</tr>
<tr>
<td>Genohm/Agilent Technologies</td>
<td>Genohm offers laboratories a digital platform with an integrated LIMS + ELN environment to manage laboratory data. This system, adapted to individual needs, can be used by research laboratories, next-generation sequencing labs, biobanks and QC labs.</td>
<td>genohm.com</td>
</tr>
<tr>
<td>gymnetrics</td>
<td>The company focuses on single-use measurement systems for cell culture.</td>
<td>gymnetrics.com</td>
</tr>
<tr>
<td>Hologic</td>
<td>A leading global healthcare and diagnostics company, Hologic focuses on breast and skeletal health, diagnostics, and gynecological surgery.</td>
<td>hologic.com</td>
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<tr>
<td>Imina Technologies</td>
<td>Imina offers robotic solutions for positioning, handling and characterizing samples at a micro- and nanometric scale.</td>
<td>imina.ch</td>
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<tr>
<td>Intrace Medical</td>
<td>Intrace Medical is focused on the development and sale of bioluminescent and near infrared fluorescent molecular imaging probes for <em>in vitro</em> and <em>in vivo</em> use.</td>
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InVivoSwiss
Located at EPFL Innovation Park, the mission of InVivoSwiss is the development and validation of tools and technologies for non-invasive optical and nuclear in vivo imaging modalities.
invivoswiss.ch

Lucentix
Lucentix offers a new biosensor technology that allows patients to measure precise concentrations of analytes in a single drop of blood or saliva using a low-cost hand-held device that provides laboratory-quality results.
lucentix.ch

Lunaphore
Thanks to microfluidic technology, the platform developed by Lunaphore makes it possible to analyze tumors with the help of immunochemical tests.
lunaphore.ch

Lyncée Tec
Lyncée Tec manufactures digital holographic microscopes.
lynceetec.com

Nagi Bioscience
The company offers an alternative to animal experiments thanks to a device that allows to model human diseases.
nagibio.ch

Nanolive
Nanolive is an expert in cell tomography and has developed a microscope capable of looking inside living cells without damaging them.
nanolive.ch

ND Biosciences
ND Biosciences develops technologies to accelerate the development of early diagnosis and therapy for neurodegenerative diseases.
nd-biosciences.com

Neogenomics Laboratories Europe
The company offers pharmacology and diagnosis services to oncologists, pathologists, pharmaceutical companies and universities.
neogenomics.com

Novigenix
Novigenix offers a new generation of blood tests for the early detection of cancer.
novigenix.com

Odysis
Odysis helps laboratories by proposing innovative and high-quality software solutions and services that improve productivity and supports quick adapt to environmental and business changes.
odysis.com

O-I
O-I makes glass packaging for the pharmaceutical and chemical markets.
o-i.com

Pristem
Pristem produces low-cost medical equipment for emerging countries.
pristem.com
QGel develops synthetic extracellular matrices (ECM) that mimic the complex physiology of the human body, enabling the growth of human or animal tissue in vitro. qgelbio.com

Quotient develops and manufactures high-quality products for use in transfusion diagnostics. quotientbd.com

Qwane Biosciences develops and sells Micro-Electrode Array (MEA) biochips for basic research in electrophysiology, secondary drug screening and safety pharmacology applications. qwane.com

Saphetor offers solutions for the annotation and interpretation of next-generation sequencing (NGS) data, at the scale of the genome. saphetor.com

SEED Bioscience facilitates personalized medicine thanks to a technology allowing scientists to isolate individual cells. seedbiosciences.com

Siemens offers medical imaging and laboratory diagnostics, as well as consulting and technology services for therapeutic and molecular diagnostics. siemens.com

SmartGene Services focuses its activities on the analysis and management of complex genetic data. smartgene.com

Socorex Isba supplies precision instruments used for reliably measuring, dosing, transferring, dispensing and injecting liquids. socorex.com

SOPHiA GENETICS analyzes patients’ molecular data with AI to make a diagnosis and propose personalized treatment. sophiagenetics.com

Spectroswiss has a wealth of expertise and offers services in mass spectrometry, signal processing, ion physics, electronics and bioinformatics. spectroswiss.ch

Spinomix develops innovative sample processing solutions for the life sciences sector. spinomix.com

SUN bioscience provides personalized organ and disease models to scientists and doctors. sunbioscience.ch
**SwissDeCode**  
SwissDeCode provides a screening device that can detect traces of contamination or undesirable ingredients in food.  
[swissdecode.com](http://swissdecode.com)

**Swiss Vitamin Institute (SVI)**  
The SVI analyzes vitamins in food, pharmaceuticals, cosmetics and biological samples for medical diagnostic purposes.  
[swissvitamin.ch](http://swissvitamin.ch)

**Sysmex Suisse**  
Sysmex distributes analytical machines to hospitals and university clinics, private and research laboratories, medical practices and industry.  
[sysmex.ch](http://sysmex.ch)

**Thermo Fisher Scientific**  
The goals of Thermo Fisher’s teams are to accelerate life sciences research, solve complex analytical challenges, improve patient diagnostics, deliver medicines to market and increase laboratory productivity.  
[thermofisher.com](http://thermofisher.com)

**Unilabs**  
Unilabs is an international group that manages many medical analysis and diagnostic laboratories.  
[unilabs.ch](http://unilabs.ch)

**Viventis Microscopy**  
Viventis Microscopy sells innovative microscopes for 3D imaging of living samples.  
[viventis-microscopy.com](http://viventis-microscopy.com)
NETWORK OF SUPPORTING PARTNERS

**BioAlps**
BioAlps promotes French-speaking Switzerland as a world-class research center in the life sciences and is dedicated to helping this industrial sector grow.

[biolaps.org](http://biolaps.org)

**Economic Development – Canton of Vaud (DEV)**
The DEV is the main contact for foreign companies looking to set up in the region. To fulfill its role, the DEV works with both private (banks, notaries, lawyers, etc.) and public partners (various government departments). It provides advice on administrative procedures and financing, and allows newly established companies to benefit from its vast network.

[dev.ch](http://dev.ch)

**EPFL Innovation Park**
EPFL Innovation Park brings together innovative companies in an inspiring environment with privileged access to cutting-edge research, a vast network of dynamic entrepreneurs and established companies.

[epfl-innovationpark.ch](http://epfl-innovationpark.ch)

**Innovaud**
As a gateway to innovation in the canton of Vaud, Innovaud supports and provides networking opportunities for startups and SMEs, particularly those in life sciences, to develop solutions with them in the area of hosting, promotion, funding and/or coaching. Innovaud is firmly established in a vast network of partners, enabling it to redirect requests to the organizations most suited to the needs of each party.

[innovaud.ch](http://innovaud.ch)

**Nano-Tera**
The Nano-Tera program aims to bring Switzerland to the forefront of a new technological revolution: using engineering and information technology to improve health and security, the management of energy and the environment.

[nano-tera.ch](http://nano-tera.ch)

**Office for Economic Affairs and Innovation (SPEI)**
The SPEI supports companies established in the canton of Vaud, and more specifically those active in the sectors of industry and advanced technologies. SPEI advises and informs entrepreneurs, particularly by putting them in touch with the appropriate organizations according to their specific needs. SPEI can also provide direct financial support.

[invest-vaud.swiss](http://invest-vaud.swiss)

**Swiss Medical Union**
Swiss Medical Union is a platform that tests the interaction, efficiency and safety of new medical products with ex vivo therapy.

[medicalunion.swiss](http://medicalunion.swiss)

**Y-PARC**
The technological park in Yverdon-les-Bains is the largest in Switzerland. It is home to companies of all sizes, creating an ecosystem rich in synergy and innovation.

[y-parc.ch](http://y-parc.ch)