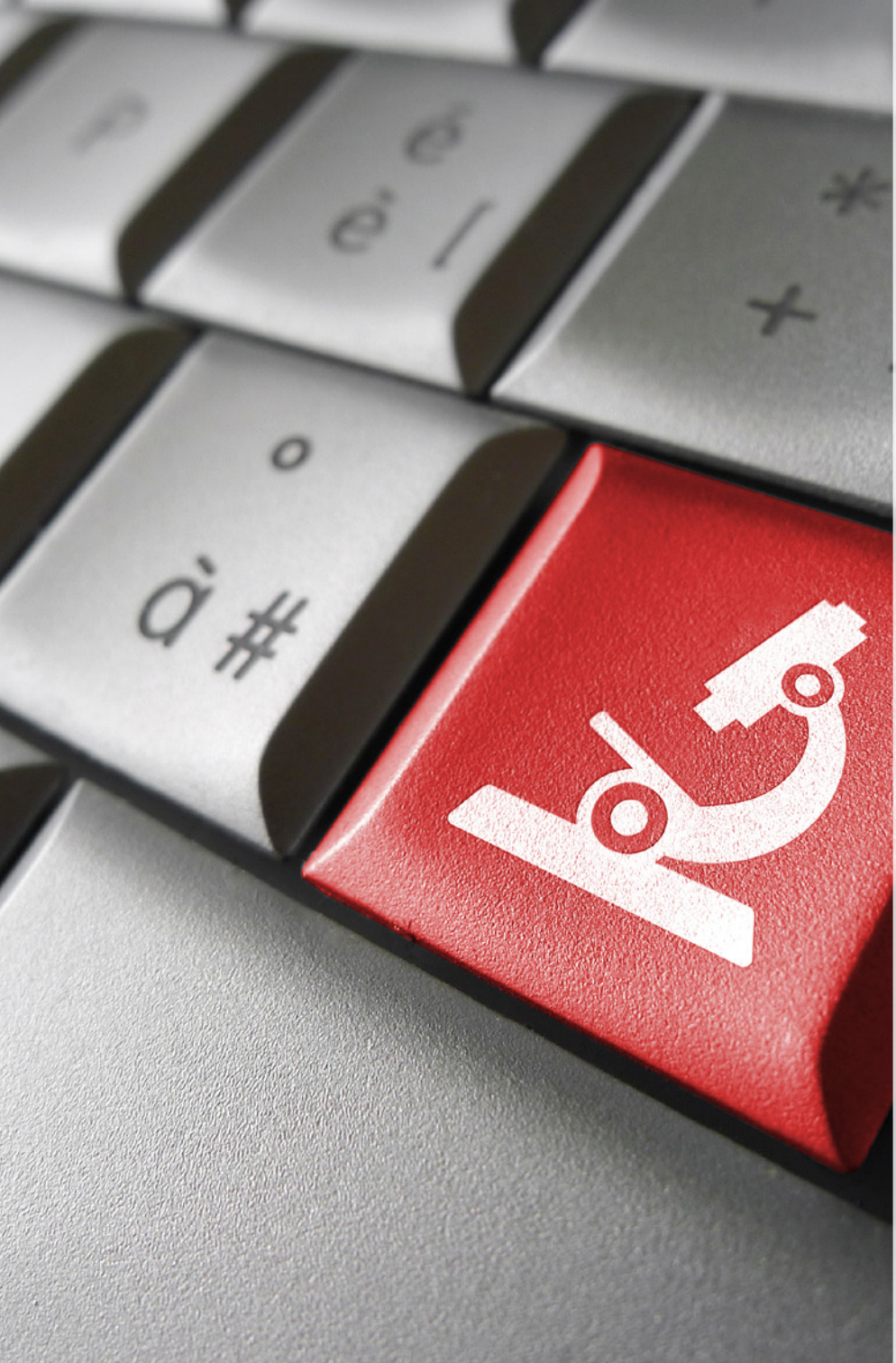

BIOPARK
CHARLEROI BRUSSELS SOUTH

news

The Biopark Charleroi Brussels South Newsletter

n°27 — fall 2015

ERDF-ESF

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ULB

UMONS Université de Mons

Mood

The ERDF's role is to fund initiatives that contribute towards a region's economic development. As such, it is essential that university research, a key factor contributing to economic growth, is able to benefit from this funding. Today, the impact of the first wave of ERDF funding granted to the ULB as part of the Biopark's ascension cannot be called into question, with the creation of 32 companies and 1000 jobs, one company floated on the stock market, and two foreign companies moving in.

Only the ERDF can provide structured, ambitious funding for academic research, training, support structures, and new businesses targeting sectors with high added value.

However, to ensure that these public funds receive have enduring economic and social consequences, a clearly defined strategy is required. The Biopark has decided to focus on the consolidation of specialist fields by building ecosystems and applying smart specialisation concepts. This is the key to guaranteeing that each Euro invested reaches its full potential.

Paul Magnette,
Minister President of Wallonia

Biopark: fresh impetus from the ERDF-ESF

Dominique Demonté, Director of the Biopark, shines the spotlight on the *Wallonia Biomed* portfolio and what its future holds.

THE RESULTS FOR THE ERDF-ESF 2014-2020 PROGRAMMING PERIOD HAVE BEEN KNOWN FOR A FEW WEEKS NOW. HOW DID IT PAN OUT FOR THE WALLONIA BIOMED PORTFOLIO THAT YOU SUBMITTED?

Dominique Demonté: It worked out very well because thanks to Europe and Wallonia, no less than €22m will be allocated to research. On top of this comes €8m to build our third incubator, and €2.5m for Training. As far as I know, this is the biggest ERDF Research portfolio ever funded in Wallonia! We are delighted because this is clear recognition for the Charleroi Biopark, but it also comes with real responsibility: we need to amplify the dynamic created in earlier programmes and continue to show how academic research can drive economic growth.

YOU USUALLY TALK ABOUT THE BIOPARK AS AN ECOSYSTEM. DOES THE WALLONIA BIOMED PORTFOLIO FORM PART OF THIS DYNAMIC?

Dominique Demonté: Of course. It even forms the core of the portfolio's strategy: building critical mass, acquiring cutting edge facilities, and forging solid partnerships, all with a view to creating, building, and attracting companies. Our strategy works and we now have international recognition. What's more, the Biopark is cited as a good example of how to use European funding in an OECD report. Thanks to this new programming period, we will be consolidating four of the campus' main *Research* specialisms: imaging, immunology, bioprofiling, and human biospecimens.

DOES YOUR ECOSYSTEM ALSO SEE ITSELF AS OPEN TO ITS SURROUNDINGS?

Dominique Demonté: Our research, training, and incubation projects are indeed all deliberately planned around these specialisms. But this focus on particular themes comes hand in hand with the development of a network between the Biopark and other biomedical players in Wallonia. A major share of the portfolio's investments will go to CER GROUP, the new Novalis science park in Marche, and UMONS. This regional plurality of skills is essential to securing a competitive international positioning for Wallonia. And of course, business too has close ties to the portfolio. Indeed, we have received over 60 letters of support from companies working in the sector.

HOW DO YOU INTEND TO ACHIEVE INTERNATIONAL POSITIONING?

Dominique Demonté: The international aspect is an integral part of research: our academic teams publish in international journals, or collaborate with their counterparts elsewhere

in Europe, the USA, Asia, etc. Our businesses, too, have an international presence, selling their products and services around the world. On the Biopark, we have reached a milestone by welcoming our first foreign companies in ORGENESIS from Israel, and PLURIOMICS from the Netherlands. i-Tech incubator fully intends to accelerate this international outreach, working closely with BioWin and AWEX. The development of a partnership with IGRETEC, our new incubator, forms an important part of this. It should be open within two years, which could not come too soon: the Incubator 2, opened in May 2012, already boasts 90% occupancy.

HUMAN CAPITAL IS ANOTHER IMPORTANT PART OF THIS DYNAMIC...

Dominique Demonté: Without a doubt: human capital is key. Biopark Training is therefore continuing to develop courses for jobseekers, students and teachers, scientific and technical staff, and managers, built around the sector's priority needs and our main specialisms. All of this is in partnership with FOREM, CEFOCHIM, and BioWin, etc. Yet again, this is proof of an open ecosystem and a smart specialisation strategy!

Nathalie Gobbe

MORE FROM THE ULB IN CHARLEROI

In addition to the Biopark, now open for over 15 years, the ULB, and several teams from the *Ecole Polytechnique de Bruxelles* in particular, is working on a new research project managed by IGRETEC: the creation of a new centre for excellence in energy efficiency and sustainable development. The ULB will play a key role in two research projects, examining the use of different sources of biomass to create biofuel, and the mass production of solid matter for storing thermal energy. The ULB is also involved in several other research projects in Charleroi.

And, last but not least, the ULB is a partner of the Charleroi-Ville Haute campus, a Campus of Science, Arts, and Trades that incorporates research, higher education and training, the dissemination of scientific culture, and work to raise the profile of scientific and technical jobs.

Immunology, and staying competitive!

The world of research is changing. This is the observation made by two Biopark immunology projects that combine research, enterprise, and training, with support from European funding.

For Arnaud Marchant and Oberdan Leo, respectively the current and former Directors of the IMI, the world of research is changing and we need to change with it. This is the lesson learned from two new immunology projects receiving ERDF-ESF funding.

WORKING TOGETHER

The LIV projects sets out to better understand the differenciation process for T-lymphocytes *(see box).* "These are complex mechanisms" says Oberdan Leo, "To understand them, we need to harness new techniques in molecular analysis and apply them to all of our research, from the molecular and cellular level all the way up to clinical studies with human subjects". The project combines teams from the Institute for Medical Immunology and laboratories working on Immunology and Molecular Biology of the Gene to create this holistic perspective: "We are bringing in different teams with different approaches, and setting them to task on a single theme. This makes us better equipped to understand the complexity of the mechanisms that regulate the immune response", Arnaud Marchant adds.

MOVING WITH THE TIMES

New technologies are revolutionising just how well we are able to understand the complexity of these processes: "It is now possible to analyse the genes expressed by a single cell in full", Oberdan Leo explains, "But this generates a huge amount of information that has to be processed using bioinformatic analysis". The LIV project is designed to develop such techniques within the Biopark, building on the existing technological facilities in Brussels, Liège, and elsewhere. The aim is to stay competitive: "First and foremost, we want to improve the way we carry out our research. And our partners in industry are facing the same challenges as us when researching their candidate drugs and vaccines", Arnaud Marchant continues, "If we want the Biopark to remain a benchmark for research into the immune response, and continue to maintain partnerships with businesses, we need to stay in step with the sector and anticipate future needs". The PCIM project *(see box)* forms part of this strategy: developing new pre-clinical models for academic research and partner companies alike.

LINKS WITH SOCIETY

"We have also been in touch with the team at Biopark Training *(see opposite)* about providing training in these new techniques for our current and future researchers", Arnaud Marchant goes on. The project therefore combines research, training, and social impact through partnerships with businesses. "This round of ERDF programming forms the foundation for future scientific innovation", affirms Oberdan Leo, "By giving us the chance to work with new technologies, it helps to consolidate the Biopark *ecosystem* today, which will have an impact on greater society tomorrow".

Natacha Jordens

PROJECTS

Cytolytic, memory, or regulatory: lymphocytes fill a range of functions, acquired following their first contact with a pathogen. The **LIV** project *(Lymphocytes for Immunotherapy & Vaccination)* sets out to better understand the differentiation process for T-lymphocytes, and those involved in antiviral and anti-cancer responses in particular. The programme has received support from a number of companies, including iTeos Therapeutics, GSK Vaccines, and Delphi Genetics.

The **PCIM** project (for *Pre-Clinic IMmunology)* is a partnership between the IMI, ImmuneHealth, and the Marloie Centre for the Rural Economy (CER). Supported by academic research teams, the two certified research centres are pooling their expertise in order to create new preclinical analytical models for the immune response that better meet the needs of business.

“The Biopark is without equal in Belgium”

Founded in 2012, iTeos Therapeutics quickly climbed the ranks on the Biopark campus. In three years, the company has increased its staff, requiring a move to more spacious premises. It has also recently signed a partnership agreement with Pfizer.

iTeos Therapeutics looks very much like the beginning of a success story, yet another from the Biopark. In three years, the spin-off from the Ludwig Institute for Cancer Research (LICR) and the UCL went from 4 to 27 workers. And since the move into iTech Incubator I, the laboratory space is now five times larger. “There are a number of potential partnerships here on the Biopark. It is a unique cluster, without equal in Belgium and even Europe within our three pillars: tumour immunology, animal models, and translational medicine”, explains Michel Detheux, CEO of iTeos.

“This microenvironment is perfect for starting a business with minimum capital, because we can take advantage of the concentration of expertise within a small location. We regularly work with ImmuneHealth, the IMI, IBMM, CMMI, and even the BUC and the *Specified Pathogen Free* animal house to discover and validate new immunomodulating molecules to stimulate the immune system to fight against cancer”.

PARTNERSHIP WITH PFIZER

The deal signed with Pfizer in 2014 marks another step towards iTeos’ future. “Pfizer is a select partner for our long-term development”, Michel Detheux continues. “And it’s also a bonus for the campus more broadly because it boosts the international visibility of all of our work. The Biopark’s cluster of expertise and our strategic needs are perfectly suited”.

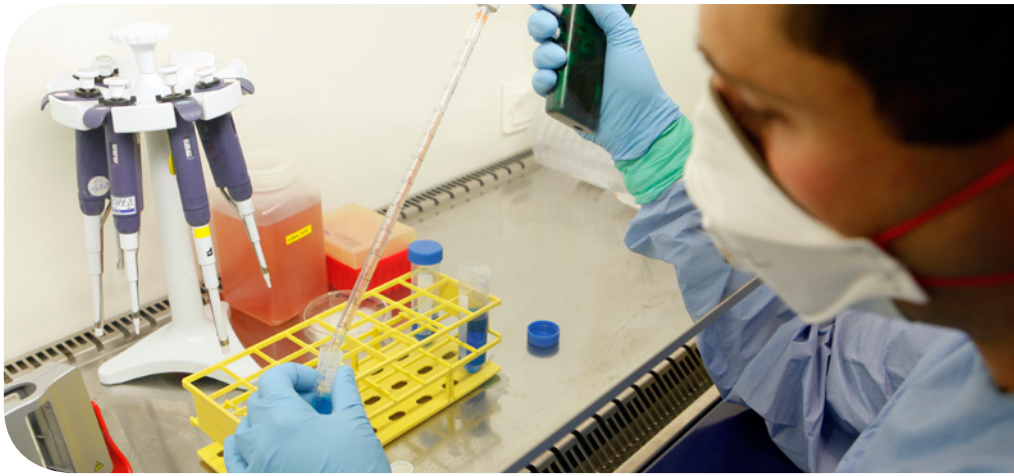
Damiano Di Stazio

Making immunology accessible

“We constantly work to tailor our prospectus to meet the needs of an evolving sector” explains Erika Baus, Scientific Coordinator at Biopark Training. We organise annual events and courses based on the latest developments in immunology, meeting the needs of industry and academia. Next year, we will also be launching a flow cytometry course delivered entirely in English in an effort to reach out to researchers who do not speak French”.

Every year since 2009, immunology training modules have attracted a great many attendees: “What makes our offering so original is that even though we look at each subject in close detail, we place great importance on the fundamentals. This means that we make advances in immunology accessible to non-immunologists”.

D.D.S.



BioProfiling Platform: 100% Walloon

Cutting edge facilities to identify, quantify, and validate biomarkers will soon be available in Mons, as part of a platform shared by the ULB and UMONS in partnership with the ULg and Eurogentec.

European funding also provides a means of financing cutting edge facilities. And this is exactly how the *BioProfiling* platform will be funded. “Thanks to backing from the ERDF to the value of €3.4m, we will be able to acquire cutting edge instruments to detect biomarkers”, explains Ruddy Wattiez, the project leader and professor at UMONS. Located within UMONS premises, the platform will be shared with the ULB: “The administrative, scientific, and everyday management of the platform will be shared by both universities, but the platform will be open to all players in the biomed sector: academic researches, hospitals, healthcare companies, etc. We have the same outlook and operating procedures as the CMMI imaging platform, which was also launched through European funding”.

POLYPEPTIDE METABOLITES

More specifically, the platform is built around two fields and two complementary technologies, which are both designed to identify and quantify biomarkers. META-VISION uses NMR *(Nuclear Magnetic Resonance)* technology to establish metabolite profiles, i.e. the small organic molecules within a cell or contained in organic fluids. “It’s a technology that is beginning to emerge in this field”, Ruddy Wattiez informs us, “It can be used, for example, to look at how these metabolites evolve with an illness, thereby revealing pertinent biomarkers”. The MS-QUANTA platform, however, uses mass spectrometry to quantify the largest molecules, like proteins.

MONS-CHARLEROI-LIÈGE

The MS-QUANTA facility will include four analytical devices, with two in Mons and two in Liège: “The GIGA (ULg) will have two different devices that complement those in Mons. It seemed important to us that we could use these instruments as part of the platform, to obtain a very broad spectrum of analysis and share this extremely expensive equipment. It will also be important with regard to standardizing analyses, in partnership with Eurogentec” *(see opposite)*. From Mons to Liège, via Charleroi, the project bridges a link between the Biopark and the GIGA, two of the biggest biomed research centres in Wallonia thanks to, amongst others, UMONS’ expertise. A 100% Walloon facility.

Damiano Di Stazio

AN OPPORTUNITY FOR THE BIOPARK

The *Bioprofiling* platform will be open to Biopark researchers. This is a godsend because the equipment at the IBMM is already over 10 years old. “Our instruments are now obsolete”, admits Sabrina Bousbata, Research Officer at the Microbiology Laboratory (IBMM), “The platform’s new tools will enable us to perform more sophisticated, faster, more sensitive analyses”. The researcher uses her research into Chagas’ disease as an example, a disease in which the parasite that causes the disease interacts closely with the host insect: Thanks to these quantification tools, we can characterise the expression of proteins involved in this interaction in several different sets of cellular conditions: in control specimens – in the parasite, in the insect – and in environments in which we have modified a given factor. And all of this accurately and selectively. These cutting edge tools have also led to a new way to design and carry out research: " This equipment isn’t just used to prove a hypothesis”, Sabrina Bousbata explains, “We are now working without an initial hypothesis, using the results obtained to create the research”.

N.J.

Another string in Biopark Training's bow

In partnership with UMONS, Biopark Training will launch a new training cycle. Its aim? To help people with little or no experience in mass spectrometry to understand the technical and practical aspects of the technique.

"Proteomics was a field that was notable by its absence from our prospectus", highlights Valérie Hertveldt, Training Engineer at Biopark Training. "This is why, in partnership with the Proteomics and Microbiology Department at the Université de Mons, we have decided to create a new mass spectrometry training cycle".

Until a few years ago, mass spectrometry was only used in a very narrow range of applications, but today the analytical technique is used for a wide range of purposes, ranging from the discovery and validation of biomarkers, to microbiology and quality control for drugs. "Universities and industry alike have a growing need for some level of expertise in mass spectrometry, even though they still tend to subcontract this kind of analysis as the equipment remains very expensive", Valérie Hertveldt explains.

"It therefore became essential to provide courses that would teach attendees to better understand this technique, so that they could communicate with service providers more easily". One particular learning outcome of the course is that it will enable those with little or no experience of mass spectrometry to follow a mass spectrometry protocol on simple and complex protein samples from beginning to end (preparation of samples to analysis of results).

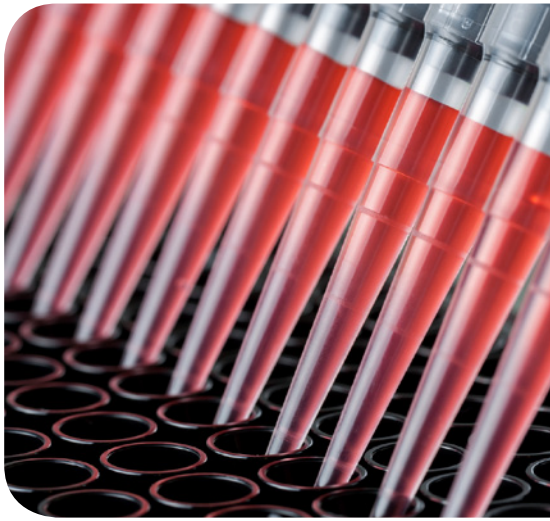
The courses at Biopark Training and UMONS will run in November. Theory classes will be held here at Gosselies, while the practical sessions will be held in Ruddy Wattiez's laboratory at UMONS. The hands-on training is original in a number of ways. "Course participants will be able to prepare samples for analysis themselves, which is not often done", clarifies the trainer. "The case study will be extremely realistic because proteins will be identified from a complex mixture rather than just from a pure protein sample. Lastly, samples will be subject to dual analysis (Q-ToF and Ion Trap)".

Damiano Di Stazio

In search of the gold standard

The KIT-QUANTA is an integral part of the MS-QUANTA platform. A partnership between UMONS and the ULB (working together as part of the *Bioprofiling* platform), the ULg and Eurogentec, the project is designed to develop a standardized procedure for the processing and analysis of specimens used in mass spectrometry. This *universal standard,* that does not yet exist, will enable us to find the absolute quantity of a biomarker contained within a specimen, whatever the molecule analysed and instrument used: "As the devices in Mons and Liège are different, we can carry out and compare blind procedures to validate our data", explains Ruddy Wattiez. "This is what makes the *Bioprofiling* platform unique in Wallonia".

N.J.



A technology facility always at the bleeding edge

The CMMI is an interuniversity platform created by the ULB and UMONS, and in a continuation of earlier ERDF programming, it intends to place more emphasis on the needs of industry and academia. Its aim? To stay competitive nationally and internationally.

Serge Goldman, Manager of *In Vivo* Imaging at the CMMI and Head of the Nuclear Medicine Department at Erasme Hospital, believes that "The major benefit that comes with being part of the Biopark microcosm is that we only have to walk 20m to work with academic laboratories and businesses. We are getting to know each other better all the time, and this enclave of experts makes communication easier. It also means that we can try out ideas on a small scale with our partners before launching research, which saves us considerable time".

As an example of this, iTeos is looking to carry out a feasibility test and take advantage of the CMMI's expertise to evaluate its new cancer immunotherapy cells. iTeos proposed a model and the CMMI is accelerating the process, boosting its efficiency. "Two protocols are currently in the test phase", specifies Serge Goldman. "And this new project in partnership with iTeos will be able to run thanks to the new European funding programme".

Having already demonstrated the relevance of the investment with regard to academic/industry needs during the previous programme, the technology platform intends to ride the momentum. "Our technological services are made possible by our cutting edge equipment, as well as our own procedures that enable us to get the utmost from our images", Serge Goldman enthuses.

NEW CLUSTER AND PROTON THERAPY

Built around three clusters (Microscopy, DIAPATH, and *In Vivo* Imaging), the CMMI will found a multidisciplinary unit dedicated to image processing and analysis: *Multimodal Image Processing.* "Many of the problems that prevent a facility like the CMMI from being used to its full potential lie in the complexity of its hardware and software systems", the researcher explains. "To properly understand this complexity, our researchers call upon skills found outside their initial area of expertise. This multidisciplinary hub makes the CMMI even more effective".

Another project soon to be launched: the creation of a proton therapy centre in Wallonia, which will provide a more scope for the CMMI to work in the biomarker field. "Research will focus on non-surgical treatments, and will therefore be highly dependent on imaging. It is thanks to the resources available at the CMMI that the radiobiological effects of proton treatments can be evaluated *in vivo* in animal models".

Damiano Di Stazio

ERDF FUNDS... BUT THAT'S NOT ALL

Independently of ERDF structural funds, the CMMI is also seeking to diversify its funding sources for more projects with a more specific target. These include CWALity (Osteomod), and *Fondation contre le cancer* funds.

D.D.S.

Exponential opportunity

The close relationship between Bone Therapeutics and the CMMI has already produced several confirmed projects. The biotech company regularly makes use of the technological platform's cutting edge facilities.

Bone Therapeutics is accostumed to rely on the facilities of the CMMI. Just on such example is the CARTIM project that tests the effectiveness of new treatments for osteoarthritis using a model that enables the non-invasive and quantitative measurement of cartilage *in vivo,* and OSTEOMOD, which will continue to evaluate and track the effectiveness of *in vivo* fracture treatments for small animals using quantitative and qualitative imaging.

"One of the Biopark's major advantages is its favourable climate for subsidised infrastructure projects", comments Wim Goemaerz, CFO at Bone Therapeutics. "This is also how, in partnership with Promethera, we have created the Walloon Cell Therapy Platform (WCTP), which really cuts our costs".

"The Biopark also facilitates interaction and collaboration with other companies, institutes, and university departments in general", specifies Enrico Bastianelli, CEO of Bone Therapeutics. A perfect example of this is our work with SIRRIS. "We are currently working with SIRRIS to develop a product that combines our cells, which are able to form bone, with a 3D printed matrix to treat serious fractures", the CEO concludes.

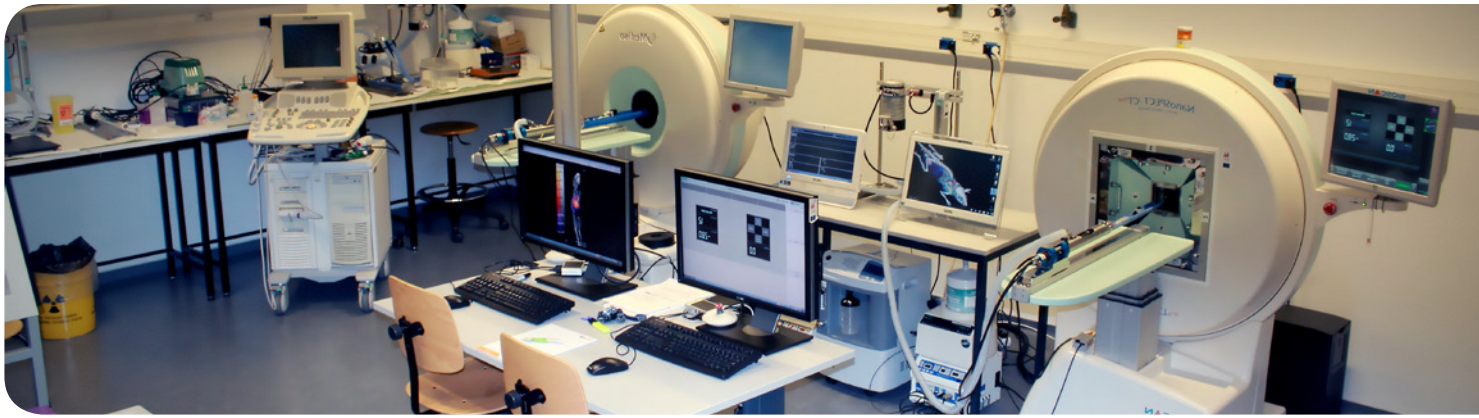
Damiano Di Stazio

Specialised courses for CMMI specialities

There has always been a close relationship between Biopark Training and the CMMI. Indeed, the launch of the molecular imaging platform went hand in hand with the increase in courses offered by Biopark Training in this field. "Since the CMMI opened in 2011, we have created a generalist training course that enables professionals working in the sector to gain a better understanding of each piece of its cutting edge equipment", Erika Baus, Scientific Coordinator at Biopark Training, explains.

"But we have also developed more specialised training modules that focus on a particular aspect of the equipment. These include special modules in fluorescence microscopy and electronic microscopy, along with histology, immunocytochemistry, and TMA (tissue microarray)". Other projects are in the pipeline.

D.D.S.



Human Biospecimen Platform: ImmuneHealth at the helm

Today, human biospecimens play an essential role in the development of new treatments, or the discovery and corroboration of biomarkers.

Europe, Belgium, and the *Fédération Wallonie-Bruxelles* were quick to understand the key-role of the human biospecimen, as evidenced in particular by the creation of the Biobanking and Biomolecular Resources Research Infrastructure (BBMRI), and support for the *Biothèque Wallonie-Bruxelles* (Wallonia-Brussels Biological Resource Centre - BWB). This dynamic has been further bolstered by support from the ERDF, and the ImmuneHealth joint research centre will form a *Human Biospecimen Platform,* working closely with the BWB.

Indeed, the BWB is aiming to form a network of university biobanks in the *Fédération Wallonie-Bruxelles* (read our report in issue 18 of BioparkNews). However, as of yet these biobanks are unable to fulfil every request. “Some studies involve highly specific tests and groups of patients, special sampling or storage procedures, or work on fresh samples, for example”, Brigitte Genard, Deputy Director of ImmuneHealth, explains, “It then becomes necessary to arrange a special prospective clinical study to collect the requested samples. Our clinical unit based at the Tivoli hospital in la Louvière enables us to carry out exactly this kind of study”.

More specifically, requests for biospecimens will be submitted to the ImmuneHealth platform which will then identify the optimal solution (biobank or prospective study), oversee contact with clinical sites or biobanks with support from the *Biothèque Wallonie-Bruxelles* (BWB), track specimens and manage clinical data, and set the value of the sample, etc. And throughout this entire process, the most stringent ethical and regulatory requirements are met.

Brigitte Genard is keen to stress that “Our platform is the only one of its kind in Europe, providing our companies with easy, organised access to human biospecimens, and furthering the growth of our university biobanks. Beyond just online connections, we wanted to establish operational processes that include our various resources”. Coordinated by ImmuneHealth, the project will be launched in partnership with the ULB, and the Erasme Hospital biobank in particular, before going on to forge more academic partnerships, with the UCL having already expressed its interest in the initiative.

Nathalie Gobbe

TATAA Biocenter pays a visit to the Biopark

TATAA Biocenter, the European leader in analytical services for genetic expression, will be in Charleroi next December. In addition to technical training in *Single Cell qPCR* and *Digital PCR,* there will be a *Quality* course covering the standardisation of specimen preparation for analytical testing, delivered in partnership with Biopark Training.

A few months back, a member of Biopark Training travelled to the TATAA Biocenter (Gothenburg, Sweden) to take a course in qPCR. "The well-known centre also offered courses in highly specialised fields like *Single Cell qPCR* and *Digital PCR.* We don't have that kind of specialist expertise here", Erika Baus, Scientific Coordinator at Biopark Training, reveals. "After talking to management while I was there, we saw that collaboration could be beneficial for both sides".

The result? TATAA Biocenter will be in Charleroi next December to deliver a course (in English) on the standardisation of specimen preparation for analytical testing as part of molecular diagnostics. "This is an extremely positive development for our profile, as well as for that of the Biopark in general", Valérie Hertveldt, Training Engineer at Biopark Training, happily reports. "We are now able to reap the rewards of TATAA Biocenter's publicity, and their international clients will now be able to come to Charleroi to sit the courses".

In concrete terms, the *New CEN Technical specifications for the pre-analytical process in molecular diagnostics* course, based on a recent CEN (European Committee for Standardisation) report, is designed to train industry and academic staff in all of the new guidelines issued to standardise pre-analytical processes (samples, storage, transport, extraction, etc.), in an effort to guarantee high quality, comparable results between laboratories.

"We can be very proud of this new international partnership", beams Erika Baus. "The project is the first step in a long-term partnership with TATAA Biocenter, and why not other renowned training centres...". A real boost to the international visibility of the Charleroi training centre.

Damiano Di Stazio

A pilot study to detect prostate cancer

Belgian Volition, a subsidiary of VolitionRx, is developing blood tests to diagnose certain cancers, and is currently working with ImmuneHealth. "We launched a pilot study (on over 200 subjects) designed to detect aggressive prostate cancers", reveals Marielle Herzog, Lead Scientist in the Namur-based company. With support from Wallonia, the project is seeking to identify and measure nucleosomes in the blood, as well as some of their specific epigenetic structures, in order to accurately detect prostate cancer.

D.D.S.

MIRVAL+ is going from strength to strength in Wallonia

The ULB has a policy of proactive contribution to Wallonia's economic development, which counts on the TTO (Technology Transfer Office) to find business applications for the findings of research. The support afforded to the MIRVAL+ project by the ESF and Wallonia serve to consolidate this policy, in particular within the Charleroi Biopark. Isabelle Lefebvre, Director of the ULB TTO, tells us how.

WHAT ARE THE OBJECTIVES OF MIRVAL+?

I.L: For the technology transfer offices that form part of the LIEU Network, the main, shared objective is to facilitate the process of finding business applications for the research coming out of the Universities and University Colleges in the *Fédération Wallonie-Bruxelles.* This entails effectively identifying laboratory research results with business potential, finding industrial partners to develop and use these results, and bringing innovative companies looking for cutting edge expertise into contact with the university teams that are able to help them.

AND HOW EXACTLY IS THIS DONE ON THE BIOPARK?

I.L: On the Biopark, TTO advisors, supported by MIRVAL+, are working to:

- Provide businesses with access to academic expertise and technological platforms, in particular those belonging to the Wallonia-Biomed portfolio and working in immunology, molecular imaging, human biospecimens, and bioprofiling
- Identify the specific innovation needs of business and provoke opportunities for partnerships in the local business sectors of immunotherapy, imaging, diagnostics, and cell therapy
- Promote partnerships between university laboratories and businesses working on the Biopark, with competition clusters, ImmuneHealth, and other certified research centres
- Collaborate with the I-Tech Incubator team to identify and support entrepreneurial projects from ULB teams

Sibylle Rocher-Barrat

WELCOME TO THE BIOPARK!

This autumn, a number of researchers are joining the Biopark through FNRS contracts, Télévie research grants, and support from the Fonds Erasme. *We would like to extend a warm welcome to all of you!*

Laura Weichselbaum (FNRS Candidate) :
Deciphering the cellular and molecular mechanisms implicated in innate immune cell dysfunction in cirrhotic patients. • Supervisors: S. Goriely/F Willems, T. Gustot

Nicolas Istaces *(Fonds Erasme)*:
Transcriptional control of Innate CD8 lymphocytes. • Supervisor: S. Goriely

Assiya Assabban (Télévie):
Tristretraprolin's (TTP) role in the control of tumorigenesis. • Supervisor: S. Goriely

Stefania d'Aria (Télévie):
Metabolic reprogramming of T lymphocytes that infiltrate tumours. • Supervisor: M. Braun

Alice Hoyois *(Fonds Erasme)*:
Role of maternal lymphocytes in the development of biliary atresia in new-borns. • Supervisors: A. Le Moine, R. Reding

Emmanuelle Alaluf *(Fonds Erasme)*:
Regulating the anti-tumoral response with myeloid HO-1. • Supervisor: A. Le Moine

Mohammad Fayyad Kazan (Télévie):
Supervisor: L. Vanhamme

BIOPARK CHARLEROI BRUSSELS SOUTH

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