



BIOPARK

CHARLEROI BRUSSELS SOUTH

news

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A couple of questions...

Biopark: three “new” clusters

The Biopark’s academic research teams have been restructured into three clusters: Immunology, Cellular and Developmental Biology, and Molecular Microbiology. The Vice-Rector for research and regional development at the ULB, Serge Schiffmann, tells us more.



3 CLUSTERS: WHO’S WORKING WHERE?

CELLULAR AND DEVELOPMENTAL BIOLOGY:

Bruno André, Marie Baucher, Eric Bellefroid, Daniel Christophe, Mondher El Jaziri, Birthe Fahrenkrog, Denis Lafontaine, Anna Maria Marini, David Perez-Morga, Bernard Robaye, Jacob Souopgui, Luc Vanhamme, Benoit Vanhollenbeke

MOLECULAR MICROBIOLOGY:

Sabrina Bousbata, Louis Droogmans, Abel Garcia-Pino, Eric Muraille, David Perez-Morga, Carine Van Lint, Laurence Van Melderen

IMMUNOLOGY:

Fabienne Andris, Michel Braun, Véronique Flamand, Stanislas Goriely, Cyril Gueydan, Véronique Kruys, Alain Le Moine, Oberdan Leo, Arnaud Marchant, Muriel Moser, Guillaume Oldenhove, Florence Roufousse, Fabienne Willems

RESEARCH AT THE BIOPARK IS NOW STRUCTURED AROUND THREE CLUSTERS: IMMUNOLOGY, CELLULAR AND DEVELOPMENTAL BIOLOGY, AND MOLECULAR MICROBIOLOGY. DO YOU SEE THIS AS A NECESSITY?

Serge Schiffmann : I would describe it more as an opportunity than a necessity.

The researchers already know each other and are used to working together. With this new structure, they will no doubt “step it up a notch”: answering calls for projects together, acquiring and sharing equipment or technology platforms... and more besides. The research teams working on the Biopark have solid scientific reputations, publish regularly, and play an active role in Belgian and international programmes and networks, but are too often small. This is why it is an important and smart decision to unite them into a group with more scientific clout, as well as enabling them to share resources and costs. This is something that *Wallonie* has understood and encouraged since through the ERDF, the Immunology cluster will be able to expand its research into T-lymphocytes.

IS JOINING FORCES TO WORK TOGETHER NOT ENOUGH?

Serge Schiffmann : I’m sure that collaboration already takes place, but by creating these clusters we are making official what was already in practice in the field. The researchers should also be looking for new opportunities to get together and talk science together, which is already happening with themed seminars focusing on each of the three clusters. Another idea is to envisage greater mobility between teams for PhD students and post-doctoral researchers. They could learn a lot from working with the laboratory next door, and share their own knowledge, too. This restructuring of research on the Biopark into three clusters should also boost everyone’s visibility. It is definitely a motivating project, all the more so for our youngest researchers.

Nathalie Gobbe

Immunology Cluster: T-lymphocytes in focus



In the Immunology Cluster, over 100 researchers are working towards a common goal: to identify which cellular and molecular mechanisms can be used to develop anti-viral and anti-cancer immune responses.



Immunology on the Biopark has roots stretching back years: first through the teams at the IBMM, then with the arrival of the IMI followed by the Immune Health joint research centre and a number of companies. And although up until now researchers had been building relationships and working together of their own accord, what was doubtless lacking was a more formal relationship, a single banner presenting a unified image, consolidating joint projects. But this shortfall has now been overcome: the hundred or so researchers (biologists, chemists, immunologists, doctors, clinicians, etc.) now form a coherent group as the Biopark's Immunology cluster.

A researcher at the **IBMM's Immunology Laboratory, Oberdan Leo** is one of the project's lynchpins. "I have been a researcher at the IBMM for many years now, and managed the IMI from 2009-2015, and while I already knew all of the teams, I now know that we share the same scientific interests, need the same equipment, and run up against the same problems", he explains, "Now that we are all part of the same cluster, we can pool our competences and resources: we can acquire and share technology

that is often very expensive, and answer calls for projects together, etc.".

ERDF BACKING

And the dynamic is off to a good start, already supported by *Wallonie* and the EU. Thanks to ERDF support, Biopark researchers will set out to identify the cellular and molecular mechanisms that can be used to develop anti-viral and anti-cancer immune responses. Their focus? Th1 and Tc1 lymphocytes.

Current vaccines stimulate the production of antibodies by B-lymphocytes, which makes them highly effective at preventing a wide range of infections. However, when combating diseases that have already established a chronic intracellular infection, as is the case with some viruses or immunity against cancer, for example, it is T-lymphocytes that play a key role, and two kinds in particular: Th1 type T CD4 and cytolytic T CD8, also known as Tc1. These two kinds of lymphocytes form an important target for therapeutic vaccinations of the future (targeting subjects who are already infected or carrying a tumour), and immunotherapy. However, too little remains known of these lymphocytes, even though cellular and molecular biology has made some major progress in recent years.



BEYOND THE BIOPARK

"A lot of questions remain unanswered: how does a lymphocyte become a killer cell? What regulatory pathways can stand in the way? How is cell memory maintained? In our cluster, we are examining these issues in humans and animals, focusing on understanding molecular mechanisms", Oberdan Leo underlines, "And our interaction with other researchers isn't limited to the Biopark: we are planning to bolster our synergy with other immunologists at the ULB, in particular on the Erasme campus. We have a need for other skills, in particular bioinformatics for which (IB)² is a key contact. And of course we have to remain attentive to the needs of businesses, which have a strong presence around *Wallonie* and on the Biopark, in particular GSK Vaccines, UCB, iTeos, Delphi Genetics, Bone Therapeutics, MaSTherCell, etc.".

Nathalie Gobbe



Cellular and Developmental Biology Cluster: examining biological processes

The new Cellular and Developmental Biology cluster is designed to expand our horizons and increase our understanding of complex living organisms. And the future looks bright, especially for training young researchers.

“Researchers in this cluster are exploring the biological processes at work on different levels, from the molecular mechanisms governing cellular homeostasis to the development and physiology of organs and organisms. Having these complementary fields at our disposal within an integrated research cluster is a fantastic asset”, reveals Benoit Vanhollebeke, who manages the “new research group” alongside Eric Bellefroid.

“More specifically, we are studying exchanges between the cell’s cytoplasm and its nucleus, ribosome biogenesis, and membrane transport”, he adds.

Within the cluster, research is also focusing on early embryonic development, signalling in receptors coupled to G proteins, inflammation mechanisms, the process behind programmed cell death, and plant physiology and genetics.

Other teams are studying transcription factors in the development of the cerebral cortex, and the intracellular movement of amino acid transporters in yeast and human cells (transporters which are, for example, hyperactive in cancer cells and therefore represent potential targets for treatments).

“This restructuring is great news for the scientific maturity of our young researchers who will be able to play a more active role in the cluster’s other teams: a boon for understanding complex biological processes, translating into better training for our students”, Eric Bellefroid explains.

In all, 11 laboratories and more than 60 researchers are now grouped together in this cluster. “Access to cutting edge equipment, in particular high spatial and temporal resolution fluorescent microscopes, is a major asset for our teams and essential to the cluster’s future”, Benoit Vanhollebeke concludes.

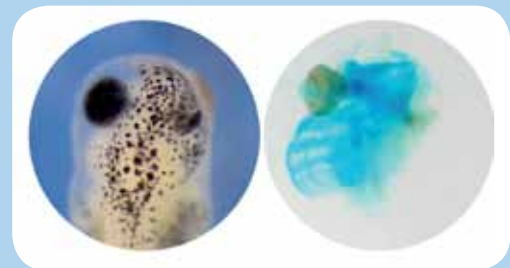
Damiano Di Stazio

A JOINT PROJECT ON RIBOSOMOPATHIES

Just one example of collaboration? The project from teams working under Denis Lafontaine and Eric Bellefroid, examining ribosomopathies which are “cancer predisposition syndromes, associated with malformations of the skeletal system and issues with blood cell maturity”, Denis Lafontaine explains.

“Thanks to the valuable support from our colleague Eric Bellefroid, we have been able to model certain ribosomopathies in animals, more specifically the xenopus, a South-African toad, which hails from South Africa and is now widely used as an amphibian model. We can now say that inhibited ribosome biogenesis (in the right section of the embryo, *see illustration*) severely affects particular tissues during embryonic development, in particular the eyes and craniofacial skeleton, reproducing some of the symptoms observed in human patients suffering from ribosomopathies”.

D.D.S.



Studying microorganisms and molecular mechanisms



Research teams at the Molecular Microbiology cluster are studying microorganisms across the board: viruses, bacteria, and even parasites.

“Presenting a united front based around a shared theme – molecular microbiology - boosts not only our internal visibility within the Biopark, but also beyond it”, explains Laurence Van Melderren who, together with Carine Van Lint, manages the Molecular Microbiology cluster and its seven laboratories staffed by over 30 researchers.

Larger funding applications can be submitted to national and international foundations and institutions, which should have a greater chance of success. “The restructured IBMM and the new Molecular Microbiology Cluster will doubtless pave the way to new partnerships with industry in pharmaceuticals and biotechnologies”.

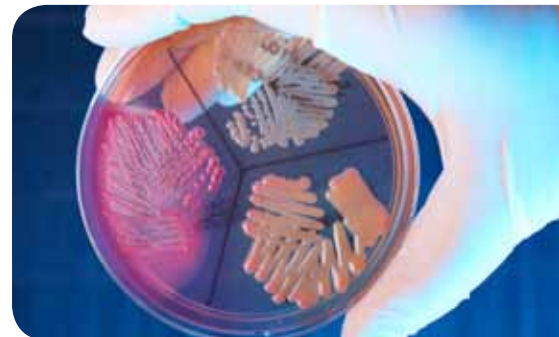
HOST-MICROBE INTERACTIONS

One of the major themes for the Cluster's research teams? Questions surrounding the molecular mechanisms that govern host-microbe interactions including, for example, interaction between the immune system and the pathogenic bacteria *Brucella*, the AIDS virus, or the Trypanosome parasite.

Other fundamental areas of enquiry include the molecular mechanisms that control the physiology of bacteria and parasites, and which let them adapt to their environment or host. “Structural biology or biochemical approaches, as well as microscopy, are the complementary keys to answering the molecular questions

we are studying in the cluster”, Laurence Van Melderren specifies. “And of course there are some major synergies with other research groups on the campus”.

Damiano Di Stazio



THE EUROPEAN RISE PROGRAMME: HIV-1 VIRUS

The Cluster is currently taking part in a European RISE project (*see page 9*) that is examining the molecular mechanisms governing HIV-1 latency, and offering researchers opportunities for international mobility between the various project partners. “The aim is to find strategies we can use to awaken the dormant virus”, explains Carine Van Lint.

D.D.S.

MOLECULAR MICROBIOLOGY MORNING EVENTS

Like the Cellular Biology and Development cluster, managers at the Molecular Microbiology cluster will begin holding themed morning events in January onwards. “At the events, young researchers (PhD or post-doctoral students) from the different groups will give a 10 minute presentation on their research project, followed by a discussion”, Laurence Van Melderren explains.

“These sessions will provide an opportunity to learn about different subjects and produce technical and/or themed exchanges between the cluster's researchers. The may also lead to new partnerships that may not have been launched otherwise”.

D.D.S.



Euroscreen: Three clinical trials for ESN364

Keeping a low profile on the Biopark and in the press but well known to the pharmaceutical industry and the investors, Euroscreen is pushing ahead with its innovative projects. These include clinical trials launched for ESN364, their most advanced candidate drug. The company has also secured additional funding to keep this project, and others, on the right track.



Whenever ESN364 is mentioned, Jean Combalbert's face lights up. The Euroscreen CEO oozes enthusiasm: "In 2015 we launched three parallel Phase II clinical trials for this candidate drug, which is quite unusual for a small biotech company", he explains. Three trials, for three female ailments: uterine fibroids,

polycystic ovary syndrome, and the hot flushes that come with the menopause. "We have great hopes for the latter", the CEO goes on, "Because it's the symptom whose frequency and intensity make it menopausal women's main complaint. This means it has a very large potential market, and ESN364 offers an unprecedented approach to treatment".

ORIGINAL MECHANISM

Whether treating ovarian cysts or uterine fibroids, most current treatments act as chemical castrators by completely inhibiting the brain's secretion of FSH/LH hormones, precursors to sexual hormones. This strategy brings with it a drug-induced menopause, with symptoms that include osteoporosis and hot flushes. "ESN364 works differently", Jean Combalbert explains,

"It reduces LH secretion without completely shutting it down, and has no effect on FSH. This avoids the problems associated with castration, in particular osteoporosis. And unlike hormone replacement treatment, which mimics the behaviour of oestrogen after the menopause, ESN364 works directly on the thermoregulation centre: "This means it stops hot flushes, a world first in the field."

PROMISING PIPELINE

The clinical trials currently underway are therefore designed to prove ESN364's effectiveness on the severity and frequency of hot flushes, as well as in the treatment of uterine fibroids and polycystic ovary syndrome. In mid-October 2015, Euroscreen attracted €16m to carry out the trials itself. This private investment comes in addition to the €14m already raised in 2012. The company has also secured funding from several European and Walloon sources. "The most advanced projects are of course the ones that attract the most private investment", notes Jean Combalbert, "But we definitely don't want to neglect the development of other products that are following ESN364 along our pipeline. Public funding for less mature projects and private funding for more advanced ones are both necessary and complementary".

And Euroscreen is continuing to study another candidate drug in partnership with Merck: ESN282, which treats inflammation. Progress is also being made with the preclinical development of ESN502, which works to treat neurodegenerative diseases like Parkinson's and Alzheimer's. "The project still has two years' worth of Walloon funding ahead of it. We have a promising preclinical candidate and hope to begin Phase I clinical trials in 2017".

Natacha Jordens



Takeda/Univercells: A strategic partnership for accessible vaccines in emerging economies



On 24 August, *Takeda Pharmaceutical Company Ltd.*, through its subsidiary specialising in venture capital, *Takeda Ventures Inc.*, invested €3m equity in Univercells. The investment is recognition of the Walloon company's expertise and know-how. The two companies will now launch a joint development programme to adapt Univercell's integrated continuous production methods for use in Takeda's vaccine production facility.



TAKEDA INVESTS IN UNIVERCELLS...

The two partners, who share a common viewpoint on decentralised production, are now in negotiations to cement a business partnership in which Univercell's integrated continuous production methods will be incorporated into the production platform for various vaccines in Takeda's catalogue. The challenge? Improving cost-effectiveness through technological innovation rather than lower labour costs. This project forms part of Takeda's accessible healthcare policy that, "...Strives to make vaccines accessible to the people who need them, wherever they are. Our market access strategy focuses on lowering production costs while maintaining excellent quality, and manufacturing processes play a pivotal role in this", explains Rajeev Venkayya, President of the Global Vaccine Business Unit at Takeda. The emerging markets that are the special focus of this accessible healthcare strategy are the Middle East, North Africa,

South Africa, Turkey, China, and South Korea. It is a strategy supported by the management team at Univercells, including its Technical Director, José Castillo, who believes that, "It is fundamentally important that there is equal access to healthcare around the world".

UNIVERCELLS DOUBLES STAFF IN 2016

To enter the market and provide access to its technology, the company also proposes innovative partnership models. These take the form of joint ventures, in which the partner provides the intellectual property which is industrialised together, or technology transfers with medium-sized pharmaceutical companies working in the emerging market and wishing to produce biosimilars locally.

And that is exactly what Univercells is discussing with a pharmaceutical company in Tunisia, with a view to developing a biosimilar production platform (monoclonal antibodies). Other partnerships have also been launched in countries like Turkey, Russia, Indonesia, and Colombia. To honour all of its projects, Univercells plans to double its staff by 2016

through the recruitment of bioengineers and qualified bioprocess technicians. These new recruits will find their home in the new laboratory which will be opened on the Biopark on Thursday 17 December, in a ceremony attended by Takeda and political representatives from the region.

Sibylle Rocher-Barrat

Univercells is an applied engineering company in biomanufacturing: it provides its clients with breakthrough continuous bioproduction techniques that significantly reduce start-up and operational costs without compromising on the highest quality standards.



OncoDNA, most promising company of 2015, plans on tripling its turnover in 2016

After one year in business, OncoDNA has analysed more than 2000 tumour samples and tracked patients from over 60 countries. On the eve of a fundraising round that should enable the company to develop its products and launch a sales strategy, the youthful company has just won the Ernst & Young award for “Most promising company of the year”.



OncoDNA was chosen from over 50 preselected companies by a panel of CEOs from the business world. They applauded both its business model and its conclusive results in assisting patients struck by advanced metastatic cancer. The company's products and services received incredibly positive feedback from oncologists who report numerous cases of remission or stabilisation. Jean-Pol Detiffe, CEO and founder of OncoDNA, confirms that “the award is fantastic recognition, especially of its business model and development”, and complements the recognition it has already stacked up from the scientific community. And at a time when the company is finalising a major round of fundraising, this recognition comes at the right time and affords some broad media coverage.

EXPONENTIAL GROWTH

Since it was founded in December 2012, OncoDNA's business has grown very quickly, and it currently employs 16 staff. 2015 turnover is estimated at €1.5m, thanks in particular to a high repeat order rate among oncologists. And the trend looks set to continue in 2016: “We were recently chosen by major cancer research consortia, and have signed a major €5m contract with 82 hospitals in 15 countries around the world”, Jean-Pol Detiffe reports. It is part of the AURORA project from BIG (Breast International Group), a breast cancer research programme in which the company will assist in the treatment and monitoring of 1300 tested patients.

FUNDRAISING ROUND

This growing business naturally means that the company has to fund itself, which is why it is currently negotiating a fundraising round incorporating both private equity and subsidies. Currently in discussions with a variety of public and private investors, the company hopes to raise €20m. OncoDNA's challenge is now to bolster the development of online communities of patients and oncologists using its existing web platforms. But it is also a matter of

launching a true sales strategy, penetrating promising markets with its own sales force, and securing social security coverage for its services in certain countries.

To that end, Jean-Pol Detiffe hopes to add to his existing teams of bio-informatics technicians with the recruitment of a number of sales and marketing experts, increasing the company's workforce to some 40 staff by the end of 2016, so that OncoDNA may continue to grow.

Sibylle Rocher-Barrat



RISE: sharing experiences to move forwards



The European RISE project is designed to promote contact between researchers from academic and clinical teams. The Molecular Virology laboratory is a partner in a project dedicated to innovative strategies in the fight against HIV.

One of the major obstacles to wiping out the Human Immunodeficiency Virus (HIV) is the presence of *latent reservoirs*, where infected cells containing the dormant virus persist in HIV+ patients, despite receiving anti-HIV treatment. The "*Accelerating HIV Cure in Europe*" project is setting out to identify the molecular mechanisms behind this latency, and will use this new understanding to develop treatment strategies that will reduce these viral reservoirs and send the disease into remission. The idea behind the European RISE (*Research & Innovation Staff Exchange*) project is exclusively to fund mobility: "Budgets are allocated solely for researchers to go on secondment to other teams in the consortium", explains Carine Van Lint, Director of the Molecular Virology laboratory and a RISE project partner. "This will enable young researchers to broaden their training by spending a few months in a foreign university or research institute, all while remaining employed by their home laboratory. It will let them see how other research centres work, and generally encourage new joint projects within the consortium".

ONE FOOT IN THE CLINICAL WORLD

The seven European and Canadian partners include two hospitals. And indeed, the RISE

project incorporates both fundamental and preclinical sections: close collaboration between academic and hospital teams will enable them to learn and apply experimental strategies or techniques that are unique to the centre in question. "We have already been contacted by a hospital in the consortium that wants to learn how we carry our preclinical trials", Carine Van Lint reports. And the laboratory's recent discoveries are very well suited to this kind of collaboration: "We contributed to the discovery of transcriptional and epigenetic mechanisms involved in HIV latency", the researcher explains. "We have also shown how certain pharmaceutical molecules, already approved for treatment of other diseases in humans, target these mechanisms and *awaken* the latent virus. And we have also demonstrated *in vitro* and *ex vivo* how some of these molecules are more effective when taken simultaneously, which means that the dosage of each molecule can be reduced, and their side effects along with it".

MULTIPLE EXCHANGES

The collaboration with hospital partners will also produce a significant increase in the number and variety of blood samples from HIV+ patients, as well as leaving to a better understanding of how the response can vary between patients due to

the heterogeneous mechanisms responsible for HIV latency. The RISE project therefore works to facilitate the transition from translational research to the clinic through collaboration and training. The programme will officially begin in 2016, and run for four years.

Natacha Jordens

EXCHANGES WITH BUSINESS, TOO

Following advice from the *Technology Transfer Office* (ULB TTO), the **Molecular Virology laboratory** was chosen to present the technology developed by the laboratory to a panel of companies in Lyon. Sophie Bouchat represented the laboratory presenting a kit, currently under development, that will be used to identify virological, immunological, and patient-specific profiles, as well as detecting which patients are showing signs of "remission", meaning long term control of the viremia in the absence of anti-retroviral treatments, without the disease developing. It is a major component in directing clinical research, as well as for planning breaks in treatment. A number of promising contacts were made with businesses in Lyon that could lead to future partnerships.



Innovative training in translational medicine

In January, I³h will launch its first training course which is also the first of its kind in Belgium and Europe: a certificate in translational medicine.



To describe and explain the long path between the fundamental discovery of the mechanism behind an illness and the sale of innovative, safe new treatments: this is the learning

objective of the certificate in transnational medicine that will be launched in January 2016 by the Institute for Interdisciplinary Innovation in healthcare (I³h), in partnership with the ULB's Biomedical Science programme committee, the Health Cluster, Biopark Training, and Solvay Brussels School of Economics and Management.

"The purpose of the certificate in transnational medicine, the first of its kind in Belgium and Europe, is to inform the full range of healthcare players about steps that are not covered in traditional courses", states Michel Goldman, founder of the Institute for Interdisciplinary Innovation in healthcare (I³h).

"Precision drugs will revolutionise healthcare by adapting the prevention strategies and treatments to the characteristics and needs of each individual and every patient", Michel Goldman explains. This revolution brings with

it the need to broaden the skills of healthcare professionals and organise the active participation of a new generation of engineers, IT technicians, economists, managers, sociologists, regulatory specialists, and patient representatives.

CROSS-DISCIPLINARY

Aimed at students and professionals from a diverse range of backgrounds, the course will be launched in January 2016. The four week programme (four modules, each lasting one week) is designed to cover the cross-disciplinary and collaborative aspects of translational medicine, from fundamental research to preclinical and clinical research, encompassing regulatory requirements, legal and ethical issues, as well as entrepreneurial strategy, all while remaining focused on patients and their expectations.

To guarantee that the four modules making up the course fit together in a logical sequence, speakers will be asked to base their classes on recent innovations and their implications for healthcare, such as the anti-parasitic treatments that recently won the Nobel Prize for medicine, meningococcal vaccines, new treatments for Hepatitis C, cancer immunotherapy, or new approaches to inflammatory diseases and neurodegenerative pathologies.

The aim? To show how the complex processes behind advances in medicine depend on complementary contributions from different stakeholders, and demonstrate how value is created through successive steps based on cross-disciplinary, collaborative approaches.

In the longer term, the aim is to expand the course and its content into the master's in biomedical sciences.

Damiano Di Stazio





Biopark Training has begun work designing a digital learning module. An intense effort will be required to meet the demand for courses and innovative new ways to learn.

Biopark Training has been looking at e-learning and other new ways to learn for a few years now. “Our flow cytometry module is designed as a *reverse class*: students learn the theory at home and then come to lab to ask questions and put their knowledge into practice”, explains Arnaud Termonia, Director of Biopark Training. The team has also used this method for a course developed in partnership with OncoDNA, all of which is delivered through distance learning (*see page 12*). “I firmly believe that we need to offer a variety of ways to learn, including some based on digital learning”, Arnaud Termonia reveals.

A DETAILED SCRIPT

Eager to explore this avenue further, Biopark Training sought out the *ULB Podcast* team, which provides educational support and cutting edge expertise in the development of new ways of learning at the university. Recently commissioned by Biopark Training to develop digital learning, Jennifer Le Van got straight to work: “Working with the *ULB Podcast* team I have access to the tools and competences used in these new approaches to learning”, explains the newcomer to the Biopark, “I’m often on the Biopark campus, guiding educators as they digitalise their content. I act as an intermediary between expert educators and developers”. And this

mediation is definitely necessary, because the process is more complex than it may appear: “First, we need to identify the target audience, given that their prerequisites may differ. Next we have to develop the course architecture, and how different content fits together: we can’t explore issues in vaccinology without having first learned some basic concepts in immunology, for example. But students who are already aware of these concepts should be able to skip this module without feeling lost in the next one. We then need to choose the format that is best suited to learning each concept: video, games, case studies, etc.” The planning and development process is a rigorous one that even encompasses recorded presentations for new educational videos: “A bit like a film script”, says Jennifer Le Van.

COMPLEMENTING EXISTING COURSES

The Biopark Training team are now working on a course structure that builds digital learning into immunology. Arnaud Termonia picks up the thread: “This foundation course will complement other courses in fields like allergology, cancer immunotherapy, vaccinology, and molecular immunology, etc.”. He hopes to launch the course in 2016, an innovative project that will have to be tracked, evaluated, corrected, and readjusted. “The long term goal is to adapt the process

to other major fields in our prospectus”. Ambitious? “Indispensable!”, retorts the director of Biopark Training, “Staying modern and competitive means developing new ways to learn, alongside cutting edge courses”.

Natacha Jordens





CHINESE STUDENTS AT THE BIOPARK

Each year, the Chinese government grants 30 fellowships to doctoral students wishing to undertake part of their thesis in one of the research laboratories of the ULB, in all disciplines. Selected by the China Scholarship Council, the projects must be of high scientific quality and correspond to the interests of the ULB host laboratory. At the Biopark, two students were selected:

- Arrived at the laboratory of **David Vermijlen (IMI)** since October, **Ma Ling** begins a thesis on the role of T lymphocytes Vg9Vd2 in early life.
- **Manfei Liang** will be welcome in February 2016 at the **Molecular Biology of the Gene Laboratory** for a thesis on the regulation of gene expression in response to changes in oxygen.

Welcome !

SUCCESS FOR ONLINE COURSE

The online course in molecular oncology from OncoDNA and Biopark Training has been a definite success. Launched in 2014, the course is designed for new distributors of OncoDEEP, a test that OncoDNA has developed to identify the most suitable way to treat a patient's tumour. The 100% online module is currently being studied by 124 people in 33 countries around the world.



SOLVAY AWARDS

Handed out every two years, the Solvay Awards reward "very high quality" work carried out by science graduates at the ULB and VUB as part of their master's or PhD course. The 2013/2014 winners received their awards on 18 October and of 29 candidates, 19 hailed from the ULB. Amongst them were three young researchers who carried out their research on the Biopark:

- **Laure Twyffels** for her thesis on the nucleocytoplasmic transfer of the protein TIS11, researched in the **Molecular Biology of the Gene** laboratory and submitted for her viva in 2013. Today, Laure works at the **CMMI**. She also gave a speech at the "Chemistry for the Future Solvay Prize" awards ceremony on 18 November.
- **Kassem Ghaddar** for his thesis providing a structural analysis of amino acid transporters in yeast, research carried out in the **Molecular Cell Physiology** laboratory, and defended in a viva in 2014. Kassem is now a post-doctoral researcher at the ULB Center for Diabetes Research (Erasmé).
- **Quentin Labtani** for his dissertation completed at the **Plant Biotechnology Laboratory**, examining the anti-biofilm action of a rosewood bark extract on *Pseudomonas aeruginosa* PAO1. He is currently expanding his research with a thesis at the LBV.

Congratulations!