



SYNTHESIS OF THE INTERNATIONAL CONFERENCE

"The stakes and competitiveness of food innovation at European level: The key to success for business-university partnerships"

Tuesday October 18th 2016

The seminar was opened by François Hubert, Vice-President of ANIA and CEO of Salins du Midi, who stressed **the importance of relations between universities and industry**. A large proportion of agri-food companies in Europe are SMEs and it is difficult for them to innovate. Innovation is essential for these companies; it is a key for the future to meet the needs of a fast-growing population. Innovations in agri-food are numerous but not always break-through, unlike other sectors. Many innovations consist in **improving the functional and nutritional properties of food**: for this we need the skills of industrialists but also of universities.

The morning talks began with Alexandre Voirin, Director of Consumer Centricity at the Nestlé Research Center in Lausanne (Switzerland), on the issues of innovation and Nestlé's university-business partnerships. To innovate, according to him, it is important to focus on the consumer and to take into account the "pleasure" dimension. The world today is constantly evolving and we must adapt our way of working: today, **collaboration between industries and universities is no longer a choice but a necessity**. For the future, we must ensure that this collaboration is improved. The aging of the population and the increase of chronic diseases make it necessary to adapt food by combining food and pharmaceutical products and by reconciling "healthy product" and "pleasure of taste".

Alexandre Voirin discussed the **various forms of collaborations possible** with universities such as networking, post-docs, sponsorship (experimental and clinical studies), licensing agreements and alliances with staffing (long and strategic partnerships). They all have an interest, on the one hand for the industrialist and on the other hand, for the universities. Nestlé has established numerous partnerships with universities in Europe and around the world. These partnerships enable Nestlé to have access to experts in specific fields, to deepen knowledge, to limit long-term human and financial investments for research projects, to have the vision of young scientists and possibly to recruit them. It is also an easier way for Nestlé to publish. For universities, these partnerships enable them to obtain financial means, to promote education through practical cases and, ultimately, to have an impact on society.

The second conference presenting the **contribution of higher education and continuing education to innovation** was given by Gerhard Schleining, lecturer at BOKU (Austria), secretary-general of the ISEKI-Food association and project coordinator of EuFood-STA. He explained that innovations are driven by our society and dependent on our society. According to him, innovation requires three key factors: identified needs, qualified people and financial support. To prepare students to be innovative, technology is not enough. Students must be mobile by being exposed to different environments. They need to be open on several fields of discipline and have an entrepreneurial mindset, which requires exposure to an industrial work environment

with the help of agri-food professionals, trainers and Tutors. Gerhard Schleining then explained the gap that too often separates universities (which focus on basic research and time-consuming publications) from the agro-food industries (focusing instead on practical and rapid applications that do not require publication) and that the EuFood-STA center is one of the solutions to bridge this gap.

Bertrand Emond, Director of Partnerships at Campden BRI (UK), hosted the third conference on the **roles of technical centers as an interface between universities and companies**. He showed how technical centers can reduce the gap between universities and companies, as described by Gerhard Schleining. Technical centers, such as Campden BRI, meet the needs of agri-food companies by drawing on the knowledge of universities and translating basic research into practical applications for companies.

The last conference of the morning was moderated by Peter Lillford, Consultant at the University of Birmingham (UK). He presented the **keys to the success of university-business partnerships**. According to him there is not a single answer but many possible models because the keys to success are multiple:

- identify the capabilities and constraints of the company,
- avoid litigious intellectual property and prefer pre-competitive fundamental research,
- follow the rules of intellectual property and the publication of the results,
- evaluate the long-term benefits.

The **roundtable on incubators** was attended by Florence Ranson, FoodDrink Europe, three Heads of incubators: Jérôme Zlatoff (ISARA, France), Israel Griol-Barres (IDEAS, Spain) and Thomas van Den Boezem (Startlife, The Netherlands), as well as Sarah Vandermeersch, a young entrepreneur who participated in the Ecotrophelia 2015 contest in Belgium.

Their cross-views concur on the importance of incubation structures and their crucial role to:

- Assess the risk and validate the promoter / project couple, which is a major element of the success of an entrepreneurial adventure,
- Set up a structuring methodological framework for the promoters of projects and accompany this crucial phase of emergence and construction,
- Connect the entrepreneur with his eco-system, saving him time and gaining in efficiency in his search for resources, whether technical, human or financial.

Stakeholders agreed on the **importance of the human factor, the state of mind** that constitutes an innovation and business creation process. They also stressed the importance of phasing and the necessity to study the needs, the market and the expectations of consumers.

They also showed how incubation structures are a key **link in connecting project promoters to their industrial ecosystem** and bridging the gap with academic research. In this sense, the role of an organization like FoodDrink Europe is upstream and contributes to building a favorable environment for innovation in the food sector by stimulating research themes that will then feed the promoters and SMEs.

The current dynamic of development of incubation structures shows a **great diversity of models**: conceptual or general, with or without profit, with or without financial participation in the projects following the logic of sharing the risk and the opportunities. Rapid access to the market is a key lever for projects success, and the **emergence of the next link, the accelerator**, takes over from the incubator in order to accompany the first stage of growth of these young Companies.

The Round Table on Ecodesign and Sustainable Development brought together Yvonne Colomer, Director of the Triptolemos Foundation (Spain), Ulf Gunnar Sonesson, Senior Lecturer at SP Technical Research Institute of Sweden, Gwenola Yannou-Le Bris, Lecturer at AgroParisTech (France) and Georges Garcia, President of Alg & You and La Voie Bleue (France).

One of the challenges facing agri-food companies is to **combine innovation and eco-design** in order to reduce the impact on the environment. To this end, stakeholders stressed the need to involve public authorities in educating and informing the public about eco-design in order to change the way we produce and consume.

There is a need to link bio-economy, the biosphere and the agri-food industry. One of the solutions to reduce the impact of food products on the environment is to find solutions to replace animal proteins, which have a strong impact on the environment, by new protein sources. Georges Garcia explained that spirulina and microalgae are the source of ecological vegetable proteins and can meet our nutritional needs in the face of the increasing protein demand (+ 40% by 2030).

The round table on financing issues brought together Nuria Arribas, representing the profession as well as the Foodlab project (FIAB, Spain), Frédéric Ventre, founder of Yooji (France), Isabelle de Cremoux, (Seventure, France) and Stefania Abbona, founder of a start-up (The Algae factory, The Netherlands).

First of all, the speakers stressed the **highly strategic nature of the agri-food sector** and therefore the importance of financing these productive activities: they are anchored in our territories, have a strong impact in terms of sustainable development and Capital investment.

Frédéric Ventre insisted on the difficulty of emerging, convincing and raising financing when we position ourselves in a sector that is highly competitive and in a niche such as baby food. After mobilizing public support and raising funds, Yooji now has the support of private investors to continue its development.

Beyond the mobilization of sufficient financial resources, Isabelle de Cremoux insists on the **very long maturation of certain projects**, particularly in the health food sector, as is the case in the biotechnology field. With the emergence of a start-up, venture capital is not easy to mobilize as long as the viability and profitability of the project have not been demonstrated. For every entrepreneur, the crucial question is therefore the time necessary to **find the right financial partner and to structure a highly capitalist industrial tool**.

Finally, the speakers stressed the importance of the institutional context and, in particular, **public aid schemes** (such as Bpifrance), which have a very important leverage effect.

In conclusion of this very rich day, Gilles Trystram, director of AgroParisTech, highlighted the following:

- The **time needed to validate any food innovation**, particularly in terms of safety,
- The **major changes** that are at work: rapid growth of the world population, changing needs and expectations and therefore the need to immerse oneself in the reality of consumers,
- From the **university point of view**, the need to be more reactive and innovative, to find new ways of working together and to develop this spirit of innovation, by renewing the model of education,
- From the **industrial point of view**, the importance of linking to science and technology, the connection with the talents of tomorrow but also of cross-sectoral approaches.

To reduce the gap between university and industry and foster win-win partnerships, G. Trystram identified three issues:

- demonstrate the value of innovation, its relevance, as is the case with ECOTROPHELIA,
- measure the overall impact of the new product,
- ensure the transfer of the university to the industry, in particular thanks to the incubators, which are a good tool to help with the transfer and the emergence of projects.