



### **BioTechDay** 8th december 2022





### Stands all day Meet companies at the ESBS !





## Conference : Bacteriophages as a response to antibiotic resistance

10:00-10:30 A.M.

As antibiotic resistance is a growing health problem, new ways of fighting bacteria need to be developed. Bacteriophages are a promising example.

### The speaker:

**Dr Patrick JAULT** is an anaesthetist and resuscitator. After having served for more than 25 years in the army health service, he now practices as an anaesthetist in a Parisian clinic. In the course of his career, he has coordinated a European clinical trial on the use of bacteriophages (PHAGOBURN). The results of this trial were published in 2019 in The Lancet Infectious Diseases, a subject of recognised interest since the journal chose to make it its front page and a dedicated editorial. Through the conduct of this trial, he proposes to show us what role bacteriophages may play in the future and how tomorrow's health issues require the coordination of universes that usually communicate little with each other.



# Conference : Innovation where we don't expect it

10:30-12:30 A.M.

Discover where innovation can emerge from, from medical reseach in the army to RNA therapies and to bioremediation.

### The speakers:

**Chantal Pichon** is Professor at the University of Orleans (France), senior member of the Institut Universitaire de France as Innovation chair laureate and invited professor at Berlin Institute of Health funded by Stiftung Charité. She carries out her research activities at the Centre de Biophysique Moléculaire (CNRS-Orléans) and coordinates the team Cellular Signaling, Molecular Targets and Innovative Therapies. Her research at the interface of chemistry and biology focuses on the development of innovative therapies and nanomedicine with a strong focus on the exploitation of messenger RNAs as vaccines and biomedicines. Chantal Pichon has a track-record of 168 articles and 12 filed patents. She has obtained 26 academic and private contracts (ANR, Horizon Europe and FP7 EU, Centre Val de Loire Region...).including 17 as coordinator



### The speakers:

Valérie Geoffroy is a lecturer at the Faculty of Pharmacy in Strasbourg, in charge of the master's degree in microbiological quality assurance of health products. She does her research in a laboratory at the interface between chemistry and biology in the UMR Biotechnology and Cell Signalling. She leads the environmental research axis within the team Metals and microorganisms: biology, chemistry and applications, which focuses on understanding the interactions between minerals, materials and bacteria. In recent years, her research has focused on the bioremediation of asbestos waste.

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Conference : Biological differences between men and women in medicine, and how society's ideals influence research on this subject

#### 10:30-12:30 A.M.

Despite the undeniable evidence of these biological differences between men and women, it is often very controversial to bring them to light. In France, research on these differences is often described as "taboo". It is however important to define and recognise these differences. In pharmacology it is recognised that some drugs do not affect men and women in the same way and yet the majority of studies are conducted on men.

### The speakers:

**Claudine Junien** is Professor Emeritus of Medical Genetics (Paris Ouest and University of Versailles Saint-Quentin) and former Director of INSERM Unit 383 at Necker Enfants Malades Hospital, Paris (1993-2009).



Conference : Biological differences between men and women in medicine, and how society's ideals influence research on this subject

#### The speakers:

**Jacques Balthazart** is a biologist, Associate Professor Emeritus at the University of Liège, who studies the control of reproductive behaviour by sex hormones. He is the author of more than 500 scientific publications and several books for the general public dealing with sexual differences in behaviour between men and women, both in terms of sexual behaviour and its orientation (homo- or heterosexual) and in terms of brain structure and cognitive skills.

**Michel Raymond** is a research director at the CNRS, and heads the Evolutionary Anthropology team at ISEM (Institut des Sciences de l'Evolution de Montpellier). He conducts research in human evolutionary biology, in particular on reproductive strategies, local adaptations and medicine.



Conference : Can cellular agriculture meet the current environmental and food challenges?

#### 2:30-4:00 P.M.

While animal farming has a proven negative impact on the environment, cell agriculture is a solution being considered by some to reduce the environmental impact of meat consumption.

### The speakers:

**Bluu Seafood** is Europe's leader in the production of cultivated fish, using cells instead of animals to obtain healthy, delicious, and sustainable fish products. The media development team around **Dr**. **André Schiefner** focuses on understanding and tailoring the nutritional needs of Bluu's fish cell lines.

**Alexandre Morel** grew his passion for tissue engineering while working on the development in vitro models of kidney, lung and skin tissues by combining knowledge in cell biology and material science. He then joined **MIRAI FOODS** to apply his expertise and help building the first cultivated meat production line in Switzerland.



# Conference : The pharmaceutical industry and its current challenges

2:30-4:00 P.M.

Find out more about the pharmaceutical industry, a major biotechnology sector.

### The speakers:

**Hélène Haegel** is an ESBS Alumni graduated in 1989. She holds a PhD in immunology from the Université Louis Pasteur in Strasbourg. After a few years in academic research, she joined Transgene SA where her work was dedicated to gene therapy and later to immuno-oncology projects. She co-funded ELB, a spin-off developing monoclonal antibodies for cancer immunotherapy. In 2018 she moved to **Roche Pharmaceutical Sciences**, where her work focused on the immunogenicity and safety assessment of innovative medicines for oncology and genetic diseases.



# Conference : The pharmaceutical industry and its current challenges

### The speakers:

**Kaidre Bendjama** is a biologist by training. His professional focus is on the application of personalised treatment techniques in autoimmune diseases and oncology. The projects on which he works mainly consist of developing therapies that stimulate the immune system to induce an anti-cancer action. The particularity of the products developed by **Transgene** is that they are based on viruses modified to express different types of proteins capable of inducing an immune response against tumour antigens (antigens) and where this response can be modulated by the co-expression of cytokines or immunomodulatory therapeutic agents. In this presentation, we will discuss the challenges of developing a cancer vaccine in patients and in particular, the advantages and limitations of personalised therapies which allow to reach a higher efficacy than more classical approaches at the cost of developing a tailormade product for each patient.



### **Conference : Discover NovAliX**

#### 4:00-4:30 P.M.

Find out more about NovAliX, is a Strasbourg-based company in expansion.



#### The speaker:

Founded in 2009, NovAliX is a French CRO in biophysics, chemistry and structural biology. Alongside the main players in the pharmaceutical world, NovAliX participates in the discovery of molecules that will improve our lives tomorrow. At the heart of a constantly evolving universe, NovAliX offers a wide range of rare and complementary services. Whether outsourcing or insourcing, NovAliX adapts to design customised solutions for each project. NovAliX has a unique technical platform implemented by passionate scientists who are experts in their fields.



# Conference : IT security in research

#### 4:30-5:00 P.M.

The collection and storage of huge amounts of data is part of today's biology, and raises security issues, for example the confidentiality of patients' genetic and health data. Genida is a platform where patients with intellectual disorders send their genetic data, which is anonymised, to help research on this subject by determining the genes involved.

### The speaker:

**Pierre Parrend** is a professor at EPITA Strasbourg, and a member of the ICube laboratory (Strasbourg) and the EPITA research laboratory (LRE). He is in charge of the security and system team of the LRE. He is interested in attack detection and data protection mechanisms for critical systems, in particular medical or industrial data.