

BRIO partner institutions

○ Institut Bergonié

The Institut Bergonié, now called Bergonié, was officially opened on April 17th 1923 as the ‘Fondation Bergonié’, the centre for cancer care in Bordeaux, and is named after the founder, Prof. Jean Alban Bergonié. Three principal missions were established early on: treatment, research and teaching. On a national level, it is one of the 18 Comprehensive Cancer Care Centres in France making up the National Federation of Comprehensive Cancer Care Centres (*UNICANCER*).

Bergonié is led by its General Director, Prof. Francois-Xavier Mahon MD-PhD, and the Deputy General Director, Nicolas Portolan. Over 900 staff members, including 100 physicians, work at the Institut Bergonié which includes 200 beds with 29 as day-hospital and the remaining for standard hospitalisation. Cancer patients are offered care via surgery, medical oncology and radiotherapy, and from various departments such as radiology, biopathology, which includes standard and molecular pathology, genetics and biology, and other departments that participate in global patient care. To provide optimal care to patients, the Institute has access to a range of last-generation equipment bringing the latest innovation to patients. In 2016, 18,881 patients came through the Institut Bergonié in 57,000 consultations and 10,700 hospitalisations.

Bergonié offers medical education in partnership with the Université de Bordeaux and several doctors have joint affiliations between the hospital, the university and paramedical organisations for the different occupations related to patient care.

With over 100 applied research programmes and 200 clinical trials running, including 15 to 20 sponsored by Bergonié, research is at the forefront of the institute strategy to provide patients with world-class innovative treatment. Furthermore, the institute hosts an Inserm research unit (*Institut national de la santé et de la recherche médicale*), ACTION U1218, and collaborates with other research structures, providing the synergy between IB clinical approach to cancer research and their competencies in cancer biology. This synergy led to a large number of joint research programmes and innovative projects.

In addition, Bergonié’s expertise in cancer care was acknowledged through multiple certifications such as Sarcoma reference centre, CLIP2 (*Centre Labellisé INCa Phases Précoces*) centre for early clinical trials and UCOG coordination unit for geriatric oncology. In 2017, the Institut Bergonié received the AFNOR (*French standardisation association*) label for quality control of research.

Bergonié research strategy focuses on 4 axis:

- Genomic and biology-guided clinical trials (notably in sarcomas),
- Management of vulnerable cancer patients (mainly older patients),
- Innovative loco-regional treatment,
- Cancer environment and survival (treatment modelisation, pesticides and inequality of access to treatment).

BRIO and Bergonié are tightly linked and a number of key actions were driven in collaboration:

- Co-funding of 3 calls for proposals and researchers starter packages,
- Participation, co-organisation of dissemination events.
- 3 of the 4 strategic axes in the BRIO proposal.

○ Bordeaux University Hospital / CHU de Bordeaux

The Bordeaux University Hospital, CHU de Bordeaux (CHU), is the biggest region care facility with over 580,000 consultations and 130,000 full hospitalisations per year. Currently, it is the 4th largest French University Hospital complex with over 14,000 members of staff, including almost 1,500 medical doctors and more than 8,000 nurses. The CHU de Bordeaux is composed of three main groups: the Saint-André Hospital, Pellegrin hospital and the South Hospital group (Xavier Arnozan and Haut-Leveque hospitals). It is under the presidency of Alain Juppé (mayor of Bordeaux), headed by Philippe Vigouroux, General Director. As a public health establishment, the CHU de Bordeaux has three main missions: treatment, research and teaching. It was recently considered, for 2 consecutive years, as the best French Hospital, including a large panel of tumour units and interdisciplinary teams.

The CHU de Bordeaux provides a complete care with services covering all medical and surgical disciplines, serving the population of the Bordeaux metropolis and covering the whole the region, at all ages of life. In addition to care itself, the CHU de Bordeaux is strongly anchored in the city by its commitment to prevention and health education. The CHU de Bordeaux offers highly specialised care involving the use of state-of-the-art equipment and mobilising the expertise of its professionals.

The CHU de Bordeaux contributes to university and further-education training of health professionals: medical, paramedical, pharmacists and odontologists working in relationship with the Université de Bordeaux. Within its 14 training institutes and schools, the CHU de Bordeaux coordinates and implements training programmes for all paramedical professions.

The CHU actively participates in the development of techniques and innovations in the medical field by defining and implementing a high-level clinical research policy in association with the Université de Bordeaux and public scientific and technological institutions partners (Inserm, CNRS). These actions in the field of research contribute directly to the improvement of the quality of care offered to patients in its services. With nearly 1,500 research protocols running, the CHU de Bordeaux is one of the most active research sites in France.

Cancer treatment represents 25% of the medical activity carried out in the different services of the CHU. Departments (surgery, radiotherapy, medical oncology, radiology, biology, pathology...) collaborate together to dispense the best care possible for their patients. More recently structuration of cancer at the CHU evolved towards the creation of a University Integrated Cancer Center built as a Comprehensive Cancer Center involving all members of staff involved in care and research.

In addition, the CHU de Bordeaux is leader in many aspects of cancer care and has been acknowledged through multiple qualifications: cutaneous tumors, rare tumors (head and neck, neurological), kidney, hepatocarcinoma, rectal, hematological, pediatric national reference centres, EPON European Consortium in early drug development.

The CHU de Bordeaux was central to BRIO actions in particular:

- Co-funding of 3 calls for proposals,
- Setting up a paramedical strategy: a paramedical chair of excellence and the co-funding of a dedicated calls, for proposals for paramedical researchers,
- Clinical strength: kidney, brain and colon cancer present in new proposal.



○ Université de Bordeaux (UB)

Ranked among the top universities in France, the Université de Bordeaux is renowned for the quality of its academic courses and research. The Université de Bordeaux was first established on January 1st 2014, following the merger of three universities: *Université Bordeaux 1, Sciences et Technologies, Université Bordeaux Segalen and Université Montesquieu Bordeaux IV*. The Université de Bordeaux is currently managed by its president Prof. Manuel Tunon de la Lara, MD, and is the third largest French university with 53,000 students. Its internal structure is based on five “academic colleges” comprising 19 teaching faculties, 3 specialized training institutes, 8 doctoral schools, and 70 research laboratories organised into 3 sectors known as “departments” (Science & Technology, Life Sciences & Health, Human & Social Sciences), in partnership with research bodies.

In 2016, Université de Bordeaux was one of the first three research-intensive universities to be definitively awarded an Initiative of Excellence (IdEx), in an intertwined cooperation with CNRS, Inserm, its associated higher-education “schools” (Bordeaux INP, Science Po Bordeaux) and in partnership with higher education and research stakeholders in the Bordeaux area: Bordeaux Science Agro, Université Bordeaux Montaigne, Inra, Inria, Irstea, CEA, the CHU de Bordeaux, Sup Optique, Estia...

Overall, the Université de Bordeaux is particularly recognised in biomedical and health sciences. Medical publications represent 37% of the total publications well over the 30% median in France in 2016. Similarly, oncology publications represent 9% of those publications (compared to a 6% national average) and as such the most important sub medical discipline.

Overall, 20 research teams from a wide range of disciplines (psychology, economics, sociology, imaging, epidemiology and public health, biology, chemistry, informatics, mathematics, ...) participate in the scientific project of BRIO. Six of these teams are fully dedicated to Cancer Research.

In the framework of IdEx Bordeaux, several initiatives were implemented with BRIO through project co-funding:

- One on pesticides and their impact on human health in partnership with the LabEx COTE (*Evolution, adaptation, and governance of continental and coastal ecosystems*) in environment,
- Two in collaboration with an emerging project on humanities and social sciences (*HEADS - Health Determinants in Societies*),
- Four projects in the framework of a specific call IdEx/BRIO on interdisciplinarity.

○ Institut national de la santé et de la recherche médicale (Inserm)

Founded in 1964, the French National Institute of Health and Medical Research (Inserm) is a public scientific and technological institution which operates under the joint authority of the French Ministry of Health and the French Ministry of Research.

As the only French public research institution to focus entirely on human health, in 2008, Inserm took on the responsibility for the strategic, scientific and operational coordination of biomedical research. This key role as coordinator comes naturally to Inserm thanks to the scientific quality of its teams and its ability to conduct translational research, from the laboratory to the patient's bed.

Inserm focuses on three strategic missions for 2020:

- Support integrated, multidisciplinary research in line with society's requirements,
- Develop the highest level of skills to meet strategic challenges,
- Optimise partnerships with academia and the private sector to consolidate Inserm's position in both Europe and on the broader international stage.

Inserm is the leading academic biomedical research institution in Europe with some 12,000 publications a year; it is only second in the world (behind the American National Institutes of Health).

Inserm has more than 365 research units spread across France and internationally. These are supported by 13 regional committees for local oversight. Scientific activities are organised around nine "Inserm Thematic Institutes" (*Instituts thématiques*), corresponding to the main fields of biomedical and health research with one of them dedicated to cancer.

The *Institut Thématique Cancer* gathers research teams working on this disease, as common as it is complex. Its thematic field includes the molecular, cellular and tissue modelling of tumours, their initiation, their progression and recurrence, the analysis of risk factors and preventive strategies, the development of innovative and personalised therapies, technological progress in imaging of tumours and their environment, molecular medicine delivery, as well as discussions about the human, social and economic dimensions of the disease. With a budget of 70 m€, the *Institut Thématique Cancer* regroups 37 research units and over 1,000 permanent staffs.

Within BRIO, 9 research units and over 30 permanent researchers are linked to Inserm.

Inserm contributes to 9 Platforms within our research programmes



○ Centre national de la recherche scientifique (CNRS)

The French National Center for Scientific Research (CNRS) is the largest governmental research organisation in France and the largest fundamental science agency in Europe. It employs 32,000 permanent employees (researchers, engineers and administrative staff). Founded in 1939 by governmental decree, it aims to:

- Evaluate and carry out all research capable of advancing knowledge and bringing social, cultural, and economic benefits for society,
- Contribute to the promotion and application of research results,
- Develop scientific information,
- Support research training,
- Participate in the analysis of the national and international scientific environment and its potential for evolution in order to develop a national policy.

The CNRS carries out research in all fields of knowledge in his 10 research institutes, in particular, the Institute of Biological Sciences (INSB) which includes cancer research. INSB seeks to promote research driven by curiosity, one of major breakthroughs that push the limits of our understanding of the living world. Its mission is to promote advances in knowledge at the highest level, whether it is in exploring, categorising and describing the living, apprehending its history, or deciphering the mechanisms underlying its organisation and functioning, while relying on and adding to the CNRS's multidisciplinary framework.

Because discoveries are neither programmable nor predictable, CNRS strategy aims to create the best possible environment for laboratories, in order to foster a fertile ground for the most innovative results, which will serve as a basis for further discoveries as well as practical applications. Within this institute, 1,700 researchers in 57 research units work on cancer research within university sites. The annual budget dedicated to cancer research is around 70 m€.

Within BRIO, 7 research units and 16 researchers are linked to CNRS.
CNRS contributes to 6 platforms within our research programmes.

○ Cooperative intergroups and learned societies

To support our research activities, BRIO can count on researcher-led cooperative intergroups and learned societies.

Cooperative intergroups bring together independent not-for-profit research groups that conduct clinical and translational cancer research. Thirteen intergroups were accredited “French cooperative intergroup of international dimension in the field of cancer” by the French National Cancer Institute (INCa).

Usually acting as study promoters and benefiting from their own operational resources, they have a strong track record of designing and completing trials that have diminished the impact of cancer in many ways. They also play a strong science dissemination role through numerous publications in leading medical journals and presentations at the main oncology congresses. Specifically, BRIO will coordinate with:

- The **intergroup on digestive tract tumours** bringing together the Francophone Federation of Digestive Tract Cancerology (FFCD) and multidisciplinary cooperative group in oncology (GERCOR)
- **INTERSARC**, the cooperative intergroup on sarcomas (which includes GSF-GETO, the French Sarcoma Group - the study group on bone tumours)
- **ICFuro**, francophone cooperative intergroup on onco-urologie
- **DIALOG**, francophone cooperative intergroup on geriatric oncology
- **EORTC**, European Organisation for Research and Treatment of Cancer

A learned society is an association of researchers who makes and publishes original research. Through their work and reflection, these societies are advancing knowledge in their field of activity and often play an important role in archiving and enhancing local knowledge and know-how.

BRIO research is particularly active in learned societies, in particular:

- **SoFOG**: Société Francophone D’Onco-Gériatrie
- **SFC**: Société Française de Cancérologie
- **SNJGE**: Société Nationale Française de Gastro-Entérologie
- **SFPO**: Société Française de Psycho-Oncologie
- **SFA**: Société Française d’angiogénèse
- **SIOG**: International Society of Geriatric Oncology

As well as more general international ones: AACR (American Association for Cancer Research), ASCO (American Society of Clinical Oncology), ASH (American Society of Hematology), ESMO (European Society for Medical Oncology)...

- **Prof. Pierre-Louis Soubeyran** is president of **DIALOG** and president of the scientific advisory board of the **SoFOG**,
- **Prof. Serge Evrard** is a member of the **EORTC** board,
- **Prof. Antoine Italiano** is a member of the board of **GSF-GETO**.

All these organisations are already at present and will continue to be key partners for the dissemination of BRIO’s research outcomes to research and health professionals



○ Réseau de cancérologie d'Aquitaine (RCA)

Created in 1999, the Aquitaine Regional Cancer Network (RCA) responds to the need for stakeholder coordination in the management of cancer patients as identified during the largest national mobilisation in the fight against cancer in 2003-2007 (first "Plan Cancer"). It has a transversal role of coordination, information collection and is a resource centre for professionals, health institutions and patient associations. Its role has been reinforced in the second and third national "Plan Cancer".

The Aquitaine Regional Cancer Network brings together all stakeholders in cancer organisation in the Aquitaine area (3.3 million inhabitants) in order to facilitate cancer management and improve quality of care, region-wide. It conducts its activities in connection with the ten Cancer Coordination Centres (3C), dedicated local quality units for cancer care, and develops relations with other networks in the region (for example, palliative care). At the national level, it works with the other regional cancer networks, and the National Cancer Institute (INCa).

The Aquitaine Regional Cancer Network manages the various actors (public and private health care institutions, public and private practitioners, general and specialist physicians, pharmacists, social workers, patients...). For all its missions, the RCA has a competent coordination team which manages the network structure for its members and makes itself available to health professionals and regional partners. Its missions were defined in 2007 (and will evolve soon):

- Promoting and improving the quality of care: every new cancer patient must have a multidisciplinary review during multidisciplinary consensus meetings held in a 3C in Aquitaine. The use of clinical practice guidelines (CPG) is the basis of the quality of treatment decisions in cancer care. The RCA is responsible for the dissemination and monitoring of their use by health professionals. For this purpose, it sets up thematic regional groups (GTR) that bring together over 1,000 professionals involved in the Aquitaine region cancer care,
- The collection of data related to the activity of cancer care: the collection and synthesis of data from the 3C are performed by the RCA in its regional activity report submitted annually to regional and national regulators,
- Evaluation of cancer practices in connection with the local cancer units: RCA brings together and supports the 3C in the implementation of actions to evaluate and improve practices and quality of management (multidisciplinary meetings, cancer health care evaluations....),
- Promotion of common communication tools: the RCA contributes to the conception and implementation of the electronic healthcare record dedicated to cancer (DCC) and assists in the development of tools for video/web conferencing in health facilities,
- Information for healthcare professionals, patients and relatives: through the network, dissemination of information is provided to healthcare professionals, patients and their families with its website (<http://www.canceraquitaine.org>) and regular newsletters. In the research field, the RCA provides each month, with the regional expert institutions, a newsletter with exhaustive lists of early clinical trials.
- Help with continuous training of health professionals: the RCA is involved in improving and updating knowledge and professional practices. Training activities are implemented according to the identified needs in the region such as the patient cancer announcement and the management of rare cancers.

The RCA and BRIO interacted during the set-up of key events aimed at health professionals:

- Regional day meeting for medical and paramedical staff,
- Sarcoma and Geriatric Oncology meetings in Aquitaine.

In 2018, the Aquitaine cancer network merged with those of Limousin and Poitou-Charentes to give the Onco-Nouvelle-Aquitaine Network

○ Cancer Patient Associations

Cancer patient associations became an integral part of patient care, bringing help and/or support to patient/families and funding to researchers. Bordeaux has a large number of local organisations, as well as local branches of national associations. The presidents of several national associations are in Bordeaux.

Since 2016, BRIO is building a large network of associations in order to connect with a wide range of patients, ex-patients, family caregivers and volunteers. BRIO can count on a number of cancer patient association support:

Association name	Description
ANAMACaP	National prostate cancer patient association
France Lymphome Espoir	National lymphoma patient association
Groupe 3V	Association organising sporting challenges for patients and IB staff
IMAGYN	National gynaecological cancer patient association
Info Sarcomes	National association to improve sarcoma knowledge and care
Jeune & Rose	Association of and for young women with breast cancer
La Ligue contre le cancer 33	Local branch of a major cancer association: funding, informing, helping...
La main tendue 33	Local association providing support to cancer patients
Life is rose	Association of volunteers fighting social vulnerability after cancer
On est là	National association supporting teenagers and young adults with cancer
Parentraide	Association to support pediatric cancer research & affected parents
Rose attitude	Association helping women to go back to work after cancer

Those associations support our work and actively participate in the ASPERON & CO group and its actions (see letter of support signed by these 12 associations). Those organisations help BRIO communicate to and engage a wide range of patients. They will also watch BRIO's genuine implication toward health democracy and BRIO's initiatives to integrate patients at every step (governance, research, dissemination).

BRIO and the patient associations have already shared a number of actions:

- Creation of ASPERON & CO,
- Participation to dissemination events,
- Integration of patients to BRIO management structure.



○ Cap Sciences

Cap Sciences is a centre for scientific, technical and industrial culture based in Bordeaux, Aquitaine.

The association was founded in 1995 at the initiative of the Ministry of Research and the Regional Council of Aquitaine. For over 20 years, Cap Sciences has been producing and presenting educational and cultural programmes to develop knowledge and awareness of science and technology.

This can be through on-site, travelling and online exhibitions and workshops, through events, visits and encounters, as well as through online multimedia reports and social media connections. Cap Sciences has developed an expertise in creating and managing resources and networks to support the dissemination and interest in science and technology.

As a centre for scientific, technical and industrial culture approved by the Ministry of Education and Research, Cap Sciences has always acted as a link between the world of research and the public by allowing the latter to discover and understand the themes, issues and the nature of scientific, technical and technological applications. Over the years, its connections have multiplied and widened. On a daily basis, Cap Sciences connects not only with the general public including a vast number of school students, but also with a wide range of professionals from companies, industries, research centres, institutions and associations, from the scientific but also the cultural, political and business world.

In 2012-2016, Cap Sciences managed the INMEDIATS project, winner of a national call for proposals. This unique project brought together six of the major French science centres to make science and technology more accessible to all and in particular to 15 to 25 year olds. In order to do so, it experimented and developed new tools for science communication using the potential of digital technologies (personalised content, multimedia platforms, serious games, living labs, fablabs, social media...).

Cap Sciences redefined its missions in three directions:

- The core science centre mission. Through its onsite and travelling exhibitions, workshops and events, Cap Sciences reaches more than 200,000 people each year. It is increasingly called upon as a consultant and commissioned to manage external science culture projects, a mission at the heart of professional networks.
- As a regional science centre, Cap Sciences is involved in running, facilitating and promoting the network of organisations, which contributes to disseminating scientific, technological and industrial culture in the Aquitaine region, promotes synergies and brings its expertise. Cap Sciences is involved in defining the political strategies linked with regional research and innovation.
- Cap Sciences develops collaborations and networks to set up and test technologies, and study their interactions with the audience. This activity is set up in a cluster-like structure bringing together, along with Cap Sciences, research centres and companies from the creative industry sector in particular. This allows both start-up companies to acquire experience and references, and also brings innovation to the science communication field.

BRIO and Cap Sciences collaborated to design and run several events for the general public:

- BRIO's participation to large national or international dissemination events run by Cap Sciences in Bordeaux (*European Researchers' Night, Fête de la Science...*),
- Bilateral collaboration on three events in the framework of the pan-European project SPARKS (*Engaging citizens in health research*).

○ Aquitaine Science Transfer (AST)

Aquitaine Science Transfert® is the Accelerating Technology Transfer Company of the Aquitaine region (SATT Aquitaine), created in July 2012 from a government investment programme (*Programme Investissements d'Avenir*). Its objectives are to promote academic research and improve the process of transferring technology to companies.

AST is supported by its founding shareholders, the University of Pau and the Pays de l'Adour (UPPA), the French National Centre for Scientific Research (CNRS), the National Institute of Health and Medical Research (Inserm) and the Caisse des Dépôts et Consignations (CDC) on behalf of the State.

AST is the interlocutor of researchers for the protection, maturation and valorisation of their research results. It welcomes them throughout the year to study their research results, help them declare their inventions and define a strategy of protection and valorisation. For some projects, it invests in technico-economic maturation to finalise the invention and make a transfer to short- or medium-term markets.

AST is also the interlocutor of the companies it supports to respond effectively to their needs for the development of innovative solutions. It helps them to find the scientific skills or the technological bricks necessary for the development of their new products, services or know-how. As a link between the company and public research, it facilitates and secures collaborations and the implementation of results.

By enhancing public research with the objective of responding effectively to market needs, AST helps to increase the competitiveness of companies and promotes the creation of jobs and wealth in the region.

Today, AST's area of influence is research and innovation with 5,500 researchers, 3,100 doctoral students, 136 laboratories, 18 technology platforms and 24 transfer cells. AST manages a portfolio of more than 275 families of securities and more than 670 partnership research contracts per year.

The know-how of AST covers all stages of technology transfer: detection and protection of inventions, management and investment in the maturation phases (technical, intellectual, legal, commercial) and the valorisation of innovations through the negotiation of licenses or preparation for the creation of innovative start-ups.

AST also offers to its shareholders' institutions, a set of services concerning the management of Intellectual Property (IP), the negotiation of partnership research contracts, a programme to raise awareness of valorisation and transfer, research sites, and site surveys and mapping.

BRIO and AST interact for the valorisation of several programmes:

- Co-funding of translational programmes (ONCOPROT and NENUPHAR),
- Sharing training programmes,
- Key partner for the implementation of a management tool to identify programmes of interest.



○ MATWIN

MATWIN (Maturation & accelerating translation with industry) is a nationwide service platform, unique in Europe, which supports the maturation of research projects in oncology up to the pre-clinical proof of concept.

The programme identifies world-class projects to accelerate their transfer from bench to bedside. MATWIN thus helps promote French research by furthering innovation and early public-private partnerships.

In 2009, the Cancéropôle Grand Sud-Ouest and its industrial committee started a programme meaning to improve technology transfer: MATWIN. After experimentations in 2009 in the southwest of France, the programme progressively opened to other Cancéropôles. The creation of MATWIN as an independent company (SAS) gave to the programme a nationwide dimension.

Since June 29th 2015, UNICANCER group, gathering the 20 French Comprehensive Cancer Centres, is MATWIN's sole owner.

MATWIN is supported by eleven of the world's largest pharmaceutical companies (AstraZeneca, Boehringer-Ingelheim, Bristol-Myers Squibb, Celgene, GlaxoSmithKline, Janssen, Novartis, Pfizer, Pierre Fabre, Roche, Sanofi) and by the French Cancéropôle network.

This unique platform, at this early research stage, supports the development of translational research thanks to a collaborative process with oncology research teams and pharmaceuticals companies. These missions are to:

- Identify and select world-class oncology research projects,
- Increase their industrial attractiveness,
- Optimise their transfer potential to the pharmaceutical industry.
- Key figures from 2009 to 2016:
 - 80 project application forms submitted for assessment (more than 200 academic and industrial assessments),
 - 40 projects auditioned by the International MATWIN Board,
 - 18 projects led to first industrial interest,
 - more than 20 start-ups created (or in progress),
 - 2 to 7 projects ongoing industrial maturation transfer,
 - and many ongoing discussions, coordinated with the Technology Transfer Offices.

Although MATWIN has a national scope, BRIO holds close local bonds especially for training with the participation to training sessions for valorisation and through the MATWIN initiative as well as in communication works.

○ Bordeaux Unitec

Bordeaux Unitec is a Technopole located in Pessac, next to Bordeaux. The Bordeaux Unitec association was created in 1990 on the initiative of Alain Rousset with the support of the municipalities of Pessac, Talence and Gradignan, with the aim of establishing a link between research, teaching technological innovation and economic development.

The mission of Bordeaux UNITEC is to promote the emergence, creation and development of innovative start-ups, in close co-operation with the scientific and academic community and the communities and institutions of the Agglomeration of Bordeaux.

Bordeaux UNITEC activities in 2016:

- 101 accompanying solicitations,
- 38 new projects selected in selection committees,
- 85 projects or start-ups advised including 24 creations in 2016,
- 23 training sessions, meetings and workshops,
- 2 unique incubation devices in France supported by Bordeaux UNITEC: Fontaulab and La Banquiz,
- 5.29 million euros of non-dilutive funds raised by 29 projects and start-ups followed,
- Since 1999, 78 projects with Bordeaux UNITEC have been awarded the national competition for the creation of innovative technology companies organised by the Ministry of Research.

Key figures

- 362 creations of technological and innovative companies advised,
- 72% cumulative perpetuation rate (rate observed in mid-2015),
- More than 200 companies still active,
- 27 years of experience,
- 3 tracks of expertise,
- 19 partner sites.

In 2016, UNITEC and BRIO signed a Memorandum of understanding to set-up our terms of collaboration specifically in the preparation of joint training programme and shared communication.



○ Cancéropôle GSO (CGSO)

In order to structure and coordinate cancer research at the national level, the first Cancer Plan has enabled the creation of seven Cancéropôles spread across the country in 2003. Cancéropôle Grand Sud-Ouest (CGSO) is a consortium bringing together more than 500 scientific and medical research teams in 2 regions of the Great South-West of France (Nouvelle Aquitaine, Occitanie). CGSO provides federative ground and brings together, on a voluntary and collaborative basis, all the institutions involved in cancer research to initiate dynamic networking and build federative research or technological programmes. Participating fundamental and clinical research teams are attached to national research organisations (mainly INSERM and CNRS), 6 universities, 6 university hospitals (CHU) and 3 regional cancer centres (CLCC). Private partners are also closely involved in the consortium (Biotechs, Big Pharmas). CGSO's funding enables the emergence of innovative projects, the support of technological platforms, and the arousal and development of consortia involving clinicians and researchers, collaborating on translational research programmes. CGSO is constituted as a GIP (*Groupement d'Intérêt Public*). The management of the CGSO is ensured by a president and a scientific director, appointed for 3 years. They combine the legal, administrative and financial responsibilities of CGSO GIP and the direction of the Cancéropôle's scientific strategy.

CGSO has developed a dynamic network of skills by the animation of research axis, interdisciplinary disease-oriented consortia and the support of working groups sharing technological approaches and competencies. The following non-exhaustive research themes can be listed below:

- Innovative therapies, translational and clinical research: new therapeutic approaches, personalised medicine, biomarkers and early clinical trials.
- Fundamental issues: genetic instability, chromatin and epigenetics, cell signalling and therapeutic targets, angiogenesis, tumour microenvironment, pharmacogenetics, biotherapy, environment and cancer.
- Social and public health mobilisation in the cancer fields: the individual and collective challenges in terms of social inequality (which tools or methodology to measure inequality), the impact of new care organisations and rehabilitation procedures.
- Health technologies: domain at the crossroads of physical, chemical, engineering and life science with oncology to promote interdisciplinary research projects and to identify cutting-edge concepts, with a special focus on nanodevices, smart nanoparticles, optics and radiotherapy.

Such an organisation makes it possible to enhance team performance and increase synergies between researchers, clinicians and industry, between disciplines and between territories.

A partnership has been established between the Cancéropôle GSO and the current SIRICs (SIRIC BRIO and SIRIC Montpellier Cancer) to clarify the respective roles, define the exchange of information and consider the actions to be implemented jointly (animation, support to platforms or researchers).

BRIO and GSO have developed a tight relationship with the development of:

- PARI call for proposals for MD PhD,
- Organisation of dissemination events,
- Support of start-up (BmySCREEN).

○ Nouvelle-Aquitaine Regional Council

Nouvelle-Aquitaine is the largest administrative region in France, located in the southwest of the country. The region was created by the territorial reform of French Regions in 2014 through the merger of three regions: Aquitaine, Limousin and Poitou-Charentes. It covers 84,061km² or 1/8 of the country – and has approximately 5,800,000 inhabitants.

It is the largest region in France by area. The growth of its population, particularly marked on the coast, makes this one of the most attractive areas economically in France: the new region outperforms the Île-de-France and Provence-Alpes-Côte d'Azur in terms of demographic dynamism. After Île-de-France, New Aquitaine is the premier French region in research and innovation, with six universities (180,000 students and over 17,000 researchers), 23 *écoles supérieures*, 6 *écoles de commerce* and 2 *grandes écoles*. Its economy is based on agriculture and viticulture (vineyards of Bordeaux and Cognac), tourism, a powerful aerospace industry, digital economy and design, parachechemical and pharmaceutical industries, financial sector, and industrial ceramics.

Nouvelle-Aquitaine is currently designated a regional strategy for the university teaching, research and innovation (SRERI). Nouvelle-Aquitaine regional council has a strong strategy in research and development based on:

- Support research structuration and public/private sector connexion,
- Support the rise of scientific regional domain of excellence,
- Nurture and help the development of research partnership,
- Reinforce international partnership in particular with transregional partner.

Regional Council of Nouvelle-Aquitaine supports BRIO in its mission through:

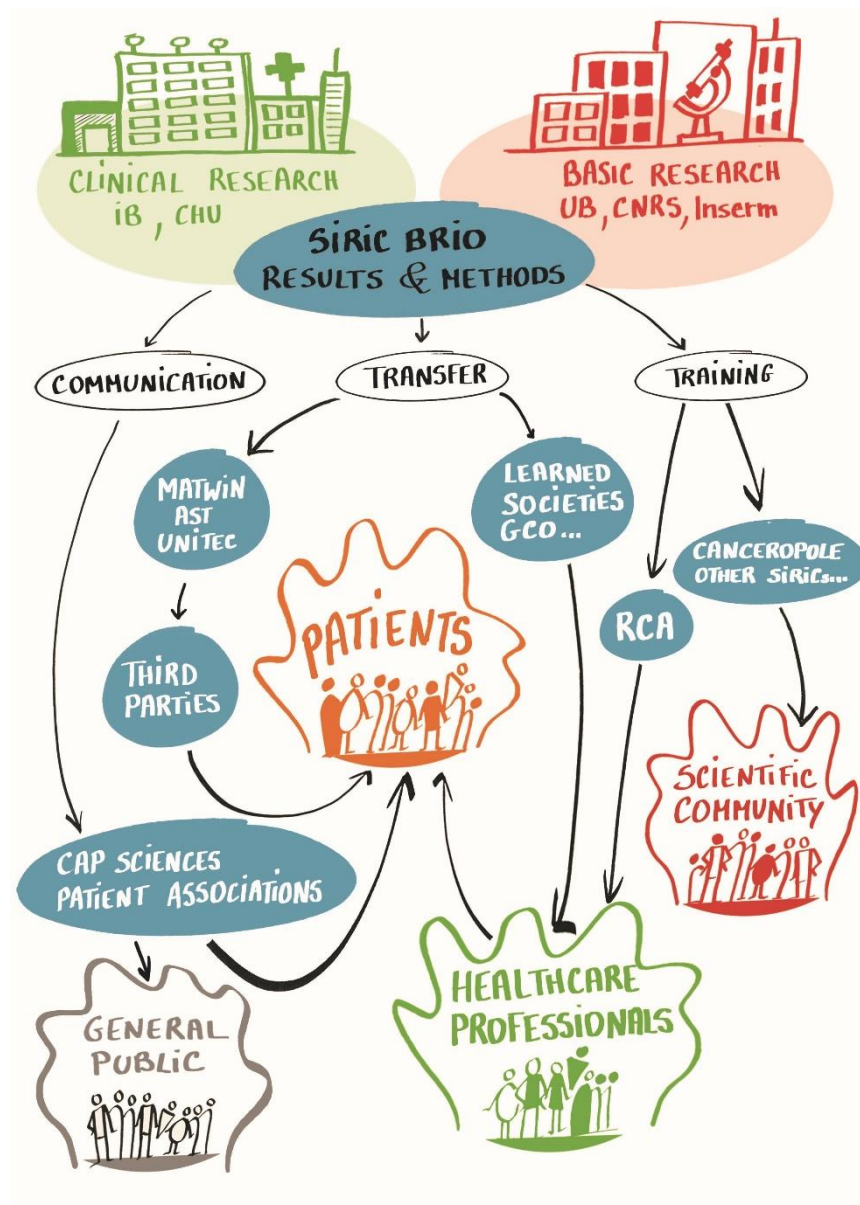
- the co-funding of BRIO project (15 projects over 4 years, around 3 m€ funding),
- Support structuration of cancer research.



Partnerships and added value of the consortium

The central axis of our consortium is based the Bordeaux cancer hospitals - the Institut Bergonié and the CHU de Bordeaux - and the research facilities in Bordeaux (Université de Bordeaux, Inserm and CNRS). All integrated research programmes have a clinical start from clinical need outlined by clinicians and based on their cancer treatment experience. Through the interaction with research teams from the Université de Bordeaux, CNRS and Inserm, scientists devised integrated projects to tackle those clinical issues. All programme teams interacted prior to the SIRIC certification but BRIO allowed the strengthening of those partnerships which in turn form the framework of our new scientific proposition. **The multiple institutions making our core consortium is a clear strength** as the plurality and diversity of our competences allow proposing ambitious and interdisciplinary projects. This plurality requires also strong communication channel and a solid understanding of our SIRIC goals to convey through proper management.

To be able to fulfil the missions given to the SIRIC (*i.e.* research excellence, training, structuration, valorisation and communication), BRIO has set-up collaboration with the local partners to help and enhance its activities. **A schematic view of our collaborations is summarised in below.**



Bordeaux has a large number of support structures for research and communication. However, most of them are not dedicated to cancer research. Therefore past collaborations were sporadic. Through our first SIRIC designation, BRIO set-up and consolidated these collaborations to help us deliver our missions as described in the activity report. **BRIO is now recognised within the local landscape as a reference point for cancer research**, enabling easier communication and development of long-term programmes.

The main focus of this consortium is to showcase the cancer research strength and to be able to draw the capabilities of all these support structures to realise our goals and missions. The key component behind this network is BRIO's management team (the Programme Manager and the Dissemination and Patient Involvement Manager) which links the programme teams with all the partner institutions and nurture fruitful collaborations.

To support our action toward the scientific community and healthcare professionals, BRIO will use the capabilities of the RCA and Cancéropôle GSO. Their support will give access to a large community of professionals to address either clinical information, training or scientific education.

Similarly, the **collaboration with AST, UNITEC or MATWIN will be central** to accelerate the valorisation of our research. The general strategy is based on multiple interactions during the first SIRIC mandate and will be described later.

A key and difficult mission of the SIRIC is **to communicate to patient/families and general public.** Our partnership with **Cap Sciences** and the local **cancer associations** are keys to prepare, design and organise our events.

As described in **Erreur ! Source du renvoi introuvable.**, **our collaboration network is perfectly suited to our needs.** Through this consortium and with the second designation, **we plan to:**

- **Continue the bridging of all our institutions** together through the fulfilment of our BRIO objectives with the aim **to create in Bordeaux a Comprehensive Cancer Centre structure and mentality,**
- Actively contribute to the development of a **new facilities housing of cancer research facilities which is expected in 2022 thanks to** the Regional Council. This facilities aim to not only regroup research and key platforms but also private sector entities and patient associations,
- Foster the **creation of a University-driven community called Oncocampus** which will regroup all the researchers linked to cancer research as well as the local private sector and patient associations,
- **Fully integrate cancer patients to our research.**

BRIO is always looking for expertise and competencies to support our programmes and remain open to collaborate when appropriate.

