

# 1<sup>st</sup> EIT Food Innovation Marketplace

Bilbao 22-23 February 2017

www.eitfood.eu









# Content

### 1<sup>st</sup> EIT Food Innovation Marketplace

IT Food's Ambition	4
Agenda	6
IT Food Partners	8
RisingFoodStars	110
lotes	172
et's start engaging!	182
-eams	184
Attendee list	186

### EIT Food's Ambition

EIT Food is a consortium of 50 partners from leading businesses, research centres and universities across 13 countries. A people-centric and resource-smart transformer of the European food system, driving consumer confidence and improved global health.

#### Goals and Impact

EIT Food's vision is to put Europe at the centre of a global revolution in food innovation and production, and its value in society. EIT Food will engage consumers in the change process, improve nutrition and make the food system more resource-efficient, secure, transparent and trusted.

EIT Food has six strategic objectives:

- Overcome low consumer trust: support
   Europeans in the transition towards a smart
   food system that is inclusive and trusted.
- Create consumer valued food for healthier nutrition: enable individuals to make informed and affordable personal nutrition choices
- 3. Build a consumer-centric connected food system: develop a digital food supply network with consumers and industry as equal partners.
- Enhance sustainability: develop solutions to transform the traditional 'produce-usedispose' model into a circular bio-economy.
- Educate to engage, innovate and advance: Provide 'food system' skills for more than 10,000 students, entrepreneurs and professionals through advanced training programmes.
- Catalyse food entrepreneurship and innovation: foster innovation at all stages of business creation.

It aims to boost the skills and entrepreneurial spirit in the sector and unlock the potential of small and medium sized enterprises (SMEs), which in turn will accelerate innovation, create jobs, benefit businesses and increase Europe's competitiveness.

#### EIT Food aims to, among others:

- Support the creation of **350** start-ups within seven years
- Train over 10 000 graduates from EIT-labelled Master and programmes over seven years
- Develop 290 new or improved products, services, and processes by 2024
- Decrease greenhouse-gas emissions in the European food system by 40% by 2030

#### This will be achieved by:

Developing new talents: attract and engage new talent through EIT Food education programmes with curricula designed to overcome the 'silos' of knowledge and skills in specific areas of the food system. EIT Food will introduce new learning methods, entrepreneurial tools, and business practices that empower students, professionals and executives at all career stages to become entrepreneurial champions in Europe's food sector.

- Delivering business creation and acceleration support: boost the competitiveness of the EU food sector and ensure that Europe remains the number one global exporter of food and drink. EIT Food will proactively support entrepreneurs in transforming their ideas into businesses through the entire start-up cycle and in clearly defining their market. It will generate future entrepreneurial champions in the food sector who will fulfil their ambition to improve nutrition, achieve food security and promote resource-efficient food systems.
- Create consumer-valued food for healthier nutrition: develop innovative tools and technologies that support personalised diet profiles combined with the ability to self-assess the impact of customised diets through non-invasive home diagnostics, mobile devices and individual online coaching. This will help to narrow the current gap between people's intentions and actual behaviour towards healthier foods and lead to an improvement of people's health across Europe.



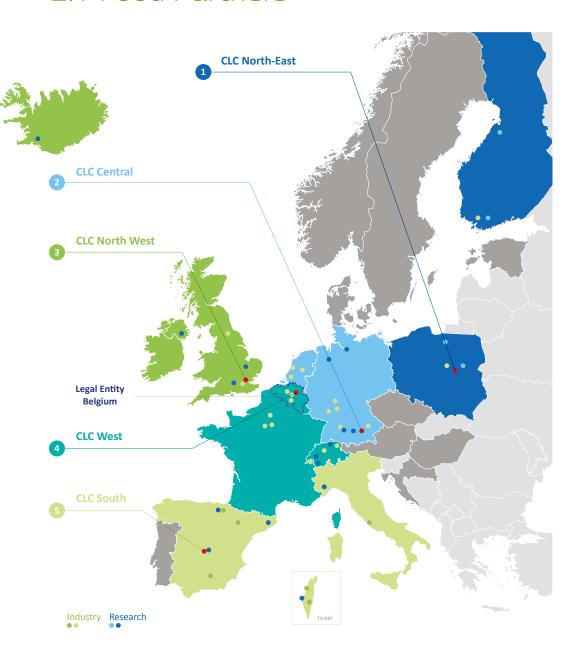
# Agenda

### 1<sup>st</sup> EIT Food Innovation Marketplace Bizkaia Aretoa | Bilbao | 22<sup>nd</sup> and 23<sup>rd</sup> February 2017

22 <sup>nd</sup> February				
8:45 – 9:30	REGISTRATION			
9:30 – 9:45	Opening by Dr. Ellen d	Opening by Dr. Ellen de Brabander Interim CEO EIT Food		
9:45 – 10:00	Welcome by Arantxa Tapia Basque Government's Minister for Economic Development and Infrastructure			
10:00 – 11:00	Inspirational talk: "Radical is Normal"  Alfons Cornellá  Founder of Infonomia "Building Innovation teams"			
11:00 – 11:30	COFFEE-BREAK			
11:30 – 12:50	Setting the scene: information of the calls  11:30 – 11:45 Innovation activities. Begoña Pérez Villarreal  11:45 – 12:00 Business Creation activities. Dr. Thorsten Koenig  12:00 – 12:15 Communication activities. Mieke Vercaeren  12:15 – 12:30 Education activities. Prof. Dr. Jochen Weiss  12:30 – 12:50 Introduction Marketplace dynamics			
12:50 – 14:00	LUNCH			
14:00 – 17:00 & MATCH-MA		15:00 – 15:20	4 KEYNOTES  "From lab to market: educating tomorrows food innovators" Prof. Dr. Jan Brinckmann — ESADE  "From lab to market: how to generate	
	MARKETPLACE	15:20 – 15:40	innovations in the food space"  Angel Sanchez — Partner Director at i-deals	
	& MATCH-MAKING	15:50 – 16:10	<b>"From business creation to creating business"</b> Erich Sieber – Managing Director Bluefields Associates	
		16:10 – 16:30	"Can citizen participation drive innovation and societal change?" Prof. Dr. Ir. Liesbet Vranken — University of Leuven & Claudia Suárez-Gapp — Business Partner Nielsen Lifestyle	
18:00 – 22:00	TEAM BUILDING ACTIVITY			

23 <sup>rd</sup> February				
9:00 – 10:30	Partners' Assembly. 1 officially mandated representative per Partner In parallel: Meeting rooms for partnering and informal meetings will be available.			
10:30 – 11:30	What makes a good EIT Food proposal  Mapping proposed activities against EIT Food strategy and planned pillar activities Interim Functional EIT Food directors.			
11:30 – 13:00	4 KEYNOTES			
		11:30 – 11:50	"From lab to market: educating tomorrows food innovators" Prof. Dr. Jan Brinckmann – ESADE	
	MARKETPLACE & MEET THE START UPS  Coffee will be served	11:50 – 12:10	<b>"From lab to market: how to generate innovations in the food space"</b> Angel Sanchez — Partner Director at i-deals	
		12:20 – 12:40	<b>"From business creation to creating business"</b> Erich Sieber – Managing Director Bluefields Associates	
		12:40 – 13:00	"Can citizen participation drive innovation and societal change?"  Prof. Dr. Ir. Liesbet Vranken —  University of Leuven  & Claudia Suárez-Gapp — Business  Partner Nielsen Lifestyle	
13:00 – 14:00	CALL FOR PROPOSALS  Review of the process, selection criteria, final proposal template for activities and key dates for the Call for Proposals Klaus Beetz, Interim COO EIT Food  CLOSING REMARKS  Final words to the attendees summarising the event, including some facts and figures regarding the work carried out: ideas proposed, number of potential projects defined, next steps.  By Dr. Ellen de Brabander, interim CEO EIT Food & team			
14:00 – 15:00	Networking Final lunch			

### **EIT Food Partners**



#### **CLC North-East**

#### Warsaw

#### Poland

- IARFR PAS Institute of Animal Reproduction
- Maspex
- Raben
- University of Warsaw

#### **Finland**

- University of Helsinki
- VTT Technical Research Centre of Finland
- Valio

#### **CLC Central**

#### Aunich

#### Scio

#### German

- Deutsches Institut fü Lebensmitteltechnik
- Döble
- Fraunhofe
- Herbstreith & Fox KO
- John Deer
- Bosch, Packaging Technology
- Siemens
- TIIM Technische Universität Müncher
- University of Hohenheim

#### The Netherlands

- DSM
- Konnert
- Plantl ah

#### **CLC North-West**

#### Londoi

#### UK

- IFR (Institure for Food Research)
- PepsiCo
- QUB The Queen's University of Belfas
- University of Cambridge
- University of Reading

#### Ireland

ABP Food Group

#### Iceland

Matis Icelandic Food & Biotech R&D

#### **CLC West**

#### Leuve

#### Belgium

- Colruyt Group
- EUFIC The European Food
- University of Leuven (KUL)
- Puratos

#### France

- Limagrain / Valmorin
- Roquette Frères
- Sodexo

#### **Switzerland**

- Bühler
- EPFL (Ecole Polytechnique Federale de Lausanne)
- Eidgenössische Technische Hochschule Zürich
- Givaudan
- Nestec
- Nielsen

#### CLC South

#### /ladrid

#### Spain

- Acesur
- Grupo AN S. Coop
- Angulas Aguinaga
- Azti
- CSIC
- University of Madrid (UAM)

#### taly

- AIA Associazione Italiana Allevatori
- University of Torino (Unito)

#### Israel

- Algatechnologies
- Strauss Group
- Technion Israel Institute of Technology

### ABP FOOD GROUP

### Food Processing



#### Profile

ABP Food Group is one of Europe's largest vertically integrated Agri Food processors. Our core business is beef processing, harvesting the products from over one million cattle each year from farmers throughout Ireland, the UK and Poland. We also have a sizeable lamb business processing over 2M across ROI and UK. Products that do not make it into the human food chain are further processed in one of our other 3 divisions, Petfoods (a pan European business trading as C&D), ABP proteins (adding value to by-products - tallow, MBM, Gelatine), or our Renewable energy division (trading as Olleco).

Dean Holroyd Group Technical and Sustainability

14 Castle Street Ardee, County Louth Ireland

www.abpfoodgroup.com

E: dean.holroyd.@abpbeef.com T: +0121 7172500

#### Competences & Capabilities

Understanding of beef / lamb farming systems and drivers of farm efficiency / profitability. Sector sustainability (economic and environmental) Harvesting and adding value to animal by products to minimize waste and maximize value. Food authenticity, security and brand protection of supply chains.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

ABP Beef has a patented Ultra-Tender process underpinning product consistency that delivers leading consumer satisfaction metrics.

We are embarked on various Genetic and Genomic programs with leading institutions to improve sector sustainability (economic and environmental)

We have 2 trial R&D farm units to prosecute our trial activity and through Blade Farming have an integrated controlled supply chain.

We are highly active in identifying opportunities and deriving value from animal by products across the sister divisions of ABP beef.

All of the above is underpinned by significant business investment in state of the art facilities.



#### Communication

ABP have c35,000 farmers supplying directly to our network of slaughter sites. From there we supply our network of beef and lamb products for retail, food service and manufacturing sectors. We would cater for 150m consumers on a daily basis to ensure they have a safe, tasty and nutritious eating experience.

Effective engagement with our farming supply base is essential to deliver sector efficiency.

Given the importance of the Agri sector to the Irish economy interactions and influence at governmental level directly and indirectly is commonplace.

We interact and collaborate joint research funded and non-funded projects with many of our customers, academics and food experts from around the world.



#### **Business Creation**

From humble beginnings ABP Food Group has grown organically, by acquisition and through business creation to become one of Europe's largest integrated Agri Food Businesses. Examples of business creation would be:

Olleco (ABP renewables) originally using tallow in biodiesel has grown to become a leader in renewable energy and recycling expertise with infrastructure collecting from 50,000 outlets weekly.

Investing to add value to animal by products in ABP Proteins by constructing the first Gel Bone plant in the British isles.

Establishing our own integrated cattle supply chain (Blade Farming) across ROI / UK using a controlled system of farming.



#### Education

ABP offer long and short term placements within every sector of the business if required.

We also are part of an innovative program to connect young children in schools to the origins of their food through a program called - 'Calves in the Classroom'.

We work with Agricultural Universities and do farm simulation trials on efficiency and sustainability.

ABP work with leading agricultural bodies from government, levy bodies to feed manufacturers to discuss and plan for all future challenges.

ABP sponsors a number of its employees to undertake PhD's / Masters / Further education activity for the benefit of both individual and business.

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# ACESUR Food industry





Pablo Gómez Rodríguez R&D

Carretera de la Carolina Km 29 23220 – Vilches (Jaen) Spain

www.acesur.com
E: prodriguez@acesur.com
T: +34 620362611

#### Profile

ACESUR is one of the most important worldwide olive oil producers. With more than 175 years of experience, it has presence in each step of olive oil production, from the tree to the table. Also it has a great experience on vegetable oil, sauces and vinegar producer. It top brands La Española and Coosur have presence in more than 100 countries around the world.

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Olive oil Production and manufacture
- Vegetable oil and fat manufacture
- Sauce manufacture
- Healthy foods
- Vegetable-base waste treatment

ACESUR innovation philosophy is very close to the market, in order to offer new, healthier, sustainable and better oils and sauces according to the modern consumer demands and necessities, as well as raw material for other food industries.

To archive that goals, our R&D team collaborate with Universities, research centers, private companies and final users to solve technical difficulties and find new opportunities.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Our innovation is focus on final consumer and clients. Based on new technologies developed by academia, research center and food companies, we apply it to produce new foods, both oils and sauces.

Olive oil is our main raw material so ACESUR can offer an excellent and prime quality new ingredient to improve all kind of food which needs oil or fat in the production process. Also we can adapt physical-chemical, sensorial and nutritional quality of olive oil and other vegetable oil to improve food matrix adaptation.

In addition, we work to reduce the impact of waste from olive production and oil refinery, looking for ways to re-use and valorize those industrial wastes.

**Contact:** Pablo Gómez Rodríguez. R&D prodriguez@acesur.com



#### Communication

ACESUR, as olive oil leader promote communication with all groups related with the oil world, from the farmer to distributors, restaurants and consumer organizations

Also we are very active to promote Mediterranean diet and a healthy way of life and remark its goodness and importance. A special mention to children, chefs and housewives.

**Contact:** Carlos Yagüe. Communication manager cyg@acesur.com



ACESUR is a group which main propose is food production, however other business and companies related with food industry, as energy or waste recycling are linked with ACESUR

New opportunities to create business which can improve or help the group growth are always welcome.

**Contact:** Andrés García. R&D manager agarcia@acesur.com



### Education

We collaborate with Universities, Master and PhD food science programs from Andalucía and Spain to offer industry expertise and point of view to the researchers of the future.

ACESUR offer the opportunity to acquire practical experience in the vegetable and sauce sector thought internship agreements with the Universities

**Contact:** Andrés García. R&D manager agarcia@acesur.com

## ASSOCIAZIONE ITALIANA ALLEVATORI - AIA



#### Profile

The Italian Breeders' Association (AIA) was founded in Rome on 20 August 1944 to revitalize national livestock breeding programs devastated by World War II. Our mission is in article 3 of our Statute: "The association is of a technical and economic nature. Its aim is to promote initiatives which can usefully contribute to a rapid improvement in livestock, enhancing value and the value of products".

The initial structure has now grown and has branches all over Italy, supporting all sectors of livestock breeding and offering a wide range of technical services to boost competitiveness and sustainability for breeders.

### 37

#### Master Contact

Riccardo Negrini Technical Director

Via Tomassetti, 9 00161 Rome Italy

www.aia.it

E: negrini.r@aia.it T: +39.0685451214

#### Competences & Capabilities

AIA is the Italian official organization in charge of livestock performance recording for management and genetic improvement purposes.

- 1100 technicians for milk and meat performance recording and 700 for extension service
- 46.000 farmers (23.000 dairy farms)
- 80% of the total milk produced yearly in Italy
- more than 250,000 days per year spent on farm
- a net of 22 laboratory for milk analysis
- member of ICAR (www.icar.org ), Interbull (www.interbull.org), EAAP (European Association for Animal Productions), FIL-IDF (International Dairy Federation), WAAP (World Association for Animal Production)

#### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

**Innovation** is fundamental to success. Apart from advanced researches in animal genetics and genomics, AIA developed a set of innovative facilities:

**L.G.S.** (Genetics and Services Lab), a fully equipped top level laboratory for genetic and genomic analysis

LSL: Milk Standard Laboratory for calibration reference milk samples. LSL provide local laboratories with certified reference milk samples in order to constantly calibrate and check instrument according with ISO standard

**C.P.C.M.** Test Laboratory for calibration of recording devices used for performance recording at heard level.

**Contact:** Raffaele Mazza mazza.r@aia.it



#### Communication

During its 70-year history, AIA has promoted the transfer of agricultural knowledge from research into farming practice.

AIA shares its know-how by developing guidelines and procedures as well as by working with international partners on innovative initiatives focused on biodiversity and biosecurity.

Its mission is to guide the farmers to the use of the best practices in the management of animal welfare, productions chains, quality and traceability of food products.

Contact: Alessia Tondo tondo.a@aia.it



#### **Business Creation**

Successful farming in the 21st century requires knowledge not only of the latest techniques for raising crops and farm animals but also of how to operate a successful business.

AIA supports the farmers by:

- introducing suitable innovations into traditional food process to maintain and increase quality and competitiveness.
- developing indicators to determine the overall farm performance in term of environmental impact and animal welfare maintenance
- identifying, testing and applying best practices and farm management innovations

**Contact:** Stefano Biffani biffani.s@aia.it



#### Education

Thanks to its 2500 specialists, AIA promotes an animal welfare culture across all country.

A widespread knowledge network has been developed, supporting farmers and breeders in their everyday activities.

Meetings and symposiums are regularly organized providing the farmers with scientific and technical up-to-date information.

**Contact:** Mauro Fioretti fioretti.m@aia.it

## ALGATECHNOLOGIES LTD.

Micro-Algae



Master Contact

Gary Brenner
Business Development

Kibbutz Ketura D.N. Hevel Eilot 88840 Israel

www.algatech.com

E: brenner@algatech.com T: +972-52-2715299

#### Profile

Algatechnologies Ltd., established in 1998, is an innovative biotechnology company specializing in the development, production and commercialization of health related algae-based products for food/beverage, dietary supplement and cosmeceutical market segments.

#### Competences & Capabilities

Algatechnologies first became known as a micro-algae leader with the production and worldwide sales of AstaPure®, a natural Astaxanthin from Haematococcus pluvialis, one of the most powerful antioxidants.

Located in Israel's Arava Desert – with its stable climate and high light intensity – Algatechnologies is ideally positioned to cultivate microalgae.

Our commitment to sustainability is rooted deeply in our eco-friendly manufacturing and support processes. We utilize natural solar energy, recycle precious resources and clean wastewater.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

The state-of-the-art closed system, covering more than 15 acres of arid desert land, hosts a modular array of tubular glass photobioreactors, more than 500 km (310 miles) long. The entire system is automated and controlled remotely:

- A controlled closed microalgae cultivation system
- Green technology, energized by natural sunlight
- Supercritical CO2 extraction technology
- ISO, HACCP, non-GMO, kosher, halal and GMP certifications



### Communication

Our core values

Algatechnologies takes a visionary approach to running a successful company, with a commitment to responsible practices across the business landscape. We aim for and achieve excellence in cultivation and science, leveraging green environmental approaches for a healthier planet, and provide safe, natural, high-quality products that align with our strategic priorities and values.

We implement our core values throughout our business, in our research & development, manufacturing, quality, marketing and sales.



#### **Business Creation**

Develop innovative algal plantbased protein sources with important functional properties needed for a wide variety of food and beverage applications. The project aims to develop cost-effect, highly functional and good tasting specialty proteins with important essential amino acid profiles; extracted to 70-80% total protein content (MFB); to be competitive with other alternative plant protein sources.



#### Education

Algatech's technology was developed nearly two decades ago in the lab for Microalgae Biotechnology at Ben-Gurion University (BGU), by Prof. Sammy Boussiba. In recent years, Algatech and the Microalgae Biotechnology Laboratory at BGU have collaborated in the European Commission FP7's consortium of the GIAVAP project.

Algatech has received repeated grants from the Chief Scientist of Israel, for development of new microalgae sources with important health and nutrition benefits.

### ANGULAS AGUINAGA

### Food industry



### Master Contac

Ainara Arregui R&D Management

Laskibar 5 20271 Irura SPAIN

www.angulas-aguinaga.es

T: +34 902 495000

#### Profile

Angulas Aguinaga is a company which aim is to revolutionize the food market to serve the consumer. We want to create trustworthy brands for consumers; offering innovative, quality and convenient solutions to the food market.

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Product and process technologies: ingredients, food processing and preservation, packaging, food safety and security,
- Consumer and market area: new food products, consumer sciences

We offer high value surimi based products, with which we are market leaders in Spain.

Angulas Aguinaga was the first company in the world to get the certification ISO 22000/2005.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Innovation is one of our key pillars. Angulas Aguinaga has created not only incremental innovation, adding value to each food category it has introduced to the market; but also breaktrough innovation, with the launch of La Gula del Norte, creating a nonexistent food category.

Furthermore, Angulas Aguinaga wants to innovate to serve the consumer, identifying its demands to develop products for them.



### Communication

We fully believe innovation has to be communicated to succeed in the market and brands are very important for that.

Our most important highlights in this area:

- First company in Spain to incorporate our own single-brand exhibitors in the point of sale. This is helpful to present innovations
- First seafood company in Spain to make point of sale product testings



We have strategic alliances with some key companies, which allows us to introduce in new markets.



We offer the opportunity to acquire practical experience in the food sector through collaboration agreements with educational centres.

้ 18

### **AZTI**

### Food Research





#### Master Contact

Begoña Pérez Villarreal Business director. Food research

Parque Tecnológico de Bizkaia Astondo bidea. Edif. 609 48160 – Derio (Bizkaia) SPAIN

www.azti.es

E: info@azti.es T: +34 94 657 4000

#### Profile

AZTI, a technology centre with experience stretching back over 30 years, works in applied research and technology development with 400 companies per year, including 36 European projects running at present.

AZTI offers innovative solutions to the food industry to develop new or improved products solutions where prime quality, food safety and identity, respecting the environment and the consumer as its centerpiece.

#### Competences & Capabilities

Research and innovation focused on offering solutions to the food industry. Managing public and private funded R&D projects: from idea generation to market. Main areas of specialization and technological expertise are:

- Food quality, safety and identity
- New food products
- Efficient and sustainable processes
- Food and health
- Sensory and consumer sciences

The innovation we generate guarantees shortterm competitiveness and long-term economic, environmental and social sustainability of the food sector.

AZTI is part of Tecnalia Corporation (www. tecnalia.es) a strategic R&D alliance with more than 1.800 staff working in multi-disciplinary projects covering 11 highly specialized business areas, among them food

### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

- Innovative point of use tools for the control of food QUALITY, SAFETY and AUTHENTICITY of the supply chain: new receptors, biosensors and fast methods.
- Reduction of risks (i.e. pathogens) through traditional and emerging technologies.
- Effect of NEW PROCESSING TECHNOLOGIES on product shelf-life, sensory properties, nutritional impact.
- INGREDIENT SOLUTION for nutritional and HEALTH CLAIMS and improved SENSORY PROFILE. Product formulation, process design and INDUSTRIAL SCALE-UP.
- Eco-efficiency of the food chain. Food quality and process monitoring: Non-destructive sensors.
- VALORIZATION of food industry by-products.



#### Communication

- We promote the communication with society by organizing open sessions for the general public in every scientific and industrial event we organize.
- We focus on current and future demands of consumers by identifying food trends, fostering the public participation of consumers in scientific research (Citizen Science), and integrating both in the cocreation of new products and services.
- We have 800 registered panelists in our consumer database, classified by age (children, adolescents, adults, elderly), and by specific nutritional requirements and occupations (e.g. chefs).
- We interact with an on-line consumer platform with 2.000 registered consumers to carry out qualitative and quantitative studies.



#### **Business Creation**

- Backed by public and private funds, we offer specialized incubators, seedbeds and accelerator covering the entire food and gastronomy value chain, to provide all the guidance that entrepreneurs need.
- We provide guidance and support instruments on sources of funding to launch businesses.
- We offer specific education and training to promote the entrepreneurial potential of the primary, food processing and gastronomic sectors from 'the idea to the market'.



#### Education

- We collaborate in 10 Masters organized by different European Universities in relation with our specialization in marine and food topics.
- AZTI promotes scientific education and training of students through scholarships and internships.
- We offer the opportunity to acquire practical experience in the food sector through collaboration agreements with the industry.

## ROBERT BOSCH GMBH

### **Packaging**





Prof. Dr. Bernd Wilke
Director Research & Development

Stuttgarter Str. 130 D 71301 Waiblingen

www.boschpackaging.com

E: Bernd.Wilke@bosch.com T: +49-160 7024508

#### Profile

Bosch Packaging is one of the oldest packaging machine builders worldwide and has a long experience in the protecting of food during the packaging process as well as during the logistic chain. Therefore Bosch Packaging spends app 1.7 Mill Euro p.a. into R&D activities with a staff of 290 engineers.

#### Competences & Capabilities

An excellent infrastructure helps to remain technology leader. On the first hand an intensive co-operation with the Central R&D activities of the entire Bosch Group (with app 1600 scientists) allows us to step into long term development. On the second hand Bosch GmbH is one of the largest producers of sensor systems, which also will become relevant for the later mentioned processes during production.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

The development of packaging concepts are important to meet the different requirements regarding shelf life and sustainability. Projects are conducted reduce resources as energy and water during the production and the packaging process (e.g. cleanability of machine systems) Also the sensing of the hygienic level in the machine system will become a relevant factor and an USP. Finally Bosch may also become active in the field of food sensing to determine metabolites during the storage of food. This may help to determine the dynamic shelf.



### Communication

Know how and experience is spread via conference, fairs and different publications.



Due to the fact that app 500 Mio Euro of equipment is delivered to Europe by Bosch Packaging, the orientation to Europe is self-explaining. And this equipment helps to feed the world, to save food and to protect the environment.



#### Education

Bosch Packaging educates app. A significant number of engineers on the job. in addition more than 50 bachelor-, master and doctoral thesis are conducted

## BÜHLER

### Process technology solutions





#### Master Contact

Beatrice Conde-Petit
Group Expert Food Science & Technology

Bühler AG Gupfenstrasse 5 CH-9240 Uzwil Switzerland

www.buhlergroup.com

E: beatrice.conde-petit@buhlergroup.com T: +41 71 9552152

#### Profile

Provider of plants, processes and services in grains and food processing.

#### Competences & Capabilities

Buhler is the global leader in process technology solutions for grains and food and for technical materials. The technology solutions cover plants, equipment, process technology, automation and services across the value chain. For cereal (wheat, rice, maize, etc.) processing the technology capabilities reach from ship unloading and logistics infrastructure to grain storage, advanced grain sorting, milling, flaking and solutions for further processing into pasta, noodles, breakfast cereals, bread, cereal bars, pet food, animal feed. Likewise, cocoa, nuts, chocolate & confectionary technology cover the entire processing chain from bean to bar. Bühler also provides technology for pulses, oilseeds, sorghum, quinoa, soy and protein-rich foods. The advance materials solutions comprise different grinding and mixing solutions, and thin film depositions technologies for advanced packaging solutions.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Bühler's strategic fields of innovation are:

- Sustainability: energy efficiency, reduction of food losses & waste.
- Food Safety: new inactivation technologies, mycotoxin control & tracebility.
- Nutrition: alternative proteins, food structure design for healthy food & feed.
- lot & Digitalization: processing efficiency, and new services. Partnership with Bosch.

Bühler embraces collaborative innovation with scientific institutions from all over the world as partners, as well as with its employees customers and suppliers

**Contact:** Beatrice Conde-Petit beatrice.conde-petit@buhlergroup.com



#### Communication

Bühler places emphasis on promoting the dialog with feed & food manufacturers and scientific institutions at so called networking events. The last event in 2016 gathered over 600 industry players from around the world, and further networking days are planned. Furthermore, Bühler is active on all channels to promote the dialog and advances in processing technology: the magazine Diagram with an global outreach, webinars on the internet, active presence at all major conferences & fairs, and a strong representation in several Swiss, European and global initiatives with focus on feed & food.

**Contact:** Beatrice Conde-Petit
Beatrice.conde-petit@buhlergroup.com



#### **Business Creation**

Bühler's vision is Innovations for a Better World as enabled by a strong entrepreneurial approach. Bühler strives for impactful innovation to create value as reflected by business creation, driven by global sustainability challenges. A recent example of new business creation is Bühler Insect Technology Solutions, a joint venture with Protix for scalable industrial solutions for the rearing and processing of insects.

Bühler partnered with Mass Challenge, one of the most dynamic start-up accelerators, to strengthen the startup ecosystem by offering outstanding opportunities for start-ups – many from the food sector – to grow under the guidance of an impressive group of partners.

**Contact:** lan Roberts lan.roberts@buhelrgroup.com



#### Education

Bühler is committed to education, starting with the apprenticeship programs to train the own engineering base. In the same manner, the Milling Schools in Switzerland and Kenya supported by Bühler contribute to the formation of professionals in grain processing. Bühler is partner of UNITECH, a network of leading technical universities and multinational companies in Europe. Bühler is also active supporter of the yearly workshops of PhD students of the Section on Food of the European Federation of Chemical Engineering (EFCE). Furthermore, Bühler is engaged in education and training of feed & food manufacturers through a broad range of wellattended workshops on specific topics as part of customer service.

**Contact:** Beatrice Conde-Petit Beatrice.conde-petit@buhelrgroup.com

### **COLRUYT GROUP**

Retail Group





Master Contact

Mieke Vercaeren Public Affairs Officer Colruyt Group

Colruyt Group Edingensesteenweg 196 1500 Halle - Belgium

www.colruytgroup.com

E: mieke.vercaeren@colruytgroup.com T: +32 499 59 39 16

#### Profile

Colruyt Group is a retail group active in the distribution of food and nonfood products throughout Belgium, France and Luxembourg. Other activities include fuel distribution, digital printing solutions and document management, and green energy production. Colruyt Group has its own production facilities for meat processing, bread production, cheese cutting, wine bottling and coffee roasting. All companies and supporting activities of Colruyt Group have one common identity and culture, summarised in our mission statement: creating sustainable added value together, through valuedriven craftsmanship in retail.

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Food quality and food safety
- Retail logistics and transport
- Food and its environmental footprint
- Food and health
- Innovative food products
- Efficient and sustainable processes
- Market research (trend watching, consumer needs and wants, motivational research, concept testing, product testing)
- Digital consumer oriented solutions
- Data quality
- Personalised food solutions (personalisation)
- New ways of shopping (online / offline)

### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

The innovations we work on, and our technology investments are aimed at making our business more efficient and future proof.

- Our R&D department has technical expertise on renewable energy (off- and onshore windmills, hydrogen units), technical innovations (e.g. more sustainable ways to cool our products, robotics, virtual reality, aquaculture).
- In our own production facilities, we develop new innovative concepts (e.g. vegetable and alternative protein sources), focusing on more healthy and sustainable solutions.
- We can offer food processing (meat and meat alternatives, coffee, bread) from 'idea to market introduction' on our own premises.

**Contact:** Veerle Carlier, R&D Innovation Manager Food Veerle.carlier@colruytgroup.com



#### Communication

We focus on current and future demands of consumers by identifying food trends, and integrating both aspects in the (co-)creation of new products and services.

Consumers are at the heart of our business. We interact with them via market research (qualitative and quantitative) and through extensive taste and performance testing.

We want to keep consumers as informed as possible through our online channels (different websites, Twitter, Facebook) and offline channels (shops, magazines, folders).

**Contact:** Veerle Poppe, Sustainability Marketing Strategist

Veerle.poppe@colruytgroup.com



#### **Business Creation**

As a retailer we think it is important to provide more and more services to consumers, covering all his / her lifetime events: from birth to old age.

Our spin-off Smart With Food focuses on digital solutions regarding the personalization of food, applying the "PAN" principle.

Our experience in working with start-ups allows us to offer tailored business development and go-to-market capabilities.

**Contact:** Veerle Poppe, Sustainability Marketing Strategist

Veerle.poppe@colruytgroup.com



#### Education

Through collaborations with universities we offer young people the opportunity to acquire practical experience in the food and retail sector

- Collibri Foundation offers programmes related targeting secondary school children and youngsters in developing countries
- Colruyt Group Academy is our training division. It organizes a wide range of workshops and trainings both to employees and consumers.
- Start2 Re-tail is our graduate apprenticeship programme offering graduated students a 10-week practical training programme

**Contact:** Mieke Vercaeren, PA Officer Colruyt Group

Mieke.vercaeren@colruytgroup.com

### **CSIC**

### Food Research





M.Victoria Moreno-Arribas Deputy Vicepresident for Scientific-Technical Areas

c/Serrano, 113 E-28006 Madrid, SPAIN

www.csic.es

E: vaact@csic.es T: +34 91 5681557

#### Profile

CSIC is the largest research institution in Spain with a 75-year experience. Its activity falls in the field of basic and applied research, and has a focus in technology transfer and generation of start-up companies. It has key research topics in the fields of food science, technology and nutrition, agriculture, aquaculture, livestock, environment, microelectronics and nanoscience that are relevant for the production of healthy and safe food products in a sustainable manner.

#### Competences & Capabilities

CSIC has research institutes in eight Research Areas.

- Food Science and Technology
- Agricultural Sciences
- Natural Resources and Environment
- Biology and Biomedicine
- Physical Sciences and Technology
- Materials Science and Technology
- Chemistry
- Social Sciences and Humanities

It has experimental fields and pilot plants for the production and transformation of foods, the development of sensors and micro devices, new materials and facilities for nutritional studies. CSIC has also pilot plants aimed to test innovative processes for preserving, processing and designing foods and ingredients in a sustainable and consumer driven manner.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

The advance in knowledge generated at CSIC leads to technology transfer and innovation to assure food security and make the agrifood industry more competitive while applying more sustainable production methods, and ensuring safety and optimal nutrition for the consumer. CSIC has skills for agricultural biotechnology, food processing and preservation technologies, traceability, labelling, quality and safety in a whole chain approach, nanomaterials and smart technologies for food production. It has also a wide background on food biotechnology, cultivars and microbial strains, and dietmicrobiota interactions.

We also aim to a better consumer nutrition through the development of personalized food products.

**Contact:** M.Victoria Moreno-Arribas, Deputy Vicepresident for Scientific-Technical Areas vaact@csic.es, programas.europeos@csic.es



#### **Business Creation**

CSIC has a Knowledge Transfer division (http://www.csic.es/oferta-tecnologica) that promotes the creation of knowledge-bases companies, and provides guidance, training and support to the scientists that engage in an entrepreneurial Project. In this moment, CSIC has more than 52 technologies available for commercial exploitation relating to foods. We have more than nineteen spin-off companies in most of the knowledge fields, and particularly, three spin-off in the food area.

**Contact:** Ana M. Guerrero Bustos, Deputy Vicepresident for Knowledge Transfer vatc@csic.es



#### Communication

This is a very relevant activity at CSIC with a central communication office (www.csic.es) and representatives in the different institutes located in different regions. It aims to the effective communication with society through the media and in different events organized. We have also activities in the field of Information Technologies to provide updated and accurate information to the consumers.

We also have links with consumer associations, policy makers and stake holders from different sectors. CSIC provides advice on relevant food issues to the consumers and governmental institutions to inform the society with a scientific background, encouraging consumers for making healthier choices.

**Contact:** M.Victoria Moreno-Arribas, Deputy Vicepresident for Scientific-Technical Areas vaact@csic.es



#### Education

- CSIC collaborates with different Spanish and European Universities in Official Postgraduate Programs, adapted to the European Higher Education Area, leading to nationally recognized Masters' and Doctoral Degrees.
- We also participate in the training of techniciens and other technical staff for the industrial sector, and host stages in our institutes to complete practical training.
- We also run some specialized courses that aim to educate and inform the food industry staff in the new scientific and technological developments and on how to guarantee and preserve quality and safety of the food products.

**Contact:** M.Victoria Moreno-Arribas, Deputy Vicepresident for Scientific-Technical Areas vaact@csic.es

### Knowledge for superior foods



### ∃ M

#### Master Contact

Dr. Peter Holl Senior Manager EU Programmes, Deputy Head of Brussels Office

DIL German Institute of Food Technologies Office Brussels, Rue du Luxembourg 47-51 B-1050 Brussels

www.dil-ev.de

E: p.holl@dil-ev.de T: +32 2 50 33 172

#### Profile

The German Institute of Food Technologies (DIL) is a private, independent and non-profit research provider. With around 150 member companies from the food industry and related fields, DIL operates as a research institute working in the areas of product development, process development and analytics.

DIL considers placing itself into the innovation framework of EIT Food as the unique opportunity to support its partners in the innovation process and to establish new collaborations along the entire food value chain system.

#### Competences & Capabilities

At the interface between applied science and engineering practice, DIL fosters the knowledge transfer from research to the industry.

In particular, the key capabilities are:

- Process development including design, construction and manufacturing of machinery and equipment
- Technology transfer from lab to pilot to industrial scale applications
- Novel process technologies: Pulsed Electric Fields (PEF), High Pressure Processing (HPP), Extrusion+ and robotics
- Processing of alternative proteins, meat, chocolate and dairy products
- Advanced chemical, microbiological and physical food analytics
- Life Cycle Assessment and Consumer Behavior

### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

DIL's applied research and development aims to convert R&D knowledge into industry-ready solutions for food production. The institute is organized in the following Business Units and Research Platforms:

- Food Safety
- Automation Technology
- Machine Development
- Food Physics
- Product Innovation
- Structure and Functionality
- Biotechnology
- Advanced Research

**Contact:** Dr. Volker Lammers, Group Leader Process Engineering v.lammers@dil-ev.de



#### Communication

DIL is embedded in a multi-layer network communicating to the food industry and relevant fields, based on > 150 members. DIL coordinates the INTERREG VA program Food2020, addressing > 1000 SMEs in the DE and NL, as well as the Lower Saxony Competence Center Food Industry (NieKE) with 450 SMEs.

An open LCA tool delivers quantitative information on sustainability and environmental impact of selected food products broader public and end user.

The Food Data Group links consumer behavior and the nutritional characteristics of food with sociodemographic and geographic features.

**Contact:** Dr. Peter Holl, Senior Manager EU Programmes p.holl@dil-ev.de



#### **Business Creation**

Business and Innovation Park Quakenbrück (BIQ): Since 2015, companies and entrepreneurs are being provided with the opportunity to locate at the BIQ site of approximately 2'700 square meters and benefit from the capabilities available at DIL.

BIQ and DIL support partners in the development and transfer of innovative ideas into business applications.

Regular scouting work-shops are performed in close collaboration with universities in order to identify best ideas for potential start-ups.

Split-off: Elea GmbH, a Rising Food Star (novel PEF applications).

**Contact:** Dr. Mehmet Cicek, Sustainability Assessment m.cicek@dil-ev.de



#### Education

Since spring 2017, DIL conducts certificate course "quality management in the food and feed industry". This 12 months on-the-job-qualification educates young and experienced professional food technologists, food scientists or product and process engineers in the fields of quality management systems and analytical tools/ methods as well as novel legal and scientific aspects.

DIL does also provide trainings, workshops and symposia for professionals on extrusion, High Pressure Preservation, Pulsed Electrical Fields, other novel process technologies for food and feed, multi-hurdle-technology, food safety, nutrition, allergen management, and bioeconomy.

**Contact:** Dr. Mehmet Cicek, Sustainability Assessment m.cicek@dil-ev.de

### **DOEHLER**

### Natural Food & Beverage Ingredients



### Master Conta

Marco Schmidt Head of Global Innovation Management

Riedstrasse 64295 Darmstadt Germany

www.doehler.com

E: marco.schmidt@doehler.com T: +49 6151 306 1276

#### Profile

Doehler is one of the world's leading producers, marketers and suppliers of natural ingredients, ingredient systems and integrated solutions for the food and beverage industry.

Using nature and innovative technologies as our starting point, we always go one step further to create real added value for customers and consumers.

From a unique range of raw materials, we extract ingredients that bring the very best of nature into your products.

#### Competences & Capabilities

We offer a broad range of natural and plant based food & beverage ingredients:

- natural flavours, extracts and colours
- health & nutrition ingredients
- cereal & malt ingredients
- plant based dairy ingredients
- fermented ingredients
- fruit & vegetable ingredients
- ingredient systems

...... 1ST EIT FOOD INNOVATION MARKETPLACE

We offer a broad range of natural and plant based food & beverage ingredients:

- access to the most innovative and sustainable food processing technologies
- development of innovative products and product applications including advice on food safety and microbiology, food law as well as Sensory & Consumer Science
- comprehensive market intelligence & trend monitoring.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

"WE BRING IDEAS TO LIFE." briefly describes Doehler's holistic, strategic and entrepreneurial approach to innovation.

With our integration throughout the whole value system – from raw materials via technologies to products and applications and finally to customers with the respective consumer insights – and our access to state-of-the-art technologies we are able to generate innovations on each step of the value system and are thus capable to offer tailor-made innovative product solutions.

**Contact:** Marco Schmidt marco.schmidt@doehler.com



#### Communication

With our Multi-Sensory Excellence approach, we offer the food and beverage industry a unique integrated research approach for long-term product success.

We have more than 200 sensory science experts, including a large number of applications developers, sensory profiles of more than 600 products from 20 product categories & our own consumer panel with more than 2,500 participants in Germany. This allows us to interact with consumers and benefit from their feedback, needs and preferences. We have experience from sensory studies with more than 20,000 consumers and results from more than 1,300 products.

**Contact:** Marco Schmidt marco.schmidt@doehler.com



#### **Business Creation**

Promoting and accelerating innovation & entrepreneurship is one of our main strategic company goals. We created different approaches in order to support Start Ups and entrepreneurs. To speed up go-to-market of innovations and ideas we have designed the "Doehler Seed Program". We collaborate & venture with innovators and entrepreneurs to fund food & beverage ideas.

Especially designed for entrepreneurs that do not seek a dedicated venture investment, we have created various models that take into account specific business needs. Our support isn't limited to the financial aspect, we can also help start-ups to scale-up their product and facilitate a global roll-out with our Idea Lab and through our partner network.

**Contact:** Marco Schmidt marco.schmidt@doehler.com



#### Education

People and institutions with experience in the food and beverage industry have the chance to become part of the global Doehler Innovation Network, which consists of leading universities, research institutes, suppliers and independent F&B experts.

Being recognised as a qualified trainer at many of our locations, Doehler takes responsibility for the future. Through cooperation and partnerships with leading universities and academic institutes, B.A. & trainee programmes and programmes designed for master & PhD students we offer outstanding career opportunities for young graduates in both, our R&D / R&I and commercial functions.

**Contact:** Marco Schmidt marco.schmidt@doehler.com

### **DSM**

# DSM Nutritional Products DSM Food Specialties



### Master Contac

Vicky Sereti Project Manager Public-Private Partnerships

Alexander Fleminglaan 1 2613 AX Delft Netherlands

http://www.dsm.com/

E: Vicky.sereti@dsm.com T: +31 6 83630967

#### Profile

Royal DSM is a global science-based company active in health, nutrition and materials. With annual sales of ca. € 5 billions in Nutrition cluster. DSM is one of the world's leading developers and producers of essential nutrients and food specialties for the food and beverage industry. Its portfolio of products which includes food enzymes, savory flavours, dairy cultures and biopreservatives (DSM Food Specialties) and Vitamins, Carotenoids and Nutritional Lipids (DSM Nutritional Products) enables healthier diets and solutions to fight malnutrition with an improved ecofootprint.

#### Competences & Capabilities

DSM has a broad competence base of more than 2000 people active in R&D with a global collaboration network of more than 100 academic groups. DSM has state-of-the-art food pilot facilities and established consumer panels to test novel ingredients for personalized food concepts. High-throughput facilities as well as advanced analytical and integrated statistical tools are available to create detailed molecular insights into the function of novel bio-ingredients in complex food matrices to help us develop desired functions such as improved texture, taste and nutritional value.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

At DSM we are using our innovative strengths to address big societal challenges, using Science as the starting point. Our Scientific competences and extensive scientific network and partnerships form the basis for our many bright solutions: DSM Nutritional Products is one of the world's leading suppliers of vitamins, carotenoids, pre-and probiotics and other nutritional ingredients to the feed, food, pharma and personal care industries. DSM Food Specialties focusses on bio-ingredients derived from fermentation processes. Our mission is to enable better food for everyone. For example, we develop salt, sugar, waste reduction as well as mild processing solutions based on enzymes, savory ingredients and cultures for our food and beverage customers.

**Contact:** Oliver May, Senior Science Fellow Oliver.may@dsm.com



#### Communication

We promote the communication with society by participating in National Science days like "Wetenschapdag" and giving workshops to secondary schools reaching out to young people. Moreover, we launches campaigns like "DSM launches Know Your  $\Omega^{\rm TM}$  at the 2016 AAFP Family Medicine Experience" to enable doctors to provide better diet advices. Moreover, we have established consumer panels to test novel ingredients for personalized food concepts.

**Contact:** Vicky Sereti, Project Manager Public-Private Partnerships Vicky.sereti@dsm.com



#### **Business Creation**

Innovation is what turns DSM's 'Bright Science' into 'Brighter Living'. It is about discovering and integrating the best, the most sustainable and commercially viable solutions to meet market needs and to drive profitable growth. The DSM Innovation Center, besides supporting innovation in the company's core businesses, also aims to develop its Emerging Business Areas (EBAs) established over the last five years. These are new and promising growth platforms outside the scope of the company's business groups Moreover, DSM Venturing, the outside-in arm of our open innovation approach, has invested in more than fifty emerging innovative companies in the US, Europe and Israel the last years.

**Contact:** Krijn Rietveld, SVP Partnering for Innovation Krijn.rietveld(@dsm.com



#### Education

We collaborate closely with high schools and Universities and are currently engaged in more than 10 ITN-Marie Curie Projects focusing on the Training of young researchers. These activities bring us in contact with more than 100 Universities and R&D Organisations worldwide. Moreover, DSM promotes scientific education and training of students through scholarships and internships. With more than 20 scientist of DSM being part time professors at Universities we have fundamental ties in educating our future workforce.

**Contact:** Oliver May, Senior Science Fellow Oliver.may@dsm.com

### **EPFL** Food and Nutrition





Stefan Meyer Head of the Food Center

Station 13 1015 Lausanne Switzerland

nutritioncenter.epfl.ch

E: stefan.meyer@epfl.ch T: +41 79 596 58 76

#### Profile

The EPFL Food and Nutrition center federates 500 research labs around the food and nutrition thematic. Diverse horizon expertise in life science, engineering, economic, environmental and food science tackle industrial challenges through pre-competitive research projects. Multi-disciplinary initiatives support entrepreneurship, education and technology transfer activities.

#### Competences & Capabilities

The Food Center supports initiatives in all fields throughout the supply chain:

- Smart and active packaging
- Sustainability
- Rapid, cheap monitoring devices for QC, authentication, safety or traceability
- Robotics for kitchen of the Future
- Interaction of food with physiology
- Bio and nanosensors to assess food safety and humans
- New ways of marketing, VR, AR
- New agricultural principles and greenhouses
- Consumer science and diet
- New ways of cooking ready to eat meals and fermented food

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

The Food Center launches calls for proposals throughout the EPFL in order to attract the most competitive ideas. Professors are asked to team up with industrial scientists in order to develop new and improved solution for the food industry



#### Communication

The Food Center is collaborating with the top hostel management school in Lausanne (EHL) for developing new communication paths and strategies to consumers through its Gusto Lab; where chefs meet scientists, where new technology meets consumers!



The EPFL proposes an Innovation park with 120 start-ups which raised 500Mio venture funds in 2016. Coaching, mentoring and entrepreneurship courses are available. The Mass Challenge accelerator is also supporting creativity of young entrepreneurs. A food incubator with possibilities to incubate more than 50 start-ups is under construction



### Education

The EPFL student community is composed of 10'000 students dispatched over 5 faculties: engineering, life science, basic science, environmental science and computing science; and 2 college: management of technology and humanity. The EPFL is leading the development of MOOCs but also collaborates with international institutions to assure high level teaching

# SWISS FEDERAL INSTITUTE OF TECHNOLOGY ZÜRICH (ETH)



**ETH** zürich



Erich J. Windhab Head of Food Process Engineering

Schmelzbergstrasse 9 CH-8092 Zürich Switzerland

www.ethz.ch

E: erich.windhab@hest.ethz.ch T: +41 44 632 5348

#### Profile

Our university for science and technology dates back to the year 1855, when the founders of modern-day Switzerland created it as a center of innovation and knowledge. At ETH Zurich, students discover an ideal environment for independent thinking, researchers a climate, which inspires top performance. Situated in the heart of Europe, yet forging connections all over the world, ETH Zurich is pioneering effective solutions to the global challen-ges of today and tomorrow.

ETH Zurich regularly features in interna-tional rankings as one of the best universities in the world (8<sup>th</sup> in 2016) and the leading university in continental Europe.

#### Competences & Capabilities

ETH Zurich's main focus areas:

**World food system**: Feeding a growing population while preserving resources.

**Cities of the future**: In their present form cities are not sustainable.

**Climate change**: The interdisciplinary approach gives a holistic perspective.

**Energy**: Towards creating a 1-ton CO<sub>2</sub> society.

**Health**: Different disciplines work to ensure maintaining a good quality of life.

**Risk research**: In an increasingly net-worked world, risks get more complex.

**Information processing**: Data can be processed more and more efficiently.

New materials: Development of new materials.

**Industrial processes**: Innovative pro-ducts through efficient use of resources.

...... 1ST EIT FOOD INNOVATION MARKETPLACE

#### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

Research nowadays is largely technology-based. Thanks to its modern infrastructure and highly qualified employees, ETH Zurich is able to perform at an extremely high level. National Centres of Competence in Research (NCCR) promote long-term research projects in areas of vital strategic importance for the development of science, the economy, and for society. NCCR improve the research structure, promote research of outstanding, internationally recognized quality, enable knowledge and technology transfer, offer training and foster promotion of women in research.



#### Communication

The Corporate Communications (CC) office manages ETH Zurich's strategic communication. It acts as a link between ETH and the public, representing the university's interests, issues and values to both internal and external audiences and maintaining a professional and uniform corporate identity for ETH.

ETH Zurich produces all of its central communications in a newsroom: Corporate Communications Corporate Communications staff are proven communications professionals with in-depth specialist knowledge and years of profess-sionnal experience.



#### **Business Creation**

ETH Zurich supports would-be company founders with its Pioneer Fellowships. They are given the opportunity to further develop their research in Innovation and Entrepreneurship Labs and to work with external coaches and industry representatives. New technologies are being researched which partners in industry convert into products and services. There are also ca. 100 patents registered each year based on the results of research carried out at ETH Zurich. Some of these patents are used by new companies founded by the inventors as ETH spin-offs. Surveys show that these companies are extremely successful and win prizes for young entrepreneurs.



#### Education

ETH Zurich trains true experts and prepares its students to carry out their tasks as critical members of their communities, making an important contribution to the sustainable development of science, the economy and society.

ETH imparts not only methodological competences and disciplinary knowledge, but also interdisciplinary and system-oriented ways of thinking.

Student numbers have increased signifycantly at ETH Zurich over the last few years. Today the figure is roughly 18,000; by 2020 it will be 20.000.

ETH recruits 35% of its students from abroad.

### **EUFIC**

### European Food Information Council





Sofia Kuhn Head of Communication

Rue Joseph Stevens 7 1000 Brussels Belgium

www.eufic.org

E: sofia.kuhn@eufic.org T: +32 2 506 89 89

#### Profile

EUFIC is a non-profit organisation that provides clear, practical information on food and health, based on sound science. We believe in a world where people choose to live healthily because they know how to.

EUFIC, food facts for healthy choices.

#### Competences & Capabilities

The sheer amount of confusing, conflicting or misleading information on food and health topics is simply daunting for consumers. Equipping people with better understanding of issues of public concern allows for more informed decisions on diet and lifestyle. This is where EUFIC makes a difference. EUFIC is a unique consumer-oriented organisation which produces relevant, actionable and credible science-based information that reaches the public.

We are a group of passionate science and communication experts who believe in the power of informed consumers.

..... 1ST EIT FOOD INNOVATION MARKETPLACE

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

EUFIC carries out consumer research using a wide range of methods, both qualitative and quantitative. Our research areas include:

- Health claims and free-from claims: Are they understood and used?
- Nutrition and sustainability labels: Do they influence food choices?
- Drivers of choice: What matters to consumers when they buy food products?
- Portion information: What perceptions do consumers have of portion size?

For Innovation, contact: Sophie Hieke sophie.hieke@eufic.org



### Communication

What do we do?

- We give impartial information with a credible
- We cover diverse and controversial topics with our outreach campaigns

How do we do it?

- We use our more than 20 years of experience
- We reach 10 million people through www.eufic.org every year
- We have 47,000 online subscribers
- We have 16.000 followers in our social media community
- We talk to people in 13 languages
- We work with scientific experts to ensure our content is accurate and science-based





### Education

EUFIC's informative infographics, animated videos as well as our clear Q&As and articles are used by educators and health professionals as well as the general public. We also engage children on our interactive online platform coolfoodplanet.org.

For Communication, Business Creation and **Education, contact:** Sofia Kuhn sofia.kuhn@eufic.org

### FRAUNHOFER-GESELLSCHAFT

Applied Research



### Master Cont

Dr. Claudia Schönweitz Vice Director Fraunhofer IVV

Fraunhofer IVV Giggenhauser Str. 35 85354 Freising Germany

www.fraunhofer.de

E: claudia.schoenweitz@ivv.fraunhofer.de T: +49 8161 491117

#### Profile

Fraunhofer-Gesellschaft zur
Förderung der angewandten
Forschung e.V. is the leading
organization for applied research in
Europe, employing a staff of 24,000
at 67 institutes and research units in
Germany. More than 70 percent of the
contract research revenue is derived
from contracts with industry and from
publicly funded projects. Subsidiaries
in Europe, in North and South America
as well as Representative Offices
in Asia, the Middle East and Africa
are building bridges to local markets
worldwide.

#### Competences & Capabilities

Our core competencies with respect to EIT Food are:

- Food and packaging technology
- Multi-sensory product perception and consumer preference
- Food quality and safety including visual inspection systems
- New technologies for the protection of crop plants and food sources
- Environmental biotechnology and bioprocess engineering
- Resource efficient processing in
- Industry 4.0 environment
- New solutions for material flow and logistics
- Software and systems engineering for integrated IT solutions

Our capabilities cover also pilot plant facilities to support our customers with e.g. first food samples for testing consumer acceptance or prototypes of processing and logistic units to simulate operational environment.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

We offer product and process development regarding: Functional food and feed ingredients based on plant and marine raw materials. Reengineering of processing technologies and food formulation with focus on healthy, vegan and convenient foods based on consumer preference. Cascade processing for the downstream recovery of high-value products. Food safety and quality with respect to environment and agrochemicals including technologies for fast detection. Flexibilisation of food processing and packaging machines including connected cyber-physical systems. Reengineering of logistic processes, including tailored packaging, digitalization of production and collaborative productivity enabled by big data processing.

**Contact:** Dr. Claudia Schönweitz claudia.schoenweitz@ivv.fraunhofer.de



#### **Business Creation**

Fraunhofer Venture fosters entrepreneurial culture, spin-offs and contact with investors for sufficient capital endowment.

Fraunhofer has developed an integrated approach along the spin off process to support Fraunhofer researchers to develop their own business. Key element is the Accelerator program FDays®. Researchers and their industry partners can participate in several programs to identify business chances, create and evaluate their business model and finally prepare the commercialization.

Up to now more than 350 companies have been founded successfully, among these Prolupin GmbH and Amidori GmbH, both producing vegan food products.

**Contact:** Matthias Keckl Matthias.Keckl@fraunhoferventure.de



#### Communication

To involve consumers as responsible cocreators in various phases of the innovation cycle we offer a set of participatory methods developed and tested at Fraunhofer.

We open up the innovation process by involving: i) laypersons in idea creation; ii) designers in translating these ideas into early prototypes; and iii) scientists in performing technical validation. The participants are of different age, gender and background. Our interaction formats help to overcome potential communication barriers

These workshops are also a means for science communication in a well understandable way and for opening up research organisations and industry.

**Contact:** Prof. Dr. Martina Schraudner martina. schraudner@iao.fraunhofer.de



#### Education

The Fraunhofer Academy is Fraunhofer's specialist provider of continuing education and part-time training for working professionals.

We offer certificate courses and seminars based on the latest scientific findings of the research activities of the Fraunhofer Institutes in collaboration with selected and prestigious partner universities.

Currently we offer around 45 programs in Germany and internationally with 3000 participants per year.

Based on our expertise as partner in EIT Digital and EIT RawMaterials new seminars could be developed for specialists and managers in the food value chain.

**Contact:** Dr. Roman Götter roman.goetter@zv.fraunhofer.de

### **GIVAUDAN**

Special Ingredients

# Givaudan



#### Master Contact

Alexandre Bastos Global Director Innovation

8310 Kemptthal Switzerland [Address] [Address]

www.givaudan.com

E: alexander.bastos@givaudan.com T: +41 52 354 0539

#### Profile

Givaudan is the global leader in the creation and manufacturing of flavours and fragrances. In close collaboration with food, beverage, consumer product and fragrance partners, Givaudan develops tastes and scents that delight consumers the world over.

Headquartered in Switzerland with local presence in over 80 locations and 39 production sites, the Company has more than 9'500 employees worldwideand 25% world market share.

In its 2020 strategy, Givaudan Flavours has articulated the intent to grow its business in the areas "Natural ingredients", "Health&Wellbeing", "Consumer Preferred Products" and "Integrated Solutions", which means Givaudan Flavours actively persue a holistic approach towards new food product design, beyond flavour technology.

#### Competences & Capabilities

Givaudan Flavours' comprehensive knowledge of local flavours, extensive global footprint and strategic insights enable close partnerships with customers across all key segments including beverages, sweet goods, savoury and snacks:

Givaudan Flavours' core innovation competencies and capabilities include

- Global Science+Technology organisation with 185 dedicated scientists and experts (located in The Netherlands, Switzerland, US, Singapore and China)
- Dedicated regional innovation centres for regional relevant technologies in CH, NL, US and Singapore, 30+ local technical application groups to develop custom-made solutions
- Multiple research collaborations with world leading Universities and Research Organisations

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

- Leading expertise in creating and manufacturing flavours for all types and areas of food and beverage application
- Technology leader to create great taste in low salt, low sugar, low fat and free of added MSG products
- Special expertise to create flavours to make value added food ingredients (like minerals, vitamins, proteins) palatable in final food application
- Unique expertise in analysis of Natural Material and Food stuff to understand, discover and re-apply the principles for taste and smell on a molecular level
- Strong expertise in the area of Extraction,
   Fermentation and Bioconversion of natural materials
- Cutting edge encapsulation and delivery systems and a dedicated research group
- Strong expertise in Consumer Science and Sensory Science

**Contact:** Dr. Thorsten Koenig thorsten.koenig@givaudan.com



#### Communication

- Through its Consumer Sensory Insights teams located in all regions, Givaudan Flavours uncover consumer attitudes, trends, unmet needs in the context of food, in order to understand and anticipate the food & beverage industry challenges and innovation platforms.
- Givaudan Flavours translates the consumer voice in actionable knowledge for innovation, selection and creation

**Contact:** Alexandre Bastos alexandre.bastos@givaudan.com



#### **Business Creation**

Givaudan Flavours is committed to drive a more collaborative and inclusive approach to innovation to accelerate the delivery of superior, sustainable solutions for the food & beverage industry. Recent collaboration partnerships that are crucial for for business creation include:

- Technology and innovation scouting with Swissnex San Francisco
- Founding partner of MassChallenge Switzerland
- Collaboration with IndieBio San Francisco, a biotech accelerator
- Corporate parter of Terra Accelerator, a program led by Rocketspace and Rabobank

Furthermore, Givaudan Flavours will keep building its ecosystem in the key innovation hubs

**Contact:** Alexander Bastos alexandre.bastos@givaudan.com

### AN S.COOP

Agri-food sector



#### Profile

AN S.Coop is a second-degree cooperative formed by 160 agricultural cooperatives and 31,000 farmers and livestock owners

### 3=)

#### **Master Contact**

Maite Muruzábal
Director of the Grupo AN Foundation

Campo de Tajonar s/n 31192 Tajonar (Navarre) SPAIN

www.grupoan.com

E: m.muruzabal@grupoan.com T: +34 948 299 422

#### Competences & Capabilities

Grupo AN acts as a central sales agency in the following divisions:

- Cereal: Grupo AN is the largest cereal cooperative in Spain.
- Fruits and vegetables: Grupo AN is a company of reference in terms of quality and offers fruits and vegetables in a wide range of formats: fresh, frozen, tinned and chopped.
- Poultry: Grupo AN is the fourth largest operator on the Spanish poultry market.
- Pigmeat industry: At a rate of 800 pigs per day. We are involved with key industrial partners.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Grupo AN coordinates, promotes and encourages the development of innovation within the rural and the agro-industrial environment. The aim is to promote synergies and cooperation projects in the cooperative world.

Currently among the projects that we are developing at European level we should mention the FREQUAL (Eurostar) project dedicated to improving the quality of food processing and the AGROINTEGRA project (Life) with the aim of developing sustainable alternatives in crop protection.

Furthermore, Grupo AN is betting on innovation through start-up companies.



#### Communication

Grupo AN has a great visibility and public outreach capacity, especially at national level thanks to its wide presence in most of the Spanish territory.

Besides, Grupo AN distributes monthly 15,000 copies of its magazine among its partners.

Grupo AN as a cooperative, organizes information and training sessions to promote integration in the agricultural sector.

Additionally, Grupo AN has an remarkable capacity for collaboration through the field of Social Economy.



#### **Business Creation**

Grupo AN promotes Business Creation in the agri-food sector increasing the productivity and competitiveness, through integration and cooperative unity.

- Start-up support:
- Grupo AN participates in the 'Orizont' project whose objective is the creation of companies, providing them with tools to convert them into a reference in the agrifood industry.
- We also participate in the 'Clave Mayor' project with the aim of orienting research to the market and creating new innovative companies.
- We are partners of CNTA: the National Center for Food Technology and Security.



#### Education

Grupo AN has a University teaching program with Public University of Navarra (UPNA) based on three pillars: research, technological surveillance and student training. In addition, we offer the chance to acquire practical experience in our company through collaboration agreements.

Our professionals cooperate in the development of Master's degrees.

At the moment Grupo AN collaborates with several universities in different fields, inter alia, Univ. Navarra (cereals and animal feed), Univ. Barcelona (poultry), Univ. Zaragoza (livestock) and with the Biotechnology Institute of Navarra (cereals and livestock).

### HERBSTREITH & FOX KG

#### Pectin Factories



#### Profile

Herbstreith & Fox corporate group is a family owned enterprise focused on the processing of fruit industry by-products: mainly from - but not limited to - apples and citrus fruits. High quality pectins are produced from these raw materials besides dietary fibers, flavonoids, fruit sweeteners, and other by-products.

#### **Master Contac**

Hans-Ulrich Endress Manager Research & Development, OM

Turnstrasse 37 75305 Neuenbuerg Germany

www.herbstreith-fox.de

E: h.u.endress@herbstreith-fox.de T: +49 7082 7913 700

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- production of pectins
- production of dietary fibres
- processing of by-products from the fruit and vegetable industries
- application technology of pectins and dietary fibres in fruit and vegetable products, dairy products, confectionary, baked goods and gourmet food.

Our innovation performance and the portfolio of products we develop and supply, secures competitiveness and creates a long-term value for our clients: best quality is ensured consistently and thus end-user production security and a high standard of the finished product.

Our application technology team is innovative, fast, customer oriented, and is concentrating on quality, price and dosage.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

We are the most innovative producer of pectins and fibres for dietary but also technological applications in the food and feeding industry.

Our in-house R+D and two application labs are run by high qualified food technologists, scientists, and engineers, equipped with the latest machine technology enabling to perform highly sophisticated production processes in a technical scale.

Our dietary fibres make it possible to develop the most innovative recipes by reducing the energy density of food and feed by replacing fat and carbohydrates.

In our production we are using the most recent technologies to safe energy and water and to reduce processing aids to a minimum.



#### Communication

We are running an information based internet platform demonstrating the application technology for our pectins and dietary fibres. In our brochures, detailed information can be found on the use of our products.

Our sales team of food technologists and food chemists is application-orientated and trained to communicate with customers and consumers.

The R+D team is communicating with our world wide research net work to support the multipliers based at universities, research centers, NGOs and supervising institutions.



#### **Business Creation**

With our pectins and dietary fibres we provide our customers with outstanding business solutions by developing new, innovative and health-conscious products for the whole population – from children to elderly people demanding special food or diets, easy to swallow and easy to digest.

We are creating business by innovative food solutions that will bring great pleasure when being consumed.

With our animal nutrition portfolio, we are supporting farmers to avoid preventive pharmaceutical measures to maintain a healthy living stock.

We provide startups with infrastructure and technological help to develop their business in a cooperative partnership.



#### Education

We are running a global network with more than 300 universities and research centers concerning our products and our experience in processing fruit and vegetable by-products and we are supporting Bachelor, Master and PhD theses.

We offer training programs in our R+D and application labs for students and research partners.

We are supporting the correspondent education of children from basic school to high school and are giving lectures at different universities.

We provide possibilities to carry out research activities in our labs.

# Institute of Animal Reproduction and Food Research, Polish Academy of Sciences

Food & animal sciences



### Master Contact

Tomasz Jeliński Professor Assistant

10 Tuwima Str. 10-748 Olsztyn POLAND

www.pan.olsztyn.pl

E: institute@pan.olsztyn.pl T: +48 89 5234686

#### Profile

The Institute of Animal Reproduction and Food Research, Polish Academy of Sciences is a leading life sciences centre carrying out interdisciplinary basic and applied research, explaining the mechanisms of environmental impact on the wellbeing of humans and animals.

#### Competences & Capabilities

The versatile team of the Institute conducts basic and applied research in the areas of food, in respect to health and consumers' perception, farm animals reproduction & aquaculture.

Institute's areas of expertise comprise:

- developing safe and valuable food, ensuring a high level of animal welfare and a limited impact of agriculture on the environment;
- achieving and maintaining personal wellbeing, with a focus on the prevention of allergy, obesity, diabetes type 2, infertility;
- exploitation of agri-food biomaterial for new food products.

Institute is a part of Polish Academy of Sciences, a leading research institution in Poland.

### Expertise related to the EIT Food Strategic Pillars



- Primary production biotechnology and biotechniques of reproduction.
- Processing innovative food products design.
- Nutrition study of relation between diet and health.

Its expertise include (•) separation and identification of functional compounds with their application in the food systems; (•) technology for biosensors development; (•) animal in vitro reproduction, fish semen cryopreservation.

Core facilities: Microbiology, Animal Facility, Molecular Biology, In Vitro, Sensory Analysis, Proteomics, Reproduction Biotechnology, Metabolomics, Experimental Farm, Bioimaging

**Contact:** Tomasz Jeliński, Dr. t.jelinski@pan.olsztyn.pl



#### Communication

Institute undertakes continues efforts to increase public awareness of the key benefits innovations in food and health bring to everyday life.

Spearheading a variety of public engagement events such as science festivals, open lectures, showcases of research facilities, tailored workshops, Institute promotes dialogue involving diversified audience to keep abreast of public concerns and maintain mutual trust.

Institute cooperates with news media, policy makers and business to disseminate its research achievements, enhance appreciation of science-driven industrial solutions, and inspire consumers of all ages.

**Contact:** Iwona Kieda, MSc i.kieda@pan.olsztyn.pl



#### **Business Creation**

- Liaison Officer initiative facilitating the networking between science and industry.
- Brokerage meetings and specialized innovative trainings providing agri-food stakeholders with advances in state of the art knowledge in food and animal sciences.
- Fostering entrepreneurship via core facilities, blending real-world innovation experience with proven research models.
- Active agent in the business environment.

Institute delivers tailored-made and complex solutions to SMEs and bigger scale enterprises to boost their innovation capacity.

#### Contact:

Marek Bogacki, Dr. m.bogacki@pan.olsztyn.pl Anna Bednarska, MSc a.bednarska@pan.olsztyn.pl



#### Education

Institute conducts PhD studies in agricultural sciences: in the field of animal husbandry and food technology and nutrition.

Students are provided with cross-disciplinary knowledge and transferable skills to be used in both commercial and academic centres.

Granted scholarships, they develop and manage their own research with the access to highly specialized scientific facilities.

Students and professionals take part in short-term scientific missions, specialised trainings and industrial internships.

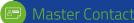
MSc students are offered opportunities to perform research for their graduate theses.

**Contact:** Aneta Andronowska, Dr. hab. a.andronowska@pan.olsztyn.pl

# INSTITUTE OF FOOD RESEARCH (IFR)

Research





Dr Christian Roghi Head of Business Development

Norwich Research Park Colney Lane Norwich, NR4 7UA UK

www.ifr.ac.uk

E: christian.roghi@ifr.ac.uk T: +44 (0)1603 255 182

#### Profile

The Institute of Food Research (IFR) is the only publicly funded UK research institute that focuses on the underlying science of food and health to address the global challenges of:

- Food Security
- Diet & Health
- Healthy Ageing
- Food Waste

Our mission is to be an international leader in research that addresses the fundamental relationships between food and health, food and the gut and the sustainability of the food chain in order to further the production of safe, healthy foods.

#### Competences & Capabilities

IFR carries out fundamental and applied research into links between food and health, microbial food safety, and interactions between food, the microbiome and health.

Expertise incudes:

- Food health claims
- Food structure
- Microbial food safety
- Food authenticity
- Understanding the gut microbiome
- Microbial ecology in the food chain
- Valorization of food chain coproducts
- Food databanks

IFR works with the food industry to translate its research into new foods and technologies and provides evidence-based advice to ensure maximum societal benefit.

### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

IFR seeks to generate innovative new foods and therapies from its research, responding to industry and consumers needs, including

- Extending chilled food shelf life
- Nutritionally enhanced foods
- Novel analytical techniques to combat food fraud
- Engineering new probiotics
- Exploiting gut bacteria enzymes
- Tackling pathogen populations in the food chain, incl. biofilms
- Bioprospecting, screening for new compounds



#### Communication

IFR encourages its staff to partake in science communication and public dialogue and engage with the news media, to raise awareness of advances in knowledge in the food and health area.

IFR maintains a network of over 250 food and health businesses, providing channels for dialogue ranging from one-to-one access to its scientists to larger meetings on specific industry-related subjects.

IFR seeks to work with governments and regulatory authorities to ensure its science contributes to evidence-based policy making.



#### **Business Creation**

IFR takes a proactive approach to business creation. We have setup a contact research organization, IFR Extra Ltd. that undertakes short-term and applied research projects or consultancies for SMEs and large multinationals.

IFR seeks to commercialise its research.

- The Dynamic Gastric Model
- Nutritional Information Solutions based on our food databanks expertise.
- The National Collection of Yeast Cultures services for brewing
- Developing consumer products with proven health benefits



#### Education

Training the next generation of food and health scientists is integral to IFR's mission. As part of the Norwich Research Park Doctoral Training Partnership, we offer innovative, sought after 4-year PhD studentships that include a professional internship, and a full professional development plan, providing students with a range of vital skills for food research or careers in industry.

IFR offers training and knowledge exchange services for industry to access expertise, e.g. IFR has with UEA developed and successfully run a MOOC — 'Identifying Food Fraud'

### JOHN DEERE

### Agricultural Machinery Manufacturer





Dr. Thomas Engel Manager Technology Innovation Strategy

John Deere GmbH & Co. KG European Technology Innovation Center Strassburger Allee 3 67657 Kaiserslautern, Germany

www.johndeere.com

E: EngelThomas@JohnDeere.com T: +49 160 90141373

#### Profile

John Deere (JD) is a trademark of Deere & Company (Illinois, USA). John Deere is the largest manufacturer of agricultural machinery and equipment worldwide and also the leading manufacturer in Europe in regards to production and technology development. There is a strong focus on smart farming, which uses satellite systems, wireless communication and big data analysis to increase crop yields in a profitable and sustainable way to address the needs of food safety and security of a growing world population

#### Competences & Capabilities

The participation in EIT Food will be coordinated and managed by the John Deere European Technology Innovation Center (JD ETIC) which opened in 2010. It is one of the most important investments of the company in the last years and demonstrates the commitment to innovation and to Europe. JD ETIC coordinates all RDI projects and university relationships of John Deere's European units. As one of its key pillars it extends John Deere's partnerships with public research institutions, NGOs (CEMA, VDMA, VDI) and other companies in Europe. Key focus areas are:

- Sustainable technologies
- ICT for automation
- Sensor technologies
- Machine knowledge systems.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

An important aspect of food safety and security is the full traceability in the complete value chain. This includes correct and seamless documentation of all production steps. A missing piece is the real-time measurement of soil and crop constituents during the cropping season and during harvesting operations.

Therefore, John Deere plans to develop smart sensors for constituents and to integrate these sensors into our machinery. We will enable this by close cooperation with sensor manufacturers as well as universities and other partners of EIT Food.

**Contact:** Peter Pickel, Prof. Dr. PickelPeter(@JohnDeere.com



#### Communication

John Deere is promoting and communicating the positive impact of smart farming technologies on the environment and on food safety and security in many public events, fairs and media. Examples are:

- European farm shows like Agritechnica (Hannover), SIMA (Paris), EIMA (Bologna), FIMA (Zaragoza)
- Field Days (e.g. DLG field days)
- Articles in Ag journals like 'Profi' and our customer journal 'The Furrow'
- International Conferences like VDI Ag Engineering Conference, Dublin Tech Summit, World Mobile Congress

**Contact:** Fabienne Seibold SeiboldFabienne@JohnDeere.com



#### **Business Creation**

John Deere has a well-established professional distribution channel. Start-up companies typically miss distribution opportunities and connection to their potential customers. This opens up many opportunities for potential cooperation between John Deere and young entrepreneurs starting with the joint development of smart solutions up to the joint marketing and sales efforts through the existing ID channel.

**Contact:** Carsten Struve, Dr. StruveCarsten@JohnDeere.com



#### Education

John Deere plans to develop, support and deliver comprehensive education programs to mainstream the application of smart and precision farming technology in the primary food production sector. This includes:

- online classes
- distance learning modules

This requires a close collaboration with universities and other stakeholders in educational areas, which are not fully defined yet.

**Contact:** Thomas Engel, Dr. habil. EngelThomas@JohnDeere.com

## KOPPERT BIOLOGICAL SYSTEMS

Biological crop protection & natural pollination





Peter Maes Corporate Marketing Director

P.O. Box 155 2650 AD Berkel en Rodenrijs The Netherlands

www.koppert.com

E: lbreugem@koppert.nl T: +31 10 51 40444

#### Profile

Koppert Biological Systems produces sustainable cultivation solutions for food crops and ornamental plants. Together with growers and in partnership with nature, we work to make agriculture and horticulture healthier, safer, more productive and resilient.

#### Competences & Capabilities

Sustainable farming requires sustainable inputs. Koppert is helping growers produce environmentally sound and healthy food by offering a complete portfolio of farming inputs that covers all steps of production – from soil care to post-harvest pest control.

Our core disciplines include:

- Resilient growth with NatuGro
- Pest control
- Natural pollination
- Application techniques & Monitoring
- Seed treatment

...... 1ST EIT FOOD INNOVATION MARKETPLACE

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Our close relationship to customers is of paramount importance and allows us to anticipate future needs and gaps in the field of crop production.

With a highly skilled workforce in marketoriented tasks, research and development, as well as logistics and engineering we can meet our clients needs with the most innovative, cost-effective and sustainable solutions on the market.



#### Communication

Koppert values the direct exchange with customers and is proud of its large network of experienced and highly skilled consultants supporting our customers in every aspect of crop production.

At the same time, we provide simple software tools that allow customers to access the vast trove of knowledge accumulated over the past 50 years of operation and effectively share their experience and ideas.

This healthy combination of traditional and modern customer interaction puts us in the position to keep optimizing our offering and maximize value to the customer.



#### **Business Creation**

Sustainability and profitability can not exist without the other. Turning an environmentally friendly and healthy solution into a profitable business is our daily work.

With the help of our vast network of partners and an abundance of talent, we manage to scale our sustainable solutions, without jeopardizing environmental integrity or the health of our clients and their customers.

As a family-controlled company we strive for stable and long-term impact, with the freedom to capture opportunities when we identify them.



#### Education

Koppert is primarily known for its premium products, but the company is also recognized as a knowledge company that provides helpful guidance and advice to its customers. With our strong R&D base, we believe that sharing knowledge and training staff is an important step towards sustainable agriculture and horticulture. Koppert offers a variety of courses and works closely with universities around the world to make knowledge accessible to a wider target group. Our 300 professional consultants devote much time and effort towards communicating their knowledge concerning nature and its solutions to ensure that dealers and growers are supported in handling their challenges on a daily basis.

### MASPEX

Food processing





#### Master Contac

Marta Kutyna-Bakalarska Director/ Innovation Management Team

Ul. Legionów 37 34-100 Wadowice Poland

www.maspex.com

E: m.kutyna@maspex.com T: +48 502 199 104

#### Profile

The Maspex Wadowice Group is one of the biggest food producers in Central and Eastern Europe, which operates on the food market for over 25 years.

The company aims to be the leader in the food industry in the Central Europe in terms of both market share values and brand power.

#### Competences & Capabilities

Maspex employs approximately 6,500 people in Poland and abroad (Romania, Bulgaria, Moldova, Czech Republic, Hungary, Slovakia, Russia, Turkey). Its products are sold to over 50 countries worldwide.

The company operates in the market of production of juices, nectars and soft drinks, instant products (cappuccino, cocoa, coffee milk powder, instant tea), pasta, jams, ketchups and sauces as well as in the segment of ready meals and processed vegetables. Moreover, the company manufactures vitamins and supplements.

In addition, Maspex operates in other related fields, i.e. logistics (most modern logistic centers in CEE), agricultural production (cooperation with farmers) and environmentally friendly solutions (photovoltaics, close water circuits, BAT for the food industry, sewage treatment plants producing biogas for trigeneration).

### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

Innovative activity of Maspex is mainly focused on the development of:

- new recipes of offered products (better quality, healthier etc.),
- new methods of production (more efficient, ecological),
- new methods of side streams management,
- new types of packaging (ecological, more customized),
- new methods in logistics processes,
- effective methods of agricultural production for cooperating farmers,
- advanced consumer research (using virtualization, eyetracking etc.).

**Contact:** Bartłomiej Mielniczuk b.mielniczuk@maspex.com



#### **Business Creation**

As the market leader in food sector in Central and Eastern Europe, Maspex attracts ideas from the market. Innovators apply to us asking for the financial support for the development and implementation of their ideas.

The company invests in new ideas, promising inventions and start-ups located in CEE.

Maspex is interested in investing in areas included in section (Strategic Pillar) "Innovation"

**Contact:** Marta Kutyna-Bakalarska m.kutyna@maspex.com



#### Communication

Maspex operates within the organizations: The Polish Association of Juice Producers, Polish Federation of Food Industry, National Federation of Grain, Food and Nutrition Institute.

The company cooperates with Institute of Mother and Child - Partnership for Health is spreading awareness on the importance of a healthy diet of children (last school year alone, more than 7300 schools took part in the programme).

Maspex is visible in national TV stations (occasional morning programmes) and as the organizer of football Tournament for children, the company promotes sport activity (over million children taken part in all editions).

**Contact:** Bartłomiej Mielniczuk b.mielniczuk@maspex.com



### **Education**

As the part of educational pillar Maspex:

- is conducting educational programmes ("5
   portions of fruit, vegetables or juice", "Kubuś
   Friends of Nature"- largest nationwide Polish
   educational programme for kindergartens
   "Puchatek Safety Club", "Grain is tasty and
   inspiring") millions of children taken part in
   these initiatives,
- cooperates with universities and colleges in the designing of dedicated courses to teach students subjects needed in food processing industry,
- organizes career days, internships and summer internships for students,
- provides financial assistance (by Foundation) to students who are the children of Maspex employees and wish to study abroad in a business or technical university.

**Contact:** dr Maciej Combrzyński m.combrzynski@maspex.com

### **MATIS** Biotech R&D



#### Profile

Matis is an independent, governmentally owned, food and biotech R&D company headquartered in Iceland. We are active participants in many national and international R&D and innovation projects, including FP7 and Horizon2020 programs (33 projects since 2010), and have an ongoing fruitful global cooperation with many of the largest food and ingredient companies, a large number of SMEs and entrepreneurs, as well as universities and institutes.

#### Master Contact

Dr. Hordur G. Kristinsson Chief Science and Innovation Officer

Vinlandsleid 12 113 Reykjavik Iceland

www.matis.is/english/

E: hordur@matis.is T: +354 422 5000

#### Competences & Capabilities

Matis, though its staff of over 100 experts and its seven locations, has the following expertise:

- Food processing, quality and safety
- Biotechnology and genetics
- Innovative processes and ingredients
- Product and process development
- Food and environmental analysis
- Consumer and sensory science
- Sustainability/full resource utilization
- Traceability and logistics
- Aquaculture

- Market analysis and trends
- New business development
- Training and education programs

Matis has especially strong competence in the blue bioeconomy sector (marine and freshwater resources and products), placing great emphasis on the circular economy and interdisciplinary activities across food and biotech sectors, with the consumer at the center.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Matis focuses on food and biotech innovation by applying state-of-the-art and emerging technologies with consumer health and safety as our priority.

We follow a co-creational holistic approach to solutions involving consumers, companies, institutions and universities from the start of an idea.

Our project cover a range of innovative solutions throughout the food and biotech value-chain, with focus on sustainable value creation contributing to environmental, social and economic sustainability.

Contact: Dr. Anna K. Danielsdottir, Chief Research Officer annak@matis.is



### Education

steinar@matis.is

our own YouTube channel.

Communication

Matis is actively engaged with consumers,

emphasis on communicating value creation,

innovation, sustainability and social impact.

dissemination material on the bioeconomy for

students and the general public, and operate

Matis regularly participates in dissemination

and marketing campaigns, consumer studies,

communication tool, having over 5000 followers

on Facebook, about 6000 followers on Twitter

Contact: Steinar B. Adalbjornsson, Head of

and has a large consumer database.

Matis actively uses social media as a

and 700 connections on LinkedIn.

Dissemination and Marketing

We have produced a range of innovative

stakeholders and its collaborators, with special

Matis hosts approx. 10 PhD students, 15 MSc students, 10 trainees from developing countries and 20 interns in collaboration with various universities and companies.

Matis hosts the MSc program in Food Science for the University of Iceland in close collaboration with the industry, and plays an active role in the BSc and PhD program. About 50 Matis staff are directly involved in advising and teaching students.

Matis trains university students in innovation and entrepreneurship through national and European competitions. We also train entrepreneurs with low education levels the basic principles of developing products and starting businesses from scratch.

**Contact:** Professor Gudjon Thorkelsson gudjont@matis.is

### **Business Creation**

Matis provides our clients with a range of support tools for increased value creation along the food and biotech value chains, leading to new innovative products, solutions and businesses.

We offer state-of-the art infrastructure and expertise, including Food Innovation Centers, to help companies and entrepreneurs bring their ideas to market.

Matis has provided direct support to over 100 start-up innovation companies and entrepreneurs since 2014, resulting in innovative new food, ingredient, biotech and personal care products.

Contact: Arnljotur B. Bergsson, Chief Impact Officer arnljoturb@matis.is

## NESTLÉ

### Nutrition, Health & Wellness





...... 1ST EIT FOOD INNOVATION MARKETPLACE

#### Master Contact

Ariane Andres Head-Academic Alliances Open innovation & Venturing Nestec S.A.

Nestlé Research Center Vers-chez-les-Blanc Lausanne 26 Switzerland, CH-1000

www.nestle.com

E: Ariane.Andres@rdls.nestle.com T: +41 21 785-8360

#### Profile

Nestlé is a global company and home to some of the world's most recognizable and trusted brands. With over CHF 88 bn in sales in 2015. Nestlé is the world's largest food company. With our Nutrition, Health and Wellness strategy, we support people who want to live a healthier lifestyle. We take pride in providing our consumers with products and services of the highest quality, building trust with every consumer contact we make. By sharing our insights, building partnerships and by engaging with policymakers and other stakeholders, we strive to have a positive impact on society. For our business to prosper over the longterm, we must deliver value to the communities where we have a presence and to society as a whole, as well as to our shareholders. This is what we call Creating Shared Value.

#### Competences & Capabilities

Put simply, Nestle Research is the engine of innovation for Nestle. Our task at Nestle Research is to convert exemplary scientific expertise and knowledge into product innovations and renovations in line with our Nutrition, Health and Wellness ambition. We do this through product and technology leadership that has a positive business impact based on our 'Discover-Develop-Deploy' approach. Our work affects every aspect and touchpoint of the business. It means going beyond products and technologies. It means finding solutions across the value chain that make good, long - term business sense - and create value for society. All that we do is consumerbased. A major part of our work is to deliver products that offer superior nutrition, health and wellness in a forward-looking and creative way. To achieve our goal and fuel sustainable success for Nestlé, we have the largest research network of any food company in the world, with 39 Research facilities, and over 5000 people involved.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Innovation boosts our ability to deliver products to the consumer which they can trust, manufactured to the highest specifications and completely safe. Our researchers deliver innovation we can apply throughout the value chain from the sourcing of ingredients, to manufacturing, packaging and distribution, and to offer consumers new types of product or services, or benefits through our brands. In addition, we are driving advances in agricultural practices and biotechnology to help secure the food supply, from developing new preservation technology to contributing to better food safety. We are improving our ability to produce more with less environmental impact, reducing carbon emissions, water consumption and waste. At the same time, we are working hard to identify ingredients we use with less environmental impact and find ways to accelerate the usage of plant proteins.



#### Communication

The Nestlé Research Center (NRC) in Lausanne, Switzerland – the world's largest private food and nutrition research institute has published over 1000 scientific publications in peer review journals and files over 80 patents annually.



#### **Business Creation**

Under the Corporate R&D function of Open Innovation & Venturing, broadly speaking, we engage with 3 segments for bringing in external innovation and creating new business opportunities in Nestlé:

- Industry innovation partnerships: We collaborate with a range of industry partners, both large multinationals and SMEs with technological differentiation for innovation and renovation projects leading to industrialization.
- Academic alliances: We partner with leading academic institutions globally for path breaking, jointly funded fundamental research for advances in food and nutrition.
- Venturing: We actively scout for technologies and make venture investments in start-ups which can further drive external innovation and new business creation into Nestlé.



#### Education

We are committed to contributing to the higher education of the next generation of nutrition and food science scientists and participate, for instance, in Horizon 2020 Marie Skłodowska-Curie Actions. We sponsor PhD Theses worldwide.

### THE NIELSEN COMPANY

Consumer, media and market research



Claudia Gapp Global Client Business Partner, Vertical Lead Sustainability Europe

Avenue des Morgines 12, 1213 Petit-Lancy, Genève Switzerland

www.nielsen.com

E: claudia.gapp@nielsen.com T: +43 664 6146 404

#### Profile

Nielsen's mission is to provide clients with the most complete understanding of what consumers watch and buy. We study consumers in more than 100 countries to give our clients the most complete view of trends and habits worldwide. And we're constantly evolving, not only in terms of where we measure, or who we measure, but in how our insights can help our clients make strategic business decisions every day.

#### Competences & Capabilities

We align our business in two principal reporting segments:

What Consumers buy provides the most comprehensive view of the consumer through information & insights.

- Global leader in retail measurement services
- Consumer panel services (250.000panel households)
- Global Consumer Surveys (targeting 30.000 consumers in 60 countries)

What Consumers watch provides audience measurement services across all devices (TV, radio, online, mobile) where content is consumed

 Global leader in both television and digital measurement (providing effectiveness metrics to optimize spending and value of the content)

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

We are focused on innovating to stay ahead of evolving market trends, allowing us to provide our clients with usable, practical and meaningful tools to develop better and healthier food solutions to meet the needs of today's consumers, and find out where they are headed tomorrow. Nielsen helps you consistently achieve better innovation outcomes, faster and more efficiently. We offer consumer centric solutions for every stage of the innovation process – from identifying profitable unmet opportunities and screening and optimizing concepts to testing products and package designs, accurately forecasting sales and optimizing pricing and assortment. (Extensive database of success norms based on 200,000 global tests, industry-leading collaboration and optimization tools, and a modern, fast, alldigital platform).



#### **Business Creation**

In the area of Business Creation we support through measurement and insights enabling smarter, quicker business decisions that drive results.

Through Nielsen Cares our associates mobilize Nielsen data and expertise for good, creating shared value in our communities and helping to solve some of the world's biggest social challenges.



#### Communication

Being a responsible corporate citizen is woven into Nielsen's DNA. Our Global Citizenship and Sustainability Council comprise a crossfunctional leadership teams aligning new and existing initiatives in this area. Nielsen will measure the social impact and outcome of the EIT Food activities through measurement and insights that drive faster and smarter innovations and decision making.

Through our solutions we have a unique perspective on how consumers engage with advertising across all channels (mobile, online, radio, TV) and content types (video, audio, text) and how it translates into what they purchase. We help our clients to "reach" the consumers, gauge the "resonance" of the message and quantify consumer "reaction" in terms of sales impact.



#### Education

In the area of Education we offer support on all impact measurement related topics.

Contact: all pillars via master contact

### **PEPSICO**

### Food and drink manufacturing





#### Master Contact

Andrew Thomas R&D Director

PepsiCo International Beaumont Park Technical Centre Leicester LE4 1ET. UK

www.pepsico.com

E: andrew.thomas@pepsico.com T: +44 116 234 8645

#### Profile

PepsiCo is one of the world's leading food and beverage companies with over \$63 billion in net revenue in 2015 and a global portfolio of diverse and beloved brands. Our complementary food and beverage portfolio enables us to provide more choices for our valued consumers; from oats and juice and yoghurts, to snacks, dips and soft drinks. Our products are available around the world and our portfolio includes 22 brands that each generates more than \$1 billion in estimated annual retail sales.

#### Competences & Capabilities

We see PepsiCo's Global R&D organization as a catalyst — transforming the company, its portfolio and the industry. Every day, R&D helps drive PepsiCo's business by providing unrivalled technical skills and solutions to offer more enjoyable and nutritious products to more people, in more places, engendering more trust worldwide. As an academy R&D organization and a destination employer, we are able to use experts to drive science, technology and innovation thought-leadership. Fifty per cent of our team is made up of individuals with advanced technical degrees; food chemists, microbiologists, biologists, who are able to develop unexpected and unique innovations. In addition to in-house chefs, scientists. nutritionists and technical experts, PepsiCo R&D maintains a network of academic and professional relationships worldwide to partner with on everything from agriculture to flavours to biology.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Within Europe we have two of our Global R&D hubs (Cork, Ireland and Leicester, UK), attracting and employing world class R&D talent to deliver our technical agenda. Including our other European R&D locations, we have more than 500 Scientists and Engineers working within the technology arena, supporting both European and Global agendas. These teams are responsible for delivering technologies to innovate, renovate, and deliver the substantial growth agenda that PepsiCo has.

**Contact:** Andrew Thomas Andrew.Thomas @pepsico.com



#### Communication

Understanding current and future consumer demands is critical to unlocking differentiated innovation, thus PepsiCo is increasingly using design led innovation.

Effective dialogue with our consumers through traditional or digital channels, co-creation, focus groups or other research approaches is critical to partnering with an active consumer.

**Contact:** Andrew Thomas Andrew.Thomas @pepsico.com



#### **Business Creation**

Business creation & sustainability is core to PepsiCo's vision, recently our Vice Chairman and Chief Scientific Officer, Dr Mehmood Khan, summed up PepsiCo's attitude: "Partnerships are crucial, because global value chains are so large and involve many interconnected players... public, private and non-profit sectors must work together." To support this we are increasing our engagement with startups and innovators to build sustainable businesses.

**Contact:** Andrew Thomas Andrew.Thomas@pepsico.com



#### Education

PepsiCo currently collaborates with over 50 Global R&D academic partners across five continents, including many high- prestige academic institutions. Providing support through research placements, industrial internships and teaching support. In addition we have a commitment to STEM engagement that is global, and underpins our citizenship agenda.

**Contact:** Stefan Baier Stefan.Baier@pepsico.com

### **PLANTLAB**

### The Next Generation of Growing





#### Master Contact

Vera Colstee Business Developer Food

Veemarktkade 8a 5222 AE 's-Hertogenbosch The Netherlands

www.plantlab.nl

E: vcolstee@plantlab.nl T: +31 6 45 48 92 89

#### Profile

PlantLab 'The Next Generation of Growing' is on a mission to change the way the world is fed. Our ultimate goal is to ensure that plants can reach their full potential, to feed a growing population with a sustainable source of safe, tasty, affordable and nutritious food.

PlantLab provides turnkey solutions for indoor, vertical farming, based on its patented technology and in-depth plant science, enabling the production of sustainable, safe and nutritious crops and high value food ingredients.

#### Competences & Capabilities

PlantLab develops and operates custom-build Plant Production Units (PPUs) integrating;

- Controlled environment technology to mimic any climate possible.
- Plant science to research optimal growing conditions for plants and their purpose
- Steering plants primary and secondary metabolites for fresh produce and extraction of ingredients.
- New value chain solutions for a sustainable, optimal supply chain.

Our state of the art R&D center in 's-Hertogenbosch we have numerous R&D chambers, scale up units and production facilities where we operate for various markets such as breeding, fresh produce, young plants and plant derived ingredients for food-, pharmacy- and nutrition industries.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

- Technology innovation on climate-, growing-, water- and nutrient systems - Circular Approach.
- Operational integration in a high tech environment – automation.
- The plant as production medium for specific compounds/ingredients.
- (Fresh) Food production with desired flavor profile.
- Improved nutrient-dense production by natural bio-fortification in growing conditions.
- New generation production systems with in-line measurement of safety, quality and taste, made available for end-users by smart labeling (digital).

**Contact:** Vera Colstee vcolstee@plantlab.nl



#### Communication

Producing locally in cities or communities encourages interaction with end-users such as consumers, supermarkets or restaurants. Indoor Farming enables a high tech farm experience where end-users can make demands to the specifications of their products and personalize their fresh food to a high degree.

PlantLab is young, post-start-up company, our communication expertise is still evolving. Currently we are developing communication tools and concepts to interact with end-users. Think of us as a perfect test-bed, we still have the start-up mentality and can quickly respond to changes!

**Contact:** Vera Colstee vcolstee@plantlab.nl



#### **Business Creation**

We see the opportunity to initiate and join forces with others to create new ventures for developing and deploying new technologies across the food value chain.

Our experience as a start-up company bringing new emerging technologies to the market can benefit the RisingFoodStars and SPV with necessary insights and mentorship.

**Contact:** Vera Colstee vcolstee@plantlab.nl



#### Education

We have several internships for students, who will be given the opportunity to work on radical new solutions for our food system.

We cooperate on project basis with universities worldwide in the field of food and agriculture.

**Contact:** Vera Colstee vcolstee@plantlab.nl

### **PURATOS NV**

Bakery, Patisserie, Chocolate



### Master Contac

Filip Arnaut R&D Director GRS Lab

Industrialaan 25 B-1702 Groot-Bijgaarden Belgium

www.puratos.com

E: farnaut@puratos.com T: +324814253

#### Profile

Puratos NV is a global leading manufacturer of ingredients for bakery, patisserie and chocolate. The vision of Puratos is built around taste and nutrition and a strong commitment to help to prepare the world for the next generation. This vision translates in products and solutions optimizing nutritional profiles of baked goods, bringing more grains and fruits in the diet, creating transparency in the supply chain, mobilizing new sources of raw material and reducing food waste.

#### Competences & Capabilities

In depth knowledge of consumer expectations and needs in the field of food and more specifically related to Baked good and chocolate.

Expertise on ingredients and technologies used in bakery patisserie and chocolate field

State of the art pilot facilities technologies in bakery patisserie and chocolate field that can be activated in projects exploring market access for new ingredients or products with optimized nutritional profiles or health benefits.

Due to the global presence of Puratos: positioning new products and solution in a non-European context and to increase the potential for export outside of the European union.

Sensorial analysis expertise and the Sensobus (mobile sensorial lab)

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Yearly, 2,5% of revenue invested in research and development

58 Innovation Centers worldwide

- 800 R&D researchers and technical advisors
- 30 formal partnerships with 3rd parties: the innovation is done in close collaboration with universities and knowledge centers inside and outside of Europe.

Entrepreneurial innovation process

Student Internships: around 75 per year



### Communication

Puratos is actively communicating

- Through a recently updated corporate website: www.puratos.com
- On social media
  - Linkedin
  - Facebook
  - http://www.tastetomorrow.com/
- By organizing dedicated customer events
- By organizing open scientific seminars with academic partners

**Contact:** Philippe Arnauts External communications Manager Parnauts@puratos.com



#### **Business Creation**

Creating value through lose collaboration with startups and high tech SME's is part of our business model.

We have adapted partnering models for collaborations with companies and academic institutes.

We collaborate in early stage phase with startup to validate and mature the technology

**Contact:** Filip Arnaut R&D Director GRS Lab Farnauturatos.com



#### Education

- There is a Puratos University where we train our employees on technical and managerial skills
- There are two campuses (Belgium and China)
- There is an extensive e-learning platform with in house developed technical courses from basic to advanced: nutrition sensorial analysis, food technology topics, management training...

**Contact:** Klaar Roeland HR Learning & Development Manager Kroeland@puratos.com

## QUEEN'S UNIVERSITY BELFAST

Agri-Food & nutrition research / Education



## Master Contac

Stephane Durand Head of Innovation, Institute of Global Food Security

Northern Ireland Technology Centre Queen's University Belfast, Cloreen Park Belfast BT9 5HN, United Kingdom

www.qub.ac.uk/igfs

E: s.durand@qub.ac.uk T: +44 7799471254

#### Profile

The Institute for Global Food Security (IGFS) is part of Queen's University Belfast, specialising in the key areas of the integrity of global food supply, farms of the future and nutritional challenges for the 21st Century. IGFS plays a major role in delivering safe, sustainable and authentic food to the world's growing population, and has become globally recognised for its excellence in research and education.

### Competences & Capabilities

We drive research, educate tomorrow's leaders and create a culture of entrepreneurship, through:

- International research and collaborations in food safety and food integrity
- expertise in animal nutrition, behaviour, welfare and precision farming
- facilities for Genomics, Imaging, Mass
   Spectrometry and Bioinformatics research
- big data management centre with unique big data access to explore links between diet, behaviour and health
- access to dietary research, especially in targeted and precision nutrition.
- number 1 in the UK in research intensity in Agriculture, Veterinary and Food Science

## Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

- We provide solutions to some of the world's biggest food safety problems, from the contamination of crops, animal feeds, ingredients and food products, and fighting fraud across the food supply system
- With a proven track record we provide a crucial interface between industry and regulators to bring about solutions globally in the area of nutrition, food fraud and integrity and precision agriculture.
- We apply methodologies developed for the Medical and Pharma industries to the agrifood space.

**Contact:** Mr Stephane Durand s.durand@qub.ac.uk



### Communication

- We're connected to schools, colleges, health agencies and government departments
- We develop tools to help those at risk of chronic illness to monitor their diet and its effect on conditions such as obesity, diabetes, Alzheimer's disease, via a citizen participation forum.
- We piloted an incentive programme to encourage schoolchildren to make healthier food choices
- We developed a smartphone app to support the self-management of type 2 diabetes.
- We publish research in world leading peer review journals

**Contact:** Mrs Isabel Jennings i.jennings@qub.ac.uk



### **Business Creation**

- Through QUBIS Ltd, we commercialise university research and development opportunities by forming spin-out companies.
- Since 1984, QUBIS has created 80 companies, with an active portfolio of 34 companies, employing over 1800 staff.
- These companies have raised £83.4m in outside investment.
- Our lean start-up approach saves time in building businesses in the food sector.
- QUBIS spin-outs benefit from seed-funding, office space, access to our business network and ongoing support

**Contact:** Mr Brian McCaul b.mccaul@qub.ac.uk



### Education

We foster an open, entrepreneurial approach to food security education.

- nine high quality degree programmes and two online courses focussed on food and nutrition, educating hundreds of students each year.
- expertise in the running of MOOCs.
- exchange programmes in Vietnam, France, Brazil and China.
- 150 students working globally in the agrifood, environmental and life sciences areas.
- upcoming summer schools to develop outstanding PhD students.

**Contact:** Dr Katrina Campbell katrina.campbell@qub.ac.uk

## RABEN GROUP

Logistics Services Provider

## Raben



#### Profile

Raben Group is a Third Party Logistics operator with 85 years of experience. Present in 11 markets of the Western, Central, and Eastern Europe with its own logistic network, Raben Group is providing services to small, mediumsized and big companies which have decided to outsource their logistics processes.

## 2=

#### Master Contact

Zbigniew Kępiński Genius Lab Manager

Raben Management Services Sp. z o. o. ul. Zbożowa 1 62-023 Robakowo Poland

www.raben-group.com

E: zbigniew.kepinski@raben-group.com T: +48 61 89 888 78

### Competences & Capabilities

Main areas of specialization are:

- Contract logistics
- Road network
- Fresh logistics
- FTL & intermodal
- Sea & air
- Logistics integration

...... 1ST EIT FOOD INNOVATION MARKETPLACE

Raben Group services a wide variety of industries ranging from FMCG and retail to automotive and chemical

Dense and well planned network of branches allows for rapid transport of goods while optimization of processes and IT systems ensure constant increase of quality.

## Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

Every day, systematically Raben Group investigates, discovers, creates, develops, and implements new solutions or improvements for our customers. We ensure innovations or significant improvement in processes, systems, organization and services which are provided for our customers.

In 2016 we launched Genius Lab (Research and Development Department) to better, structurally invest in trends research and solution development. To enable collaboration we are going to bring together customers, academic institutions, research center, market partners and logistics experts within business units and departments.

We support our customers delivering better services and providing accurate high value business information from logistics processes.

Contact: Zbigniew Kępiński Genius Lab Mananger zbigniew.kepinski@raben-group.com



#### Communication

We do not operate in a detached social space. We follow the words of Milton Friedman who wrote that a company may continue its activity as long as the society believes that they need it. Our development, growth and innovativeness translate into the quality of life in the environment. We execute projects focusing on the areas nominated by our stakeholders. The key identified areas were: local communities, the natural environment, education and road safety. One of our aims is also to increase the awareness of the role of transport.

Our communication platform myRaben.com provides on-line whole business information for our customers, partners and consignees. There are over 10 000 registered users who day by day take and exchange necessary business information.

**Contact:** Sylwia Tylińska Group Marketing Manager sylwia.tylinska@raben-group.com



Sharing our knowledge is an inherent part of Raben Group philosophy. We offer professional advice for our customers and all players on the logistics market.

We cooperate with several universities, e.g. Higher School of Logistics in Poland, Poznań University of Economics and Business and University of Warsaw, SGH Warsaw School of Economics as well as with numerous secondary schools.

Our experts are often invited to speak during industry conferences and business meetings. Knowledge sharing is one of our company's cornerstones.

Contact: Zbigniew Kępiński Genius Lab Manager zbigniew.kepinski@raben-group.com

## ROQUETTE

## Specialty Food Ingredients



## Master Conta

Frédéric BOUVIER Scientific Advisor, Nutrition & Health R&D

1 rue de la Haute Loge 62136 LESTREM FRANCE

www.roquette.com

E: frederic.bouvier@roquette.com T: +33 6 12 09 42 14

#### Profile

A family-owned Group serving customers globally, Roquette is a leader in specialty food ingredients and pharmaceutical excipients. The products and solutions developed by the Group deliver proven technological, nutritional and health benefits precisely tailored to the pharma, nutrition, food and selected industry markets. Roquette's offer is produced from plant-based raw materials such as corn, wheat, potatoes and peas.

Roquette operates in over 100 countries, has a turnover of around 3.3 billion euros and currently employs more than 8,000 people worldwide.

### Competences & Capabilities

Our ambition is to be the natural source of innovative plant-based ingredients and formulations for highly demanding industries. We bring high-value nutritional and functional ingredients to our markets, backed by the cocreation services our customers require.

At Roquette, food producers find a range of plant-based solutions: plant proteins (peaor wheat-based), soluble fibers, polyols, maltodextrins, native and modified starches, dextrose, glucose syrups and many more to discover.

Roquette's development is based on a long history of company technology and expertise on plant-based raw materials, leading complex projects from the laboratory to the factory, as well as on the long-term partnerships the Group establishes with its customers.

...... 1ST EIT FOOD INNOVATION MARKETPLACE

### Expertise related to the EIT Food Strategic Pillars





Communication

Since its foundation over 80 years ago, the Group's growth has been based on innovation, a passion for the job and a commitment to achieve.

Responding to the needs of the market, Roquette is constantly developing ever more innovative, competitive and sustainable food and nutritional solutions, bioactive ingredients and performance material systems.

Roquette's renowned Research & Development is key to Group strategy by deploying the state-of-the-art science and technology essential to creating the applications, ingredients and formulations that best support its customer's ambitions.

**Contact:** Frédéric BOUVIER, Scientific Advisor frederic.bouvier@roquette.com





## SCIEX

## Analytical Instrumentation



Master Contac

Ashley Sage Senior Manager – Market & Business Development

Phoenix House Lakeside Drive Warrington, Cheshire WA1 1RX UK

www.sciex.com

E: Ashley.Sage@sciex.com T: +44 1925 236060

#### Profile

With over 40 years of proven innovation, SCIEX helps scientists and laboratory analysts gain insights in addressing challenges in bioanalysis, biomedical research, biologics, food safety, clinical research, diagnostics, forensics and environmental analysis. SCIEX offers analytical solutions including; mass spectrometry (MS), capillary electrophoresis (CE) and liquid chromatography (LC), along with a range of reagents, services and software that is uniquely designed to address customer needs.

### Competences & Capabilities

SCIEX is dedicated to helping scientists ensure the safety of foods, beverages, water and the environment. Our LC-MS/MS-based solutions deliver the fast, accurate results needed to meet and exceed regulatory requirements that ensure safety. For decades,

SCIEX customers have depended on our instrumentation and software solutions to detect a wide range of contaminants, including both manmade and natural toxins that impact our global food and environmental resources. With an R&D group focused on new technology, both hardware and software, this is backed by a worldwide group of technical applications and support chemists that can train, tailor and develop new applications dependent on scientific requirements.

### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

SCIEX have been a proven innovation company for over 40 years in the field of analytical science. Being the first commercial organization to introduce routine LC-MS/MS in 1989, the technology has developed significantly in terms of sensitivity, speed and selectivity. We constantly develop new applications and technology especially in the food safety, authenticity and consumer protection applications. SCIEX works closely with scientific partners to drive innovations and thus the advancement of analytical science always with key applications in mind.

**Contact:** Mark Cafazzo, Global Director Mark.cafazzo@sciex.com



### Communication

Communication with the scientific and industrial community is a key activity at SCIEX. We regularly organize seminars, workshops, user meetings and training courses aimed at helping customers develop knowledge and expertise in the field of food testing.

We work closely with our business partners to provide education related information relating to analytical science and often contribute to the scientific discussions at key conferences.

SCIEX also provide on-line based training material at SCIEX University as well as have active social media channels for the promotion of scientific developments

**Contact:** Ashley Sage, Senior Manager Ashley.sage@sciex.com



### **Business Creation**

SCIEX works closely with key partners in strategic business creation, especially with the development of new technology. This is often driven by demand from customers but also regulations, and as an organization, we strive to remain ahead in innovation.

We work regularly with customers to help them with funding applications for scientific research grants especially where our expertise can add value or deliver some benefit in kind to the research program.

SCIEX are always looking at key markets and the trends to effectively introduce new technology at the right time, and this is often in combination with strategic alliances with business partners.

**Contact:** Mark Cafazzo, Global Director Mark.cafazzo@sciex.com



#### Education

SCIEX provide significant numbers of training classes, workshops and user meetings yearly to disseminate scientific and analytical knowledge. We also contribute at conferences to highlight new developments in technology. Our SCIEX University portal is an on-line training facility that helps customers better understand the applications around food safety.

We also work closely with scientific institutions, both academic and industrial, to develop relationships, networks and scientific developments for new and future products and applications.

**Contact:** Ashley Sage, Senior Manager Ashley.sage@sciex.com

## SIEMENS AG

Digitalization / Automation

## **SIEMENS**



#### Master Contact

Rudolf Sollacher Senior Research Scientist

Otto-Hahn-Ring 6 81739 Munich Germany

www.siemens.com

E: rudolf.sollacher@siemens.com T: +49 152 22 79 79 87

#### Profile

Siemens is a global powerhouse focusing on the areas of electrification, automation and digitalization. The company is active in more than 200 countries. In fiscal 2016 Siemens generated revenue of €79.6 billion and net income of €5.6 billion and had around 351,000 employees worldwide. Siemens is the only provider that offers a comprehensive range of products and systems for automation in all sectors and is a leading supplier of automation systems to the food & beverage industry.

### Competences & Capabilities

Siemens is active in the areas of electrification, automation and digitalization with products and solutions like

- Totally Integrated Automation (TIA) portal
- Product Lifecycle Management (PLM) software
- Energy management and efficient drives

Corporate Technology, the central research & development arm of Siemens, develops the company's technology and innovation strategy. It has 7,400 employees worldwide, holds 59,800 granted patents and collaborates with 9 centers of knowledge interchange and 16 principal partner universities worldwide.

### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

Siemens looks back to a history of 170 years of innovation from telegraph and dynamo to computer tomography, high speed train, Totally Integrated Automation (TIA) portal and Product Lifecycle Management (PLM) software.

Current research & development focuses – among others – on technologies for the Internet of Things (IoT) and for Industrie 4.0.

We are supporting the application of Industrie 4.0 and IoT concepts to the food production value chain and contribute to field trials and demonstrators.

**Contact:** Rudolf Sollacher, Senior Research Scientist rudolf.sollacher@siemens.com



### Communication

As a leading supplier of automation technology Siemens is presenting innovative solutions at basically all important fairs of the food & beverage sector.

Other means of publication reaching a large audience are e.g.

- Customer Magazine: Information about main developments in technologies and markets (https://www.siemens.com/customermagazine/en/home.html)
- Pictures of the Future: Presents important technology trends and research at Siemens (https://www.siemens.com/innovation/en/ home/pictures-of-the-future.html)

Contact: Florian Martini,
Press Officer Research and Technology
florian.martini@siemens.com



#### **Business Creation**

In 2016 Siemens – itself a global player founded as a start-up in a Berlin backyard – opened a new unit: next47 will cooperate with innovative partners to identify new trends, invest in them and turn them into viable business. These partners may include entrepreneurs from Siemens as well as external start-ups and established companies. A team of dedicated managers will build a bridge between the world of start-ups and of Siemens.

**Contact:** Lamin Ben-Hamdane, Venture Technologist lamin.benhamdane@siemens.com



### Education

Siemens Professional Education provides first-class vocational education, combined vocational and academic education, as well as further education to our internal and external customers. These programs secure next-generation skills for the digital world.

One example is a Massive Open Online Course (MOOC) offering curriculums, automation training and learning concepts for conveying know-how on Industrie 4.0

**Contact:** (temporary) Rudolf Sollacher, rudolf.sollacher@siemens.com

## **SODEXO**



## Master Con

Laurent COUSIN Group SVP R&D

255 quai de la bataille de Stalingrad 92166 Issy-les-Moulineaux Cedex France

www.sodexo.com

E: laurent.cousin@sodexo.com T: +33 6 07 44 90 16

#### Profile

With 425 000 employees in 80 countries, SODEXO provides daily Quality of Life Services to over 75 million consumers at more than 32 000 sites: schools, universities, production, administration or business centres, detention centres, hospitals, senior homes, ...

We experience daily, at field level where consumers live, that Quality of Life Services and Food Services at a special position, directly contribute to **progress of individuals** and to the performance of their organization. We also know how much Food Service can contribute to health & wellness for our guests, nutritional education for the youngest, social interaction and sense of recognition, personal development, facilitation for ease and efficiency in daily activities and tasks, for providing a safe and secure living environment. We also have clear **commitments** and important role to play for our **environments** (planet, local communities) in a sustainable development perspective.

### Competences & Capabilities

We are committed to bring to EIT-Food our consumer knowledge and 50 years of experience in food service. We also bring our expertise of supply management and partnerships with all food categories (we are a generalist food service company, not specialized in any type of food or products).

Connected with all types of public and private institutions, we also have more than 45 years of international experience, internal coordination and multicultural cooperation.

With the **agility** and **reactivity** of a pure service company, we have a robust experience and know-how in **innovation development**, **piloting** and **testing** for life validation after lab confirmation, precise outcomes **measurement**, large scale **deployment** across our organization (over 17 500 sites in 22 EU countries).

### Expertise related to the EIT Food Strategic Pillars









## STRAUSS GROUP

Food & Beverage company



## Master Contac

Eyal Shimoni CTO, VP Technology

49 Hasivim St. POB 194 Petah Tikva 4959504 Israel

www.strauss-group.com

E: Eyal.Shimoni@Strauss-Group.com T: +972-3-675-2328

#### Profile

Strauss Group is an international Food & Beverage company that strives to improve people's lives, headquartered in Israel. Our portfolio includes five businesses: Strauss Coffee B.V., Strauss Israel, Strauss Water, PepsiCo – Strauss Fresh Dips & Spreads International and Max Brenner, aligned with two global consumer trends: Health & Wellness and Fun & Indulgence.

The Group has 14,000 employees worldwide, is active in more than 20 countries. The Group's turnover is estimated at 2 billion USD in 2015.

### Competences & Capabilities

Strauss Group is active in the following categories:

- Coffee
- Dairy
- Confectionary & Salty Snacks
- Home water appliance
- Vegetarian fresh dips & spreads
- Fresh cut vegetables
- Honey, olive oil, jam

In each of these categories, Strauss Group has product development, process development, manufacturing facilities, marketing, distribution and other various capabilities.

Strauss Group pioneered the creation of the Israeli FoodTech ecosystem with innovators and startups through Alpha Strauss platform and "The Kitchen" incubator.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Strauss Group's innovation is managed in four layers:

- Product and process innovation in the business units on an ongoing basis.
- Testing and disseminating post proof-ofconcept technologies into the group through our "Migrating technologies" platform.
- Developing new product processes and business models through our "Breakthrough Technologies" platform.
- Nurturing early stage technological startups in our incubator (The Kitchen).

Alpha Strauss venture is Strauss Group's main vehicle to create technological edge.

**Contact:** Jameel Istaitih, Alpha Strauss Email: Jameel.istaitih@Strauss



### Communication

As a food and beverage company, Strauss Group communication efforts face both consumers and professionals:

- Consumer facing communication involve:
   Blog, Website, Tweeter, Facebook, YouTube,
   Instagram, etc.
- Our unique mobile application "Strauss plus" serves over 100K users in tracking their retail shopping and composing unique offers for consumers.
- For the professional community we hold professional Meetups, annual FoodTech conference and a listing of over 1500 members of the FoodTech community also through our LinkedIn group "Israel FoodTech innovations".

www.alphastrauss.com www.thekitchenhub.com



## **Business Creation**

Strauss Group is the leading industrial player in the Israeli FoodTech ecosystem, pioneering collaborations and investing in startups and technologies using two main platforms:

Alpha venture is Strauss Group's vehicle to collaborate with the FoodTech ecosystem through providing beta sites, professional advice, and creating shared value through collaborative projects. Alpha also engages in the connection between the "technology providers" and venture capital funds, market service providers, government representatives, our strategic partners etc.

"The Kitchen", founded by Strauss, is the first Israeli FoodTech incubator. It provides funding and support for early stage FoodTech ventures in all areas of the Food & Beverage value chain, from Farm to Fork, taking innovative ideas and creating successful startups.



### Education

Strauss Group is collaborating with universities and colleges in Israel.

Strauss Group's mangers lecture in various academic institutions. We also provide scholarships for young researches focusing on health and nutrition research. We are also open for interns on a need basis.

We also support academic education by professional visits of students in our facilities.

# TECHNION, ISRAEL INSTITUTE OF TECHNOLOGY

Research University



## Master Contac

Yoav D. Livney Assoc. Professor

Biotechnology & Food Engineering Department Technion, Israel Institute of Technology Haifa 3200000. Israel

www.technion.ac.il/en

E: livney@technion.ac.il T: +972-50-7642386

#### Profile

The Technion, Israel Institute of Technology, is a science and technology research university dedicated to the creation of knowledge and the development of human capital and leadership for the advancement of the State of Israel and all humanity.

Since founded in 1912, Technion has become a global pioneer in both traditional and novel engineering fields including biotechnology, space, computer science, nanotechnology, and energy. Three Technion professors, and one former graduate have won Nobel Prizes. The Technion is currently participating in 80 H2020 projects

#### Competences & Capabilities

Technion has 18 academic departments in engineering, natural sciences, medicine and architecture as well as 60 research centers, embracing the interdisciplinary research approach that is driving new developments worldwide. Among Technion's outstanding interdisciplinary research centers are the Grand Water Research Institute, Russell Berrie Nanotechnology Institute, Nano-Med Initiative, Lokey Center for Life Sciences and Engineering, Grand Technion Energy Program, Technion Autonomous Systems Program and Technion Computer Engineering Center. World-class laboratories such as the Electron Microscopy Centers, Genomics Center, and Micro-Nano Fabrication Unit enable the cutting-edge research that has empowered Technion to build its reputation for academic excellence and boldly inventive research.

...... 1ST EIT FOOD INNOVATION MARKETPLACE

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

'Necessity is the mother of invention'. For Israel and the Technion, this is not a cliché but rather a way of living. Israel's institute of Technology produces both world-class basic science and applied research, generating numerous patented technologies, which position it as a world-renowned technological university and the beating heart of the Israeli high-tech- and start-up nation. The Technion fosters out-of-the-box thinking. It is home to various multidisciplinary centers of excellence, generating a diverse portfolio of groundbreaking innovations, from computer and data science, through electrical- and mechanical engineering, to the fields of agricultural-, biomedical-, biotechnology & food engineering, nutrition and

**Contact:** Uri Lesmes, Associate Professor lesmesu@tx.technion.ac.il



#### **Business Creation**

Entrepreneurship is coded in the DNA of the Technion. Between 1995 and 2014, more than 1,600 startups were founded and/or managed by Technion graduates. The total capital raised by these startups was over 6B €. 42 of the 72 Israeli companies on NASDAQ, with a total market-cap of \$22 Billion, were founded or managed by 64 Technion graduates.

We at the Technion believe that
Entrepreneurship is not a gift but rather a set
of interrelated skills that a student could be
equipped with. We are trying to implement this
policy in different organization and programs
that exist on campus. These include the
Entrepreneurship center, the BizTec competition
and the Technion's accelerator.

**Contact:** David Shem-Tov David.S@technion.ac.il



### Communication

The Technion promotes evidence-based informed decision making in science and technology related issues, with special focus on the role of the mass and social media. Expertise include:

- Data mining, quantitative and qualitative research of public engagement with science in offline and online environments.
- Supporting scientists and other stakeholders in communicating their research via mass and new media, including practical media training.
- Initiating citizen science and public participation projects.

Contact: Ayelet Baram-Tsabari, Associate Prof. of Science Communication ayelet@technion.ac.il



### Education

The prestigious Shanghai Ranking placed the Technion at the 69th place of the world's leading academic institutions. The Technion is home for 10,000 Bachelor and 4,200 Master and PhD students mostly in the fields of exact sciences, engineering, medicine and science-education, guided by more than 550 active faculty staff members. Most of the 50 undergraduate and 83 graduate programs can contribute to the strategic goals of EIT Food.

The Technion already offers several MOOCS and Technion students enjoy an interactive e-learning environment.

The Bronica Entrepreneurship Center and the Technion Knowledge Center for Innovation provide hands on training in entrepreneurship and innovation.

**Contact:** Avi Shpigelman, Assistant Prof. avis@bfe.technion.ac.il

86

22 & 23 FEBRUARY 2017 | BILBAO .....

# TECHNICAL UNIVERSITY OF MUNICH

University

Technische Universität München



## Master Contac

Judith O'Meara TUM ForTe – Office for Research and Innovation

Technical University of Munich Arcisstr. 21 80333 Munich, Germany

www.tum.de

E: eu-office@tum.de T: +49 89 289 22042

#### Profile

The Technical University of Munich (TUM) combines top-class facilities for cutting-edge research with unique learning opportunities for students. It is committed to finding solutions to the major challenges facing society as we move forward: Health & Nutrition • Energy & Natural Resources • Environment & Climate • Information & Communications • Mobility & Infrastructure. TUM thinks and acts with an entrepreneurial spirit. Its aim: to create lasting value for society. All this combines to make TUM one of Europe's leading universities.

### Competences & Capabilities

In line with its institutional strategy TUM. The Entrepreneurial University, is committed to address all aspects of the innovation triangle: education, innovation and business creation.

TUM's mission is to spearhead the education of top-talent and the development and marketing of new technologies, innovative solutions and services that support people in their right to a healthy diet and in their duty to improve nutrition, achieve food security and promote a sustainable bioeconomy.

## Expertise related to the EIT Food Strategic Pillars



#### Innovation

End-to-end coverage of the Agro-Food-Nutrition-Health chain: TUM School of Life Sciences Weihenstephan (78 Profs.), ZIEL Institute for Food & Health (12 Profs.)
TUM Dept. of Sports und Health Sciences Entrepreneurship and Business Management incl. Operations & Supply Chain, Management. Digitalization, Sensors, and Automation; Dept. of Mechanical Engineering, Dept. of Informatics, Dept. of Information & Communication Technologies; network partners: Center Digital Bavaria, Leibnitz Supercomputing Center (superMUC)

Munich Center for Technology in Society (MCTS). Interactions between science, technology, and society, understand TechnoSocieties and actively contribute to their positive development.



### Communication

The TUM Media Relations team has offices on all three TUM campuses. It has considerable experience with EIT Health setting up communication channels. It is the first point of contact for journalists, employees and university associates. Outreach Partners in the region are:

- German Museum Munich (~1.5Mio visitors p.a.; "traveling exhibition", "Digital German Museum").
- Airport Munich GmbH (~130.000 travelers per day; demonstrators mounted at physical spaces ("FoodConnects Showroom").
- The Competence Center Nutrition (KErn, subdepartment of the Bavarian State Ministry of Food, Agriculture and Forestry: regional exchange research-industry-educators.



#### **Business Creation**

TUM proactively encourages its members to found growth-oriented startups and support them with non-bureaucratic services until they achieve a strong foothold in their market.

- UnternehmerTUM: is one of Europe's leading entrepreneurship centers: 100staff, >40technology-based start-ups p.a., technology scouting, start-up incubation/ acceleration, start-up coaching, team matching & development, start-up financing.
- TUMentrepreneurship program for a proactive entrepreneurial support of students and scientist (12 staff members) and recognition of innovative talents.
- Incubators: GATE Garching on TUM's Science & Engineering Campus Garching, Innovation & Start-up Center Biotechnology (IZB) on TUM's Life Science Campus Weihenstephan.



#### Education

Thematically relevant study programs: 11 BSc & 17 relevant MSc 3 MBA and advanced training courses, seminars and conferences.

Wide experience in setting up Europe's largest summer school for climate innovation and entrepreneurship (Climate KIC).

Extra-curricular as well as add-on study programs to facilitate the growth and foundation of entrepreneurial ventures (CDTM).

Divers formats (MBA and workshops) for professional and executive training by TUM School of Management.

TUM publishes its own MOOCs on renowned US platforms. An ever-expanding MOOC offering enriches the university's teaching repertoire.

European Venture Programme for PhD student and Postdocs.

## UNIVERSITY OF CAMBRIDGE

## University



#### Master Contact

Howard Griffiths
Professor of Plant Ecology

Department of Plant Sciences Downing Street Cambridge CB2 3EA UK

www.cam.ac.uk

E: hg230@cam.ac.uk T: +44 (0) 1223 333946

#### Profile

A world-leading University whose mission is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence.

### Competences & Capabilities

- World-class research expertise across the whole food value chain from farm to fork;
- Collaboration with colleagues worldwide; including large-scale partnerships with Europe, Asia, Africa and America.
- Engagement with peer institutions, governments, NGOs and policy-makers to translate research into global benefit;
- Promotes the interface between academia and business, with a global reputation for innovation;
- At the heart of one of the world's largest technology clusters - the 'Cambridge Phenomenon' has created 1,500 hi-tech companies.

...... 1ST EIT FOOD INNOVATION MARKETPLACE

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

World-class research expertise across the whole food value chain, including in plant and crop science; modelling and epidemiology in plant and animal production systems; supply chains; diet/nutrition and health.

Encompasses Strategic Research Initiatives in Global Food Security, Infectious Diseases, Big Data, Energy, Conservation, Public Health. Also Cambridge Algal Innovation Centre, Cambridge University Farm, and Cambridge Centre for Crop Science.

Firmly established infrastructure and track record of working with industry, fostering entrepreneurship and promoting spin-out companies.

**Contact:** Howard Griffiths, Professor of Plant Ecology

hg230@cam.ac.uk



### Communication

Active programme of public engagement and communications, including annual Festival of Ideas, Science Festival, and Summer Schools for all ages.

**Contact:** Howard Griffiths, Professor of Plant Ecology

hg230@cam.ac.uk



#### **Business Creation**

Entrepreneurial Learning within Cambridge Judge Business School (JBS) provides networking opportunities with peers, and a range of open programmes for aspiring entrepreneurs.

**Contact:** Shima Barakat, Director of Entrepreneurial Learning & Engagement, JBS Sb679@cam.ac.uk



### Education

#### We run:

- MBA and Executive MBA programmes (Judge Business School);
- Customised professional development programmes (Institute for Manufacturing);
- Customised executive education programmes (Cambridge Institute for Sustainability Leadership);
- Online adult-learning courses (Institute of Continuing Education).

**Contact:** Theo Hacking, Director of CISL Graduate Programmes
Theo.hacking@cisl.cam.ac.uk

## UNIVERSITY OF HELSINKI

Public non-profit research and higher education

institution



### Master Contact

Pasi Sihvonen Project Manager

P.O. Box 53 (Fabianinkatu 32) FI-00014 University of Helsinki Helsinki Finland

www.helsinki.fi

E: pasi.sihvonen@helsinki.fi T: +358 50 4150236

#### Profile

University of Helsinki (UH), established in 1640, is the largest institution of academic education in Finland, and an international scientific community of 40,000 students and researchers. UH operates in four campuses in Helsinki (City Centre, Kumpula, Meilahti and Viikki) and in nine other localities in Finland, UH has 11 faculties, several research-orientated institutes, multidisciplinary research networks and campus units, and units attending to the duties of a national authority. UH has an annual budget of 750 million euros. UH's vision for 2025 is encapsulated in the slogan "Global impact in interaction".

### Competences & Capabilities

University of Helsinki is among the top 1% of the world's research universities, ranked 1st or 2nd among the Nordic countries, and it is a founding member of LERU. Scientific quality is manifested for instance by 44 ERC grants, 50% of Thomson Reuters' highly cited Finnish researchers are in UH, and the University has over 100 European projects running annually.

Scientific spearheads cover entire spectrum of disciplines. Within food research those include

- food production and quality
- food safety and veterinary medicine
- healthy nutrition and consumer behaviour
- remote sensing, precision farming, big data
- multidisciplinary research and education platforms
- modern infrastructure (including research farm, animal hospital, green houses, laboratories)
- Nordic dimension and expertise
- Close collaboration with companies

## Expertise related to the EIT Food Strategic Pillars



#### Innovation

Helsinki Innovation Services (HIS), the fully owned technology transfer company of University of Helsinki, is responsible for identifying and protecting inventions arising from research at the University of Helsinki, including food and environmental safety related research. Our activities are manifested by nearly 100 invention disclosures and tens of patent applications annually. We work closely with different industry sectors to better understand customer and end-used needs, market potential and competitive advantages of our inventions, aiming to serve food industry with solutions promoting development of sustainability.

Contact: Jari Strandman, CEO jari.strandman@helsinki.fi www.his.fi



### **Business Creation**

University of Helsinki supports the commercialisation of food research via Helsinki Innovation Services (HIS). Two major routes for commercialization are out-licensing and spinout creation. The technologies and solutions invented at University of Helsinki are offered to food industry for licensing and further development. HIS also supports the formation of several start-ups annually. HIS provides support in putting start-up teams together, and guidance to the teams on finding investors and other sources of funding to launch new businesses.

**Contact:** Jari Strandman, CEO jari.strandman@helsinki.fi www.his.fi



#### Communication

University is a respected public actor and it is extensively engaged in communication with the society, including the private and public sector, NGOs, political decision makers and legislators, media, funders, alumni and the general public, among others.

Communication is built to support researchers and happens via news and press releases, events, workshops, discussion forums, networks, interviews, expert seminars, meeting places such as Think Corner, using both digital and physical media.

The communications team at University of Helsinki supports scientists on communication matters. The communications team is known to be a pioneer in adopting and developing new communication channels.

**Contact:** Ville Korhonen, Comms specialist ville.korhonen@helsinki.fi



## Education

UH offers the widest selection of Master and PhD level programmes in Finland, also as MOOCs. Multidisciplinary programmes cover the entire agri-food chain from primary production to nutrition and consumer economics. Examples in doctoral programmes include "Food Chain and Health" and "Sustainable use of renewable natural resources". Student mobility are integral parts of the activities.

UH provides training to promote innovation, entrepreneurship and impact of research. Topics include for instance pitching, development of commercial potential, identification of funding opportunities, scouting of industrial opportunities and industrial collaboration.

**Contact:** Maija Tenkanen, Professor maija.tenkanen@helsinki.fi

## UNIVERSITÄT HOHENHEIM

## University





### Master Contact

Benjamin Biesdorf Project Manager

Hohenheim Research Center for Bioeconomy Wollgrasweg 43, 70599 Stuttgart Germany

www.uni-hohenheim.de

E: b.biesdorf@uni-hohenheim.de T: +49 711 459 24249

#### Profile

The University of Hohenheim is the leading University in agricultural research and food sciences in Germany, and is ranked #3 in Europe. With its three faculties/colleges of agriculture, natural science and social and economic sciences, the university is able to address holistically most aspects of the food system.

It has extensive experiment stations with associated acreages that make it possible to carry out field research. The University maintains an international network with numerous partners and has a strong foothold in Africa and Emerging Countries.

### Competences & Capabilities

The University of Hohenheim is divided into three faculties:

- The Faculty of Agricultural Sciences,
- The Faculty of Natural Sciences, and
- The Faculty of Business, Economics and Social Sciences.

With 10.000 students, 2500 staff members, 1000 Ph.Ds and about 140 professors, the University carries out interdisciplinary teaching and research, finding solutions for key global challenges like transforming the economy to a biobased one, addressing resource shortages and environmental challenges taing social and economic aspects into account. Being located in the capital of the state of Baden-Württemberg, one of the most prosperous and economically dynamic states in Germany, it has strong links to local businesses and governmental organizations. An extensive state-of-the-art research and teaching infrastructure exists.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Our vision is to combine actors across the food chain in a new way to share knowledge and develop new products and technologies.

Our institutes and institutions are internationally and interdisciplinary aligned to carry out basic and application-oriented research providing innovations in the food arena. We are one of the top players in Germany when it comes to joint industry-academic research and innovation grants.

In addition to its KIC participation, Hohenheim is building a regional food and agricultural innovation network including local startups.

**Contact:** Jörg Hinrichs, Prof., Dept. Chair J.Hinrichs@uni-hohenheim.de

Andreas Pyka, Prof., VP International inno@uni-hohenheim.de



#### Communication

Nine Professors from the Institutes of Communication Science and the Institute of Marketing & Management focus on communication aspects at the University of Hohenheim. Health and Food Communication is a dedicated focus at the department of Communication Science.

To foster a collaboration along the food chain and to build and maintain networks, a new Research Center for Bioeconomy was set up in 2015. An extensive European partner network through joint grantsmanship has been established.

Contact: Sabine Trepte, Prof., Dept. Chair sabine.trepte@uni-hohenheim.de
Susanne Braun, Mrs., Chair of Center susanne.braun@uni-hohenheim.de



#### **Business Creation**

Several institutes of the Faculty of Business, Economics and Social Sciences cover the field of Business Creation. Amongst them the department for Business Start-Ups and Entrepreneurship that addresses all aspects of the entrepreneurial process. A recently awarded program supports student entrepreneurship and startup creation ("Hohenheim Creates", & the "StartUp Garage").

A dedicated technology transfer office is fostering a continuous dialogue between companies and scientists to ensure that IP is turned into products and services. A speciality of Hohenheim is its extensive seed bank and plant breeding programs continuously generating new and improved plants.

**Contact:** Andreas Kuckertz, Prof., Dept. Chair andreas.kuckertz@uni-hohenheim.de



### Education

Hohenheim is a full University offering all academic degree levels to students:

- Various food system oriented accredited degree programs with demonstrated excellence in teaching (e.g. Ars Legendi award, Humbold-reloaded)
- The only Master Program in Bio-economy in Germany (EU Master's Program)
- Various structured Ph.D. degree programs (food engineering, biology, agriculture, economics)
- An University Spanning Graduate Academy (supports Ph.D. students and Post-Doctoral workers)

**Contact:** Jochen Weiss, Prof., Dept. Chair j.weiss@uni-hohenheim.de

Lutz Fischer, Prof., Dean of Studies Lutz.Fischer@uni-hohenheim.de

## UNIVERSITY KU LEUVEN - LFORCE

Food Science, Technology and Nutrition





#### **Master Contact**

Dr. Kurt Gebruers, Innovation Manager

KU Leuven - Leuven Food Science and Nutrition Research Centre (LFoRCe) Kasteelpark Arenberg 20 box 2463 3001 Leuven (Heverlee), Belgium

www.kuleuven.be/english www.biw.kuleuven.be/english www.lforce.kuleuven.be

E: kurt.gebreurs@kuleuven.be T: +32 16 32 19 19; M: +32 497 06 22 91

#### Profile

KU Leuven is a core partner in EIT Food and is also taking the lead in setting up the Western Co-Location Centre (CLC West). The KIC's mission lines up very well with the University's mission, aiming at strengthening the knowledge-based socio-economic fabric within the Leuven region and beyond that in an EU context. Its activities cover the different corners of the knowledge triangle, i.e. Innovation, (entrepreneurial) education and business creation, and offer plenty of opportunities for collaboration in these areas via an integrated approach.

### Competences & Capabilities

The Leuven Food Science and Nutrition Research Center (LFoRCe) groups the University's expertise in the agro-food-nutrition area (> 550 researchers, > 50 professors) covering plant- and animal-based food systems, nutrition and health, consumer science and cross-cutting fields. The University fosters an entrepreneurial spirit in its R&D community and closely supported more than 110 start-ups (10 in the agro-food area) with more than 87 still being active (> 4100 employees). Combined with its BSc and MSc education programs of high international standards, the University will offer in the KIC win-win opportunities in terms of e.g. branding, attracting/educating top talent, leveraging (disruptiveness of) innovation by interdisciplinary partnerships and accelerating time-to-market of innovations via the KIC's network, tools and resources.

## Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

KU Leuven has internationally renowned expertise on plant-based food systems from 'farm to gastrointestinal tract' and a strong competence base built on research of high international standard in areas along the animal-based food value chain and in crosscutting research domains. This includes:

- Agriculture: crop (bio)technology, agricultural/ harvesting technology, ...
- Post-harvest technology
- Livestock genetics, physiology and nutrition, precision livestock farming
- Food technology/(bio)chemistry (cereal-, fruit-, vegetable-, meat-based food systems)
- Food quality and safety
- Nutrition and health
- Sensor technologies, industry 4.0, ...

**Contact:** Dr. Kurt Gebruers, Kurt.gebruers@kuleuven.be



#### **Business Creation**

Via its knowledge and technology transfer office, Leuven Research & Development (LRD), the University is dedicated to building bridges between science and industry. By transferring knowledge and technologies to society and the marketplace, it advances the impact of research results on people's lives around the globe. We have a tradition of collaborating with industry, securing and licensing IPR, creating spin-offs and stimulating knowledge-driven regional development. Herein, LRD supports researchers throughout the entire knowledge and technology transfer process and helps them to best leverage the societal and economic potential of their research. To this end, KU Leuven created its own VC fund, incubators and science parks.

Contact: Dr. Kurt Gebruers, kurt.gebruers@kuleuven.be; Dr. Bart Motmans, bart.motmans@kuleuven.be



#### Communication

The KU Leuven performs advanced market/ marketing, consumer and consumer communication research to study consumer behavior, judgement, preferences and decision making. Research at the University also includes the exploration of potential strategies supporting sustainable change in consumer behavior. Our interests cover for instance the potential role of labels and packaging herein, the impact of traditional/novel communication media, the relation between reward sensitivity and food choice, endorser effects and persuasive communication in food marketing and food nudging.

Contact: Dr. Kurt Gebruers, kurt.gebruers@kuleuven.be; Prof. Liesbet Vranken, liesbet.vranken@ kuleuven.be



### Education

The University organizes several Master programs and a Doctoral program in Bioscience Engineering and other fields, offering a multitude of courses that are highly relevant for the agro-food sector sensu lato.

Herein, international students make up about 16 % of the total student population (about 35 % international PhD students).

To stimulate entrepreneurship, we offer dedicated communication, awareness creation, training, coaching and matchmaking activities and share best practices.

Contact: Dr. Kurt Gebruers, kurt.gebruers@kuleuven.be; Prof. Christophe Courtin, christophe.courtin@kuleuven.be

## UNIVERSIDAD AUTÓNOMA DE MADRID

Education and Research on Food&Nutrition









Ana Ramírez de Molina Deputy Director IMDEA Food

Einstein 3, E-28049 Madrid Spain

www.uam.es

E: ana.ramirez@imdea.org T: +34 91 727 81 00

#### Profile

Universidad Autónoma de Madrid (UAM) is a Life Sciences specialized academic institution, ranked 11th worldwide and 4th in Europe in QS < 50.

UAM campus hosts two complementary **Food&Nutrition** Institutes:

**CIAL (UAM-CSIC):** Focused on innovation in food design for nutrition and health.

**IMDEA Food:** Targeting Precision Nutrition for human chronic disease prevention.

### Competences & Capabilities

Working for the increment of competitiveness and innovation of food industry through knowledge transfer from bench-to-fork. An integrated ecosystem is located in our Campus to comply with the 3 pillars of knowledge: R&D, entrepreneurship and education.

- Technological platforms:
  - Food and Nutritional Genomics Platform
  - Service platform for food industrial sector
  - Metabolomics platform
  - Bioanalytical techniques unit
  - Gastrointestinal simulator
  - Laboratory of cooperative activity in R&D
- Genotyped cohort with more than 1200 volunteers. Active collaboration with the major Hospitals
- 20 research clusters and > 100 researchers allowing the development of added value food through genomic nutrition
- Scientific Park with capacity to hold > 400 start-up companies

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

UAM prioritizes innovation as an engine for the food sector development reflected on:

- A mean of 143 new patent applications per year (5 on Food&Nutrition)
- A mean of 25 licensed patents per year (2 on Food&Nutrition)
- International collaborations with special emphasis on activities developed with industries and Latin American partners
- Strong national presence through competitive consortia (i.e. Predimed)

UAM harbors a platform design to promote knowledge transfer between academia and industry, and a Scientific Computing Centre serving the whole scientific community.

**Contact:** Ana Ramírez de Molina, Ph.D. ana.ramirez@imdea.org



#### Communication

Contributing to the dissemination of scientific knowledge on Food&Nutrition is a key element to improve well-being of society and to valorize new added-value foods and ingredients by consumers. On-going activities:

- Nutrigenomics Interactive Center is a permanent exhibition to educate society about the interaction genetics-food-health
- UAM Gazette disseminates our scientific knowledge (i.e. European Night of Researchers, Science at School infodays)
- Infodays addressed to food industry & retailers to spread out innovation outcomes
- Specialized courses on Science Communication & Dissemination

**Contact:** Sara Castillo, M.Sc. sara.castillo@imdea.org



### **Business Creation**

To provide support to the creation of technologically-based companies, UAM supports the following structures:

- Scientific Park of Madrid, an incubation organization with almost 400 start-ups
- UAM-Foundation, sponsored by many industries, enhances technological transfer and provides continued formation
- > 5000 m2 brand new building to host research infrastructures and private companies

To date, 15 start-ups/spin-offs have been created.

**Contact:** Guillermo Reglero, Prof. guillermo. reglero@uam.es



### Education

The UAM campus hosts > 28.000 students and > 2.000 teachers in its 2.252.000 m2 area. It is one of the top environmental sustainable campuses in the world

The academic offer on Food Technology and Nutritional Sciences comprises 2 BSc, 2 MSc and 1 PhD program

Our University implements the latest information and communications technology applied to Education. In addition, the university provides lab support for food and nutrition-related degrees, masters and continuous education programs.

**Contact:** Tiziana Fornari, Ph.D. tiziana.fornari@uam.es

## UNIVERSITY OF READING

University



## Master Contac

Professor Ian Givens
Director, Institute for Food, Nutrition
& Health

University of Reading Whiteknights Reading, Berkshire, RG6 6UR

www.reading.ac.uk

E: d.i.givens@reading.ac.uk T: +44 (0)118 378 8491

#### Profile

The University of Reading is among the UK's top universities, with a world-class reputation for the quality of our teaching, research and links to business, and a proud history of innovation and social influence that stretches back over 125 years.

The University of Reading is ranked #1 in the UK and #12 in the world for agriculture and food, based on quality of research, teaching and impact.

### Competences & Capabilities

The University of Reading has a long-standing, international reputation for integrative, interdisciplinary research across the whole food chain; to understand how interventions can be optimised to sustain and improve the provision of safe, healthy and nutritious food for consumers.

The University has the largest range of dedicated food laboratories in a UK university, enabling us to support our clients and collaborators with access to state-of-the-art facilities and technical services, including: a farm with a large dairy herd and experimental metabolism unit; the international cocoa quarantine centre and plant research facilities; human nutrition trials facilities, with body composition and brain imaging scanners; large suite of in vitro gut models, representing the gut microbiome under various physiological and pathological states; a sensory science unit and a food processing plant.

## Expertise related to the EIT Food Strategic Pillars



#### Innovation

The University of Reading actively seeks opportunities to collaborate with industry to enhance innovation, and to promote the benefits of research for end users. We support a range of innovative and exciting projects including student placements and Knowledge Transfer Partnerships, and provide access to cutting-edge technical equipment & facilities.

The University jointly established one of the first commercial R&D centres exploring Big Data in agri-food (Agrimetrics Ltd) and is currently developing the Thames Valley Science Park, which will be the biggest dedicated science business park in the region and one of the largest in Europe.

**Contact:** Professor Richard Frazier, Head of Department of Food and Nutritional Sciences r.a.frazier@reading.ac.uk



#### **Business Creation**

The University of Reading delivers entrepreneurship education throughout our curriculum. The University is home to Henley Business School, leading providers of entrepreneurship advice and training, who run business plan competitions, nurture innovative start-ups and link to investment opportunities.

The University is a major investor in incubation and science park facilities in the Thames Valley region as the heart of a strong, high-growth business community. We have a range of facilities and capabilities available to support developing companies operating within EIT Food's scope and aims.

**Contact:** Mr Andrew Carlin, Head of Enterprise Services a.p.carlin@reading.ac.uk



#### Communication

Our expertise in understanding consumers is particularly noteworthy and includes consumer sciences, ranging from flavour to sensory sciences, food and behavioural economics, diet, nutrition and health linked to food value chains.

The University of Reading will be able to play a central role in communication activities based on our long-standing experience, access to large cohorts of consumers and our highly committed network partners. For example, the Museum of English Rural Life at the University of Reading has worked alongside rural people, local communities and specialist researchers to create displays and activities that engage with important debates about the future of food.

**Contact:** Dr Becky Nadal, Strategic Project Manager

b.c.nadal@reading.ac.uk



### Education

The University of Reading has a strong reputation for innovation in training students and upskilling employees from the agri-food industries. We offer 27 undergraduate courses and 17 postgraduate courses directly in the agri-food area, including dedicated courses in consumer science and behavioural economics. The University has also developed a series of MOOCs, e.g. 'Obesity: Causes & Consequences'.

Our Food Advanced Training Partnership provides postgraduate-level taught and research training to food industry professionals, encouraging industry-wide 'without boundaries' thinking to stimulate innovative and sustainable approaches to the production of quality food that benefits human health.

**Contact:** Professor Julian Park, Head of School of Agriculture Policy and Development j.r.park@reading.ac.uk

## UNIVERSITY OF TORINO

## Education, Research and Technology Transfer



UNIVERSITÀ DEGLI STUDI DI TORINO

## Master Contac

Luca Simone Cocolin Full professor

Via Verdi, 8 10124 - Torino Italy

www.unito.it

E: eitfood@unito.it T: +39011670 9616/9605/9620

#### Profile

The University of Torino (UNITO) is one of the largest Italian Universities, with about 70,000 students, 3,900 employees, and 1,800 post-graduate and post-doctoral research fellows.

It manages roughly 500 projects per year (among which 115 FP7 research projects and 46 H2020 projects funded up to date).

### Competences & Capabilities

UNITO has a long standing experience in EIT Food relevant research. UNITO main areas of specialization and technological expertise are:

- Crops and primary production: plant biodiversity, crop production, environmental pollution
- Food safety and production: biosecurity, risk assessment, food hygiene and quality control, livestock farming, food processing and traceability
- Environmental and socio-economics aspects: ecology, soil-crop-climate model systems, assessment of economic sustainability and of agro-environmental and socio-cultural impacts, food policies and legal framework
- Consumers and health: nutritional profile and safety aspects, health effects of dietary supplements, specialised nutrition for vulnerable sub-groups (e.g. infants, elderly), rising consumers' awareness about healthier and more sustainable nutrition

### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

UNITO's vision embraces the development of a strong inter-sectorial innovation ecosystem, connecting technological advancement to new production systems embedded in Italy and Piedmont territory and culture. This leads UNITO to actively participate in many regional, national and European clusters and platforms, which bring together representatives from academia, industry and consumers. A high number of UNITO funded research and innovation projects relate to EIT Food issues, both at national and international level. involving a multitude of diverse research skills and a strongly interdisciplinary approach along with up-to-date research infrastructures available at UNITO's premises.

**Contact:** Mara Ghiazza eitfood@unito.it



### **Business Creation**

UNITO provides active support and services to knowledge and technology transfer and to the commercial valorization of the results of academic research through the Office for Research and Third Mission. Spin-off creation and incubation activities are managed by UNITO business incubator 2i3t (www.2i3t.it). UNITO accounts for 36 academic spin-offs, 8 of which operate in agrifood value chain related sectors, and holds cooperation agreements with more than 30 regional, national and international industrial partners.

**Contact:** Giuseppe Caputo eitfood@unito.it



### Communication

At UNITO the specialized unit Agorà Scienza is dedicated to spread awareness of the social responsibility of R&I, while enhancing the dialogue between science and society. Science communication and public engagement are promoted through events presenting UNITO scientific competences and research project results, e.g. the Researchers' Night of Piedmont and Aosta Valley, an ongoing UNITO-coordinated initiative funded by the EC since FP7. Such events target not only academic and industrial researchers, but also other stakeholders of our territory and the general public. In addition, an innovative on-line research communication and valorization **platform** is available at UNITO both for research professionals and for the general public.

**Contact:** Chiara Abrescia eitfood@unito.it



## Education

UNITO hosts several academic courses and training activities focusing on food-related issues, including:

- 12 first cycle degrees spanning from biotechnologies to chemical, agricultural and environmental sciences, to food technology, veterinary sciences and nutrition.
- 12 second cycle degrees encompassing medical, molecular and plant biotechnologies, chemical, agricultural and environmental sciences, food technology, human nutrition sciences, veterinary medicine.
- 3 PhD courses and 5 Master courses
  (of which 1 of international level) on
  agricultural, biological, veterinary and foodrelated topics, among which sustainability
  and circular economy.

**Contact:** Giulia Maccario eitfood@unito.it

## UNIVERSITY OF WARSAW

Education, Research & Development



## Master Contac

Dr Magdalena Klimczuk-Kochańska Assistant Professor, Rector's repr. in EIT Food Consortium

University of Warsaw Office of University Advancement Krakowskie Przedmieście 26/28 00-927 Warsaw, POLAND

www.en.uw.edu.pl E: EIT.Food@uw.edu.pl T: +48 505 928 994

#### Profile

The University of Warsaw, the largest and top-ranked university in Poland, Polish leader in implementing R&D projects, has scientific expertise in multiple fields: social and economic sciences, mathematical and computer sciences, chemistry and biology as well as research strengthening the sustainability of the food system.

#### Competences & Capabilities

Main areas of research and development expertise in the field of food are:

- Research on consumer behaviour combined analysis in psychology, sociology, social anthropology, marketing and economics
- Regulatory frameworks for the food industry
- Operations and strategic management in FMCG sector
- Corporate Social Responsibility in the food sector
- Big data analytics
- Assessment of biological and chemical hazards and food spoilage
- Research on food ingredients and nutrient biofortification of food crops

..... 1ST EIT FOOD INNOVATION MARKETPLACE

## Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

- We have best-of-breed research infrastructures, including the largest supercomputing centre in Warsaw and over 100 modern laboratories, representing science and technology fields as diverse as medicine, biotechnology, food research, cosmetology, environmental monitoring, waste management, renewable energy and data mining.
- The main research centers which aim is to run interdisciplinary research are Centre of New Technologies and Biological and Chemical Research Centre.



#### Communication

- The UW co-operates with over 800 international partners. It is a member of 90 international research initiatives.
- We have orchestrated a network of over 30 food-related stakeholder organisations in Poland and other countries.
- The UW is engaged in community outreach activities, aimed at popularising sciences and entrepreneurship, including Warsaw Science Festival, Science Picnic, Start-up Grind and TEDXLIW.
- We manage the UW Botanical Garden, which is a popular sightseeing spot in Warsaw, offering opportunities for thematic exhibitions drawing the attention of international visitors.



#### **Business Creation**

- Our scientists have experiences with IPR management, technology transfer, incubating and accelerating technology-based companies.
- We have experts with a good track record in patenting, technology licensing, spinningoff businesses and forming corporate partnerships.
- Special purpose vehicle UWRC Sp. z o.o. could actively support the process of commercialization of research results for the food sector.
- We have excellent links with the local startup and venture capital community with the ability to support the development of innovative firms in the food industry.



### Education

- We offer undergraduate and doctoral studies, organise summer schools, postgraduate studies and vocational courses, and initiates interdisciplinary programmes.
- The UW brings together scholars from a variety of disciplines including biology, chemistry, computer science, quantitative data analysis, psychology, management and law.
- Our Executive MBA programme is leading in Poland.

## **VALIO**

## Food production



Minja Miettinen Research Manager, R&D

Meijeritie 4 00370 Helsinki FINLAND

www.valio.com

E: minja.miettinen@valio.fi T: +358 50 398 7204

#### Profile

Valio Ltd is Finland's leading dairy cooperative owned by Finnish family farms.

Valio was established 1905 and today has production in Finland, Estonia and Russia. Subsidiaries are in Sweden, Denmark, Baltic countries, Russia, USA and China. The amount of employees is 4 000 and the net turnover was € 1.7 billion in 2015.

#### Competences & Capabilities

Valio operations are divided into five integrated key areas:

- Farming and milk production
- Milk processing
- Research and development
- Sales and marketing
- Logistics

Personal responsibility is our core value. We listen to customers and consumers, and aim to exceed their expectations. We care for people, animals and the environment. Our goal is international profitable growth with world class value added.

Valio is the only dairy company with a Nobel prize winning innovation heritage. Our R&D staff includes 130 researchers, technologists, product developers and experts. Besides innovative product development, we have built superior know-how in separation and powder technologies and in novel process concepts.

## Expertise related to the EIT Food Strategic Pillars





Communication

Valio creates innovations that deliver benefits to milk producers, food manufacturers and consumers. Valio is known globally as a leader in functional foods and unique milk processing technologies. Valio leadership and competitiveness is based on scientific research, leading technological expertise and superior raw material - Finnish milk.

Valio is famous for its patented nutritional innovations including lactose free Eila® and milksalt ValSa® licensed and sold globally.





# VTT TECHNICAL RESEARCH CENTRE OF FINLAND LTD



## Master Co

Kaisa Poutanen Research professor

P.O. Box 1000 FI-02044, VTT Finland

www.vttresearch.com www.nutritech.fi

E: kaisa.poutanen@vtt.fi T: +358 40 540 3326

#### Profile

VTT Technical Research Centre of Finland Ltd is the leading research and technology company in the Nordic countries. Our research and innovation services give our partners, both private and public, all over the world a competitive edge. We pave the way for the future by developing new smart technologies, profitable solutions and innovation services.

VTT creates new businesses for the food and beverage sector. Our pilots and even ready-to-launch products present new opportunities for any size of food industry.

### Competences & Capabilities

VTT's services increase the competitiveness of our customers' businesses, promote the creation of new business and improve and speed up R&D. In our personnel of about 2600 persons we have a wide expertise base ranging from solutions for natural resources and environment to smart industry and energy systems and knowledge intensive products and services. All these skills are also used to improve the competitiveness of the food sector, where we are specialised in bioprocesses, biological tools and biomaterial science. VTT also has tested tools and methods for companies to move forward with digital transformation.

We offer our customers access to our cross-disciplinary technological and business expertise, unique research infrastructure and comprehensive partnership networks. We create customised solutions in close cooperation with our customers.

## Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

VTT's research and innovation strategy aims at clean world, good life and sustainable economy. The focus areas implement the goals of our vision and include: bioeconomy, low-carbon energy, digital world, clean technologies, resource efficient production systems, as well as health and well-being solutions.

VTT's vision of an era of smart consumercentric food production has just been published as the roadmap "Food Economy 4.0" http://www.vtt.fi/inf/pdf/visions/2017/V10.pdf.

It consist of three themes: Consumer centric manufacturing, Agile manufacturing technologies and Vertical food production. The core is in efficient use of plant raw materials and healthy nutrition.

**Contact:** Research professor Kaisa Poutanen Kaisa.Poutanen@vtt.fi



#### **Business Creation**

VTT brings a broad understanding of industrial ecosystems and value chains, including foresight and impact assessment. We help to discover current and future business opportunities. We commercialize patented technologies through licensing or spinoff creation. VTT Ventures co-invests to VTT spinoff companies.

VTT is actively developing our own long-term collaboration models. We have for instance, launched the General Finland Initiative to boost the business ecosystem of small and medium-sized companies targeting new international markets.

**Contact:** Vice President, Sales and business development John Kettle
John.Kettle@vtt.fi



#### Communication

VTT has an active communications policy both towards scientific, industrial and societal & consumer communities. VTT communicates methodically and consistently on its activities, the results attained and their impacts.

The latest news are published on VTT's web site: <a href="www.vttresearch.com">www.vttresearch.com</a>. VTT is active in social media channels such as Facebook.com/VTTFinland, Twitter @VTTFinland, YouTube. com/VTTFinland, LinkedIn/VTT, VTTblog.com and SlideShare.net/VTTFinland. VTT publication series include VTT Visions, VTT Science, VTT Technology and VTT Research Highlights. For the food cluster there is the specific VTT platform www.nutritech.fi.

Contact: Specialist, External Communications
Paula Bergqvist
Paula.Bergqvist@vtt..fi



### Education

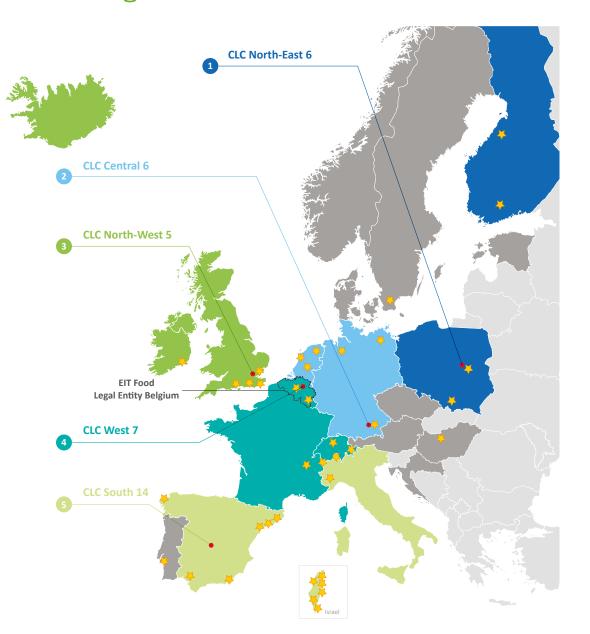
VTT collaborates with Finnish and European universities and offers internship possibilities for students at all levels: BSc, MSc, PhD and Post doctoral. A large number of doctoral theses are produced at VTT annually. Many of VTT researchers are connected to university education programmes.

We have internal project manager training programs and support our employees in getting IPMA certifications; Several of our Food Research Seniors hold IPMA C level certificates.

**Contact:** EVP Strategic Research Anne Ritschkoff Anne.Ritschkoff@vtt.fi

## RisingFoodStars





CLC North-East	Warsaw
Poland	
<ul><li>GeoPulse</li></ul>	
<ul><li>Kontakt.io</li></ul>	
Hungary	
■ Yaso	
Finland	
■ Foller	
<ul><li>GrainSense</li></ul>	
Sweden	
<ul><li>Glucanova</li></ul>	

CLC Central	Munich
Germany	
<ul><li>Agrilution</li></ul>	
(N-Zyme BioTec)*	
<ul><li>ProLupin</li></ul>	
The Netherlands	
<ul><li>Phenospex</li></ul>	

CLC North-West	London
UK	
■ BioBean	
<ul><li>Entomics</li></ul>	
<ul><li>FoodMaestro</li></ul>	
<ul><li>TellSpecs</li></ul>	
Ireland	
<ul><li>(Analytics Engines)*</li></ul>	
<ul><li>Nuritas</li></ul>	

<sup>\*</sup> in negotiation

CLC West	Leuven
Belgium	
<ul><li>FoodPairing</li></ul>	
<ul> <li>Porphyrio</li> </ul>	
France	
<ul><li>MonPotager</li></ul>	
Switzerland	
<ul><li>Flatev</li></ul>	
<ul> <li>Gamaya</li> </ul>	
<ul> <li>Morphotonix</li> </ul>	
<ul><li>QualySense</li></ul>	

## **AGRILUTION GMBH**

Smart Home Appliances / Vertical Farming



## Master Contac

Maximilian, Loessl CEO & Co-Founder

Anton-Böck-Str. 34 81249 Munich Germany

www.agrilution.com

E: info@agrilution.com T: +4917685655788

#### Profile

agrilution is a startup company active in the smart home appliances and vertical farming space. We have developed a complete vertical farming ecosystem consisting of a smart plug'n'play home-growing appliance and consumables (pads with seeds), as well as a smartphone app that eliminates the need for a green thumb. Thereby we enable consumers to grow the healthiest, freshest most taste intensive greens in their own homes.

### Competences & Capabilities

Main areas of competences and capabilities include:

- Vertical Farming
- Controlled Environment Agriculture
- Hydroponics
- Data Science
- Food and Health
- Plant Growth Optimization
- Climate and Light Recipes for Plants

agrilution is a data driven Internet of Things (IoT) company with expertise in hardware, software and plant sciences.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

We have developed the plantCube, an innovative smart appliance with LED lighting, automated watering and climate control to grow a large variety of leafy green vegetables, herbs, lettuces and microgreens. The plantCube lets anyone grow fresh, safe and flavorful food soil and effortlessly without the need for a green thumb. Additionally we have developed a consumables model (pads with seeds) to provide customers a unique growing experience out of the box. A smartphone App functions as the user interface and lets customers remote monitor and control their device from anywhere in the world. The business model is a fusion of the Nespresso system and the Apple App store.

**Contact:** Maximilian, Loessl loessl@agrilution.com



### Communication

Through our app and integrated community we can engage with customers around the world to learn from them and collaboratively improve our product offering.

Our customers are the key to learning about current and future food trends, consumer behavior and day to day ingredient choice for their recipes. It is also a tool to communicate and promote new plant varieties on offer.

**Contact:** Maximilian Loessl loessl@agrilution.com



### **Business Creation**

Being a Startup ourselves we have gone through all the ups and downs of business creation. We are open to sharing all our learnings and would be happy to help guide early stage startups with our experience and network in the vertical farming and controlled environment agriculture space.

**Contact:** Maximilian Loessl loessl@agrilution.com



### Education

We are developing an educational version of the plantCube with a curriculum for secondary schools in Germany. This could easily be translated into other languages.

The plantCube can also be used for controlled environment agriculture research (eg. by universities or research institutes).

Additionally, we offer students the possibility for internships, projects and theses.

**Contact:** Dr. Peter Bickerton bickerton@agrilution.com

## **ANALYTICS ENGINES**

## Data Management & Analytics



#### Master Contact

Stephen McKeown

1 Chlorine Gardens Malone Road BT9 5DJ Belfast

www.analyticsengines.com

E: s.mckeown@analyticsengines.com T: + 44.28.9066.9022



#### Profile

THE COMPANY: Analytics Engines was founded in 2008 in the UK. It is privately held by institutions in Belfast, London and New York

ANALYTICS ENGINES XDP™: Turn-key Data Platform software for providing fast, easy and affordable real-time analytics and reporting across organizations and supply chains. It facilitates data fusion, analytics model building and executing analytics workflows at scale.

CURRENT CLIENTS: Fortune 100 and NYSE/NASDAQ listed customers; large-cap and mid-cap companies across all sectors and geographies.

### Competences & Capabilities

Analytics Engines provides organisations with the ability to quickly and easily combine data sets and run analytics at scale. Research has shown organisations implementing predictive analytics in their business generate more than 2.5 times higher ROI than their competitors.

Our core product is Analytics Engines XDP™ which is used in life sciences, enterprise, food security, supply chain, healthcare and finance among others. In relation to Supply Chain, three areas of particular business focus are:

- Asset tracking and traceability
- Supply chain visibility
- Supply chain risk management

The platform provides solutions across four key areas in building a big data solution: a 'Deployment and Management System', a 'Unified Data View', an 'Analytics Execution Environment' and an 'Integrated Monitoring Dashboard'. This is provided to customers along with complementary supporting services.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Analytics Engines XDP™ is a leading third generation data platform that allows you to easily connect multiple data types and sources, both internal and external to the organisation in single queryable view. It is the only data platform on the market to natively handle disparate data types and source systems and execute analytics across them.

This single view and processing capability provides the customer with the ability to perform analytics on the joint data to provide insights on how best to improve their business processes, including supply chain traceability and customer engagement.

The company is already a top 100 big data solutions vendor and a recognized award winner in innovation in data storage solutions.

Contact: info@analyticsengines.com



## **Business Creation**

Our customers are typically mid- to large-sized organisations who have a number of data sources and a need for solutions that enable analytics across the data. We are aligning Business Development activities by industry vertical, including Manufacturing & Supply Chain, Life Sciences & Healthcare and Industrial & Enterprise. Our approach to customer engagement is multi-faceted and includes activities such as:

- Direct sales and marketing engagements
- Participation in government/EU sponsored communities and consortia
- Hosting and organising the annual Big Data Week conference in Belfast
- Hosting and organising big data meetups

**Contact:** sales@analyticsengines.com



#### Communication

We work across multiple sectors and industries allowing us to communicate best practice and innovation opportunities on analytics and data management to complementary sectors and markets.

The company also has an active marketing and PR activity covering multiple channels from social media to guest editorials and peer reviewed publications.

We are frequently invited and key note speakers at international events, including headlining the analytics track at the European Technology Summit.

A number of the senior team are policy advisors to local government on ICT and act as technical experts to the European Commission.

**Contact:** marketing@analyticsengines.com



### Education

We have strong links with international universities and research institutions, supporting a number of both Masters and PhD students as part of those collaborations.

In addition we run on site training and skills development around Big Data and Analytics technologies on our XDP data platform.

Community engagement and continuous professional development is supported through our Big Data Belfast initiative and giving lectures and key note speeches on relevant industry topics.

Dissemination of collaborative research is through commercial marketing and peer reviewed conference and journal papers. The senior team have over 200+ international publications in total.

**Contact:** support@analyticsengines.com

114

22 & 23 FEBRUARY 2017 | BILBAO .....

# ARTIFICIAL INTELLIGENCE TALENTUM

ITC





#### Master Contact

Antonio Vicente Contreras CEO,

Centro Europeo de Empresa e Innovación de Murcia. Módulos 6 y 7 Universidad de Murcia 30100 - Espinardo (Murcia), SPAIN

www.aitalentum.com

E: avicente@aitalentum.com T: +34 609 854 199

#### Profile

Al Talentum is an innovative technology-based company specialized in artificial intelligence and high performance computing.

Our project is backed from national institutions as the Centre for the Development of Industrial Technology (CDTI), of the Spanish Ministry for Innovation and Science, the Spanish Ministry of Industry, Energy and Tourism, through the Spanish National Innovation Enterprise (ENISA).

#### Competences & Capabilities

We develop predictive models using techniques of artificial intelligence and machine learning.

Our experience and expertise is focused on the development of simulation, forecasting and decision models in real time, through expert systems, algorithm development and the processing of internal data.

Main areas of specialization and technological expertise are:

- Financial market (evolution forecasting of price of raw materials)
- Energy (price of electricity and consumption forecasting)
- Biotechnology (drug discovery)

## Expertise related to the EIT Food Strategic Pillars



#### Innovation

Our DIPAP methodology allows to incorporate advanced forecasting models in platforms by integrating all available information, processing all collected signals and providing analysis tools that enable operational decisions. We provide an integral process from de Data to Prediction through fifteen algorithms designed and optimized during three years in our labs.

We develop several R&D projects, as our project entitled "New Generation Robot for Automatic Quantitative Trading with distributed computing capabilities based on application methods of Neural and Bayesian Networks", that involves the use of novels methods for learning, inference and prediction of dynamic environments of financial markets.

**Contact :** Dr. Sergio Navarro Sanchez, R&D snavarro@aitalentum.com



### Communication

We believe in promoting talent from the bottom and that is why we sponsor the event "The Creativity Olympics" that the European Business and Innovation Centre organizes annually. The participants are high school students that give their particular vision on products and business models of the future.

We participate in an active way developing tests and challenges for the students based on artificial intelligence and predictive models in order to encourage them to becoming future creative professionals.

**Contact:** Germán Caravaca, CTO gcaravaca@aitalentum.com



#### **Business Creation**

We have collaborated in a technology transfer project at European level within the Tetracom Program (Technology Transfer in Computer Systems) with the research group BIO-HPC (Bioinformatics and High Performance Computing Research Group) of the University San Antonio of Murcia (UCAM) in the biotechnology area. More about this topic at: www.talentum-biotech.com.

Our vision is to create a bridge between science and industry for the transfer of scientific knowledge to the world of business.

**Contact:** Antonio V. Contreras, CEO avicente@aitalentum.com



#### Education

We also actively collaborate with the Universities through our Talent Retention Program. This program was created with the aim of offering a working environment to highly qualified graduated students and to accommodate final-year students in our company to encourage them to develop final quality projects.

Since the project was launched in 2014, more than 20 talents have left their mark on our company with their work in neural network, machine learning, deep learning, etc.

**Contact:** Amparo Roca, CCO aroca@aitalentum.com

## BEYOU HEALTH COACH

Digital health platform





#### **Master Contact**

Abie-Jean Mehawej Founder-CEO

Calle rec comtal 13, 1.1. 08003. Barcelona- Spain

www.beyouapp.com

E: abir@beyouapp.com T: +34674884223

#### Profile

BeYou is a unique digital health platform that offers a holistic suite of support in one, costeffective mobile app. It's the first app that designs custom fitness and nutrition plans for users and then pairs them with three human coaches to ensure sustained progress.

### Competences & Capabilities

BeYou is the only service that addresses each pillar through behavioural change theory and tangible rewards, such as wearables, product discounts and more.

We've created a comprehensive programme that is designed to disrupt unhealthy behaviours, and which can be used anywhere and on any budget.

Most importantly, users are motivated and supported until they reach their end goals and beyond.

We have strong partnerships, Technogym is our investor & sponsor

## Expertise related to the EIT Food Strategic Pillars



#### Innovation

BeYou is the only service solution tackling obesity issues from all its angles. 4 pillars of weight gain:

- Poor nutritional habits
- Insufficient exercise
- Emotional eating
- A lack of tangible incentives and rewards

#### BeYou solution:

- weekly meal plan
- weekly Fitness workout
- 3 coaches take care of each user
- daily rewards



#### Communication

We communicate with our users via the app, communication is our motivation tool to keep our user engaged with their health program through:

- Coaching: every user has a team of coaches that take care of him, Nutritionist + Fitness Trainer+ Life coach
- Rewards: people are 10x more likely to engage in a health program when they are financially rewarded. Upon completing their goal in the app, they can unlock every day a daily reward including discounts and voucher codes to eating out healthy/ fitness sportwear/ others



#### **Business Creation**

BeYou is self funded by its founders, we created our startup back in 2015. Technogym the world leader in gym equipments liked our wellness approach and became also in investor beginning of 2016.

Today we are ranked among top 5 health coach apps in the USA market

We have over 10K active users, our users use the app at least 5 to 8 times a day.



#### Education

We have a team of certifies coaches in Fitness, Nutrition, holistic health, life coaching, diabetes educators and others. All information displayed in the app is verified by our team of coaches. We also produce weekly rich content through our blog and social media. Users also get daily notification messages for practical tips to keep them engaged.

Founders are coming from different backgrounds, combining digital marketing, business management/sclability

## DOUXMATOK LTD.

**Enhancing Flavors** 





Yoram Shkedi Chief Operations Officer

14 Odem St. Petach-Tikva Israel, 49517

www.douxmatok.com

E: Yoram.shkedi@douxmatok.com T: +972-54-4745176

#### Profile

DouxMatok developed novel flavour delivery solutions enabling substantial reduction of sugar and salt in foods and beverages, while retaining the full sensory quality of the original products, with no aftertastes.

### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Sugars, polyols and salt chemistry
- Behavior of sugars in food matrix
- Compositions and methods of coating/ loading sugars, polyols and salt on carriers
- Ingredient manufacturing engineering
- Substituting sugar functionalities in foods (fillers)

..... 1ST EIT FOOD INNOVATION MARKETPLACE

## Expertise related to the EIT Food Strategic Pillars



#### Innovation

DouxMatok has successfully coated/loaded micron size mineral carriers with various sugars, polyols, or salt. When these clusters of sweetness or saltiness reach the receptors, they unload the sugars, polyols, or salt into the saliva and activate the respective receptors to report more sweetness of saltiness in a product than were actually there. By replacing sugar in recipes with DouxMatok sugar, a reduction of 20-50% of sugar consumption is expected, while keeping the same good taste of the original products.



### Communication

We participate in food innovation conferences and exhibitions worldwide. Our company was featured in a variety of publications, newspapers and magazines.



We are actively pursuing collaborations with food and beverage world leaders as well as with other food technology based startups.



## **ELEA GMBH**

## Machine supplier & Food Research





#### Master Contact

Dr. Claudia Siemer R&D Manager

Prof-v.-Klitzing-Str. 9 49610 Quakenbrueck GERMANY

www.elea-technology.de

E: c.siemer@elea-technology.com T: +49 5431/ 92 62 978

#### Profile

We are the leading supplier of Pulsed Electric Field (PEF) systems to the food, beverage and scientific sector worldwide. We design, build and install PEF equipment suitable for a wide range of applications and outputs.

### Competences & Capabilities

Elea attaches importance to develop new possibilities of PEF-treatment in the food and beverage industry. We also generate applications in non-food areas.

One of the main emphasis of our work is located in Research and Development, therefore almost the half of our employees work in the R&D.

Elea offers their customers the possibility to test the PEF equipment in a well equipped pilot hall. Different PEF systems as well as equipment for analyses are available. The purpose of all trials is a successful demonstration of PEF with regard to a possible scale up on industrial standards.

Since our foundation 2012, we already have retailed over 70 PEF-systems worldwide.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Elea, whilst commercial, has research and development at its core. We have designed and developed over 70 PEF systems that are in full-scale operation around the world in many different food and beverage sectors.

Our scientific and technical staff work closely with our clients to provide tailor-made solutions though a tried and tested process that involves research, design, manufacture and support of our PEF machines.

We are continually running product trials and as a result, we are continually developing new applications for several food and non-food industry sectors.

**Contact:** see master contact



### Communication

Elea is present with its own booth on many exhibitions worldwide. On this events we always have our PEF pilot system for trials with clients' raw products available. Additionally, we are participating on many conferences in the scientific sector regarding electroporation.

To facilitate the comminucation between industry and science, we broad our network by participating various conferences and exhibitions as well as national and international projects.

Contact: see master contact



#### **Business Creation**

Elea was founded 2012 as a spin-off from the German Institute of Food Technology (DIL e.V.), Germany, for providing PEF-Systems to the food and beverage industry as well as in the scientific sector.

We offer a close-to-process development of PEF systems in the industry. To generate industrial relevant applications and to provide tailor made PEF-systems, Elea attaches importance to close collaboration with clients.

Contact: see master contact



### Education

We enable national and international students to create their bachelor or master thesis on diverse industrial relevant PEF treatment applications.

Elea supports different workshops and lectures at the University of Applied Science in Osnabrueck, Germany and collaborate in further scientific projects with this university.

Contact: see master contact

## **ENERGY PULSE SYSTEMS**

Pulse Power Modulators



## Master Cont

Marcos Pereira Director

Estrada do Paço do Lumiar Polo Tecnológico de Lisboa Lote 3 1600-546 Lisboa - Carnide Portugal

energypulsesystems.pt

E: marcos.pereira@energypulsesystems.pt T: +351 918027966

#### Profile

Energy Pulse Systems, EPS, researches, develops, produces and sells pulsed power modulators based on state-of-the-art, high efficient semi-conductors, assembled in very flexible and modular Marx topologies which are designed to add value to several industrial sectors such as Food, Feed, Microbiology, CleanTech, Oil & Gas, Automotive and Health.

### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Pulse Power Modulators
- Pulse Electric Fields
- Electroporation
- Mass Transfer
- Microbial Inactivation
- Advance Oxidation Processes

EPS is composed by a multi-disciplinary team with complementary skills and competences, from electronics to physics and biology.

EPS is committed in improving food processing, especially regarding extraction and microbial inactivation steps, using an innovative and sustainable approach.

## Expertise related to the EIT Food Strategic Pillars



## Innovation is part of EPS DNA and is a constant

commitment.

EPS is constantly improving its high-voltage pulse modulators and transducers in order to achieve a higher ratio between performance and cost.

Regarding food processing, using stateof-the-art technology, our team is always looking to improve extraction and microbial inactivation processes, with the application of pulsed electric fields for a more efficient and sustainable process.

We believe that technology innovation is sustainable when the social, economic and environmental aspects are considered.

**Contact :** Marcos Pereira, Ph.D marcos.pereira@energypulsesystems.com



### Communication

Being close to the academic world, EPS is closely involved with several organizations that work on the dissemination of pulsed power and pulsed electric fields all over the world.

Regarding food industry, EPS regularly presents the obtained laboratory and industrial trial results at conferences, workshops and fairs for academic and professional assistances.

**Contact:** Luis Redondo, Professor luis.redondo@energypulsesystems.com



### **Business Creation**

At EPS we are very excited about new ideas where the use of pulsed power electronics delivers energy in a controlled way and adds value for the well-being of everyone by

- lowering thermal load in processes
- by increasing energy efficiency
- allowing for disruptive processes.

We look forward to work in multidisciplinary projects where we can make a difference.

**Contact:** Marcos Pereira, Ph.D marcos.pereira@energypulsesystems.com



## Education

EPS is closely related with several academic partners in Europe. In Portugal, EPS has a close collaboration with Instituto Superior de Engenharia de Lisboa (ISEL) and in Europe, through european research project, EPS is collaborating with the formation of several students from MSc to PhD programs.

**Contact:** Luis Redondo, Professor luis.redondo@energypulsesystems.com

## **ENTOMICS BIOSYSTEMS LTD**

## Insect Protein / Food Waste Transformation



## Master Conta

Matt McLaren

Future Business Centre Kings Hedges Road Cambridge CB4 2HY

www.entomics.com

E: matt@entomics.com T: +44 747 664 7060

#### Profile

Entomics 'closes the food waste loop' by transforming organic waste into sustainable agricultural inputs, using an insect called the Black Soldier Fly (BSF) as a conversion catalyst.

BSF larvae efficiently convert 95% of organic waste into complex fats and proteins in their bodies. Leveraging our novel post-processing technology, we refine these compounds into aquaculture feed and organic fertilizer in a cheap, scalable and sustainable manner.

Overall, this is an innovative way of turning waste material into a set of valuable, sustainable resources.

### Competences & Capabilities

Our main competencies and capabilities are in the following areas:

- Organic waste conversion trials
- Insect protein / oil feed preparations & formulations
- Biological conditions experimentation & optimization
- Engineering design & operation for insectrearing at large scale
- Organic fertilizer preparations and trials
- Supply chain & logistics model optimization

We have a strong team of biologists and engineers that take a flexible and pragmatic approach to problem solving for a range of customer contexts in the food and feed sector.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Our company creates innovative technologies that optimize the end-to-end conversion process of organic waste streams into high value agricultural resources, leveraging the power of insects.

This includes integrating engineering and biological tools to create commercial scalable solutions that address the needs of specific customers.

In addition, we have strong ties to several EU academic institutions that allow us to collaborate on innovative developments in this exciting field of waste transformation and novel protein production.



### Communication

With a strong scientific culture, we will collate and share knowledge gathered through this project with the wider scientific community and the public.

We aim to publish in peer-reviewed journals to maintain academic credibility, but importantly, we will also disseminate best-practice tools, tips and techniques to the community of sustainability enthusiasts and small-scale insect growers, particularly in the developing world.

We will share Entomics' progress and philosophy with this audience through social media and traditional news outlets.



### **Business Creation**

Being a small business, we continue to immerse ourselves in the dynamic world of food and agriculture entrepreneurship in the UK and across Europe, participating in sustainability-oriented events and competitions like Hello Tomorrow, Unilever Sustainable Living, Shell Springboard, BioStart and MassChallenge.

We regularly contribute to panels for students and aspiring entrepreneurs at a range of University and careers events, and have been featured in the Financial Times magazine edition around entrepreneurship and business creation.



#### Education

We currently directly support several internship positions with Masters and PhD-level students at the University of Cambridge and other academic institutions, and are in the process of developing learning modules around 'food waste' and 'insect protein' for an education program run by the National Institute of Agricultural Botany.

In addition, we promote scientific education by offering our company as a 'sustainable startup' case study for engineering, biology and business students across the UK.

## **ESKESSO**

IoT & Food Tech





#### Master Contact

Pedro Nuñez Porras Founder & CEO

Avenida de la Tecnología 26 Planta 1 – oficina 19-21 41015 - Sevilla SPAIN

www.eskesso.com

E: info@eskesso.com T: +34 95 422 3859

#### Profile

Eskesso is a startup company that has developed a complete solution, from preparation to plate, to create perfectly cooked healthy meals in an easy and hassle-free way. Eskesso has a smart cooking appliance, a mobile App to control it and an online marketplace where users can order different food packs.

### Competences & Capabilities

Main areas of specialization and technological expertise are:

- IoT hardware devices development
- Mobile apps development
- Web services development
- Domestic cooking appliances
- Sous Vide cooking
- Fresh food delivery

We have a technical team of hardware and software engineers with broad experience in development smart products and solutions in different verticals.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

By working on the IoT world, our innovation is focused on disrupting the domestic kitchen appliance market creating devices for the smart home.

One the other hand, we are bringing professional cooking techniques to the domestic kitchen. In doing so, we are allowing even unskilled cooks to made their own homemade food.

Contact: Pablo Nuñez Porras, CTO Pablo.nunez@eskesso.com



### Communication

Our company was born to be social from the beginning. We are providing our clients solutions exactly how they are asking us to do it.

We are building a whole new community around our sous vide cooking with more that 600 followers. As our cooking device reach the market we will split this community into Providers, who prepare are sell sous vide food packs, and Consumers, who buy this food pack and cook them with the help of the smartphone.

Every day we interact with our fans and followers through our social media accounts trying to get as much feedback as possible and put it onboard.

**Contact:** Pedro Nuñez Porras, CEO Pedro.nunez@eskesso.com



### **Business Creation**

We allow our providers (catering companies, chefs, local restaurants and even expert domestic cooks) to start their own business over our marketplace.

Consumers rate Producers meals also in the marketplace and give them feedback. By doing so Eskesso guaranties that the food that is sold through our marketplace always has the highest quality possible.

**Contact:** Pedro Núñez Porras, CEO Pedro.nunez@eskesso.com



### Education

With the help of the chefs that are members of our platform, Eskesso pretends to organize sous vide cooking workshops to expands this delicious, healthy and easy cooking technique from the Michelin-stars restaurants to kitchens all over the world.

**Contact:** Pedro Núñez Porras, CEO Pedro.nunez@eskesso.com

## FLATEV AG

## Consumer Product



## Profile

The Flatev Artisanal Bakery and Flatev Dough is Your Personal Baking System (PBS)! The closed baking system expertly prepares single servings of fresh tortillas, rotis, flatbreads, cookies and more with no fuss and no mess. A consumer simply pops a proprietary, recyclable, single serve dough container into the Flatev Artisanal Bakery, selects their desired setting, and soon enjoys a delicious, fresh treat in seconds.

## **=**

#### Master Contact

Pamela Vazquez CFTO

Zollstrasse 62 8005 Zürich Switzerland

www.flatev.com

E: pamela.vazquez@flatev.com T: +41 78 846 94 16

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- New food and packaging products
- Organic food
- Smart appliance
- Consumer centered design

Organic, all natural, with no artificial preservatives or additives, Flatev allows busy users to nourish themselves or nurture their loved ones in a thoughtful, yet efficient way.

Ready in sixty seconds or less, Flatev provides time-constrained consumers the opportunity to efficiently enjoy high quality meals with their loved-ones, rather than to spend precious hours cooking and cleaning, and provides a much welcome alternative to preservative laden, frozen foods, reconstituted in a microwave or toaster.

## Expertise related to the EIT Food Strategic Pillars



#### Innovation

There is a large and growing segment of the population that is becoming more careful in their food choices. As negative information about the impact of eating indiscriminately has made its way into the market, consumers have begun to carefully read food labels, to look for non GMO ingredients, to shun fruits and vegetables treated with pesticides and herbicides, to avoid high fructose corn syrup, and to pay a premium for nutrient rich, healthy, and wholesome foods. Flatev is seeking to ride this growing wave by offering high value, fresh, and convenient tortillas, flatbreads. cookies, and crackers delivered in a responsible and sustainable manner. The company's solution provides a cultural canvas for new and satisfying eating experiences by offering an expert system to deliver authentic, high quality, flavorful foods and services.



#### Communication

Flatev ran a Kickstarter campaign in 2016 and generated presales of approximately 700 Personal Baking Systems that provided valuable visibility in the market. Flatev's personal baking system has been seen by more than 2 Million people worldwide, and has more than 20.000 followers

The smart appliance will allow Flatev to directly get in touch with customers for direct feedback loops and new recipe developments.



### **Business Creation**

Close to 70% of the world's population consumes one or another type of flatbread on a regular basis. Flatev, initially conceived as a tortilla-making robot, has grown and matured to position itself as an expert Personal Baking System delivering healthy and authentic traditional tortillas, rotis, flatbreads, cookies and more to discriminating consumers virtually anytime and anyplace.

While tortillas are unquestionably a growth market, the company has learned that a single flatbread offering is not enough to drive PBS sales. A variety of flat breads with the right attributes and the proper delivery mechanism are necessary to capitalize on the growing wave of consumer preferences.

## **FOLLER OY**

## Food waste reduction technology





Heikki Hintikka

Tekniikantie 12 02150 ESP00 FINLAND

www.foller.fi

E: heikki.hintikka@foller.fi T: +358 44 059 3365

#### Profile

Foller is an IoT solution for reducing food waste. We combine technology and innovative solutions to motivate stakeholders from producers to consumers to generate less food waste to our planet.

Foller is a patented (pending) platform providing service for reducing food waste in the whole supply chain. It enables automated, real-time inventory, pricing, marketing and tracking of expiring food.

### Competences & Capabilities

Foller is founded in December 2016.

The strategic partner Link Design and Development Oy is behind the conceptual creation of Foller.

Link has an astonishing team of professionals with multifaceted backgrounds, providing strategic integrated product and service development, originating from user-centric design and innovative strategies to boost your business.

We are based in Espoo, Finland and a subsidiary of Link Design and Development Oy, an awarded (red dot, Brunel, Fennia Prize..) design company.

..... 1ST EIT FOOD INNOVATION MARKETPLACE

## Expertise related to the EIT Food Strategic Pillars





heikki.hintikka@foller.fi

Contact: Heikki Hintikka, CEO

The central idea of Foller is to give the customer an incentive to buy and use food that is closer to its use by date, aligning with consuming products before their expiration date. This incentive is automatic, real-time, dynamic pricing that is being communicated in real-time over multiple channels, for example social media, media screens, etc. Which means that Foller in fact enables automatic, directly product driven pricing and marketing campaigns, i.e. the product markets itself. At the end of the day this is also a way to prevent overproduction, and make business operations more cost-effective through providing opportunity to more precise order process based on real-time data on actual and predicted sales.

Contact: Heikki Hintikka, CEO heikki.hintikka@foller.fi



**Business Creation** 

Contact: Heikki Hintikka, CEO heikki.hintikka@foller.fi

Contact: Heikki Hintikka. CEO heikki.hintikka@foller.fi

## **FOODPAIRING**

## Food algorithms & Market Research





#### Master Contact

Johan Langenbick Co-founder & Co-ceo

Nijverheidsstraat 7 8310 Brugge Belgium

www.foodpairing.com developer.foodpairing.com

E: johan@foodpairing.com T: +32 485 51 23 50

#### Profile

Foodpairing is a creative food tech company at heart. We believe that discovering exciting flavor combinations can improve our enjoyment of food & quality of everyday life. Ours is a unique approach to that utilizes scientific research, algorithms & data science as a launching pad for the future of food.

Our team exists of (data) scientists, chefs, developers and engineers. The company owns & develops the world's largest ingredient flavor database.

### Competences & Capabilities

#### Food Algorithms (Foodpairing API)

Based on science data, our unique algorithms are capable of calculating food combinations, context-related recipes (f.ex. bread, juices, etc.) and user recommendations.

## Market Research (Consumer Flavor Intelligence)

What flavors should you launch next? Foodpairing combines scientific data with consumer behavior data to define what flavors food companies should launch for what market and when.

### Expertise related to the EIT Food Strategic Pillars



#### Food Algorithms

Food is being digitalized and consumers are looking for personal, healthy, sustainable and exciting food recommendations. Our API can power a new generation of consumer-centric food apps.

#### Market Research

Unlike traditional consumer research that is slow and based on a limited number of concepts and consumers, our approach combines science data with consumer behavior data, resulting in a fast, evidence-based flavor advice.

**Contact:** Johan Langenbick johan@foodpairing.com



## Communication

#### Food Algorithms

Our algorithms allow companies to communicate with their consumers. By collecting data via apps, they can get to know their users and their flavor preferences. This allows to make even better personal recommendations.

#### Market Research

We focus on current & future demands of consumers by identifying food trends, based on different data sources:

- Scientific flavor data
- Chefs data collected from the use of our website
- Consumer data from open sources
- Data from co-creation tools and data partnerships



#### Food Algorithms (Foodpairing API)

Our algorithms can educate/inspire consumers, whether foodies or food professionals, to eat more sustainable (foodwaste, local, in season), more healthy (calories, vitamins), or according to dietary prescriptions (gluten, vegan, etc.). In this way, the technology empowers people to selfmonitor their preferences and needs.

## **GLUCANOVA AB**

Nutrition/Health





Jörgen Holm CEO

Scheelevägen 22 Box 719 22007 Lund Sweden

www.glucanova.com

E: jorgen.holm@glucanova.com T: +46 46 163946

#### Profile

Glucanova is a research-based company situated in Lund, Sweden, driven by innovation and curiosity. The company was founded in 2012 with focus on IP protected fiber rich liquid oat ingredients/technologies. Our vision is to address global health and sustainability concerns with documented healthy liquid oat fiber products.

We work closely in cooperation with Lund University and a large external network of world class expertise which means that our innovations and deliverables are the result of well documented scientific findings.

## Competences & Capabilities

Glucanova capabilities are based on full upstream as well down-stream integration in the value chain. This is achieved through in-house knowledge combined with an extensive diverse network of expertise and partners. Those capabilities contribute to a business focused innovation pipeline based on our liquid oat technology:

- Oat science and technology
- Enzyme technology
- Oat breeding, production and selection via part ownership in www.croptailor.com
- Milling and dry processing
- Innovation partner: Product and concept development.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Glucanova AB has innovated the field of oat bases for liquid applications using different oat raw material and keeping all their components in the final product, without any side stream. Glucanova oat bases are especially rich in dietary fiber (liquid oat brans) making possible to have tasty, convenient and nutrient rich drinkable high fiber consumer products.

Glucanova's oat bases are IP protected and are the result of specific know-how in milling technology, careful selection of oat raw materials and proprietary enzyme technology.

The consumer products are supported by health claims, and contributes to improved health and well-being among consumers

**Contact:** Ana Rascón, CRO ana.rascon@glucanova.com



### Communication

Glucanova participates actively in food ingredient and industrial fairs as well in international basic science conferences related with food and nutrition not only as participants but also contributing with our scientific findings.

We can provide seminars to interested consumer groups and food science students on the health benefits of oats and other nutritional related topics.

**Contact:** Ana Rascón ana.rascon@glucanova.com



Glucanova BUSINESS IDEA is to use world class science, technology and know-how, from "farm-to-table", to develop production ready, high sensory quality, consumer products for mass market applications. In addition, we help our B2B clients identify manufacturing & supply chain options. Glucanova also develops B2C in India in a JV, putting new oat based products on the Indian market.

Glucanova is a subsidiary to Aventure AB. The business idea of Aventure is to create new food concepts from natural food components. The focus is towards high-end projects within food and health that have patents or potential to acquire patents. The exploitation of this business model is made through subsidiaries.

**Contact:** Jörgen Holm, CEO jorgen.holm@glucanova.com



#### Education

Glucanova participates in national and international basic and applied research projects where young scientist work as PhD and Master of Science candidates. It also receives every year several national and international students for internships with duration of up to 6 months from several countries in the world i.e. France, Greece, Spain, Netherlands, Portugal, Mexico and India are among those who have contributed to our work.

The CRO of Glucanova also has a position as Adjunct Professor at Lund University in the Food for Health Science Centre.

**Contact:** Ana Rascón, CRO ana.rascon@glucanova.com

## **GRAINSENSE**

Agtech

## **GrainSense**



#### **Master Contact**

Edvard Krogius CEO

Henry Fordin katu 5 K 00150 Helsinki Finland

www.grainsense.com

E: edvard.krogius@grainsense.com T: +358 50 322 9392

#### Profile

"WE HELP FARMERS THROUGH SCIENCE"

GrainSense develops the first truly hand-held device for grain quality measurement. For the first time, farmers, seed producers and plant breeders will be able to rapidly measure the key parameters of their crops in the field and make decisions that can improve profitability. We are bringing a major improvement to food production and logistics. Our handheld device measures the protein, moisture, oil, and carbohydrate content of cereal grains and other crops. The company was founded in 2014 and has offices in Oulu and Helsinki, Finland.

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Optics, near infrared spectroscopy
- Material calibration and quality measurements
- Mathematical algoritms
- Cloud based data service offering

We will bring an easy to use hand held device and solutions for farmers to improve crop quality and revenue.

With the GrainSense, we are able to affect millions of peoples lives and to add to their everyday well being.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

The innovation we generate and our technology investment are aimed at helping the individual farmer to make more confident and better decisions based on real, accurate data and thus improve his/her daily operations and financial outcome.

Our innovation is based on three patents and it may very well be adapted on related use in the food and agri value chain, for accurate and efficient measurement purposes.



### Communication

GrainSense is gearing up for the launch of the hand held device in 2017. All efforts currently are focused on this launch. Sales efforts on the home market (Sweden, Finland and the Baltics) have already started in 2016. More intense and media coverage to take place during 2017 as we go along. Social media reaching the end user, the farmer, is important.



We are launching our first application of our technological invention, the hand held quality measurement device, during 2017 in Sweden, Finland and the Baltics. We base our global sales efforts on distribution partnerships with local co-operation partners.

We are already in contact with global food and agri companies regarding our invention and technological solution.

For the year 2018 and beyond, we are looking for capable distributors on the European market.



## Education

We collaborate with the leading research and education institutions in Finland, including VTT, University of Helsinki, Evira. Our founder, Mr. Ralf Barbach, is a former senior scientist at VTT, with more than 25 year of experience in the field of spectroscopy.

## **GREENONYX**

## On a mission to bring fresh nutrition to every plate





#### Master Contact

Tsipi Shoham, Ph.D.
Co-founder and Chief Technology
Officer

Sderot Ha'Hascala 9 Tel-Aviv Israel

www.greenonyx.biz

E: tsipi@greenonyx.biz T: +972-52-8081-694

#### Profile

GreenOnyx is a privately held startup company based in Israel that was founded in early 2012 and is led by two experienced entrepreneurs with complementary skills in high-tech and in cell and plant biology.

The company is developing a revolutionary in-doors automated food platforms, which supplies an edible traditional micro-vegetable called Khai-Nam that resembles green caviar.

This nutrition-dense and proteinrich aquatic micro-vegetable has been naturally cultivated and consumed for generations in indochina.

## Competences & Capabilities

The GreenOnyx food platform converges hightech, clean-tech with cutting edge botanical, nutritional and food science disciplines.

Our technology, developed and validated over the last 3 years, is capable to deliver a nutritional-dense and protein-rich plant source from which endless healthy food offerings can be formulated without compromising the foods palatability or taste.

We have gained unique expertise in aquatic planet cultivation and developed the needed technology to precisely control, adjust and customize the nutritional content of the produce. As a result, we can deliver produce variants with diverse nutritional profiles such as sodium-free produce, mineral enhanced variants (Iron / Magnesium/ Zinc) or with high fiber to name a few.

In addition, we have developed novel capabilities to maintain an exceptional level of cultivation safety and process tractability.

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

GreenOnyx integrates for the first time, large plant and algae aquaculture with an in-doors vertical-farm architecture combining the main advantages from each approach into one solution. Together with the selection of an outstanding micro-vegetable for nutrition value and total automation (Khai-Nam) we created a solution that deliver unmatched operational and commercial advantages in costs, supply and produce value.

**Contact:** Dr. Tsipi Shoham Tsipi@greenonyx.biz



### Communication

Our planed market communication will relay on multiple channels to build awareness and to support our brand.

These will include: digital media, interactions with opinion leaders (Chefs, Food Bloggers, Nutrition experts), Co-marketing campaigns with partners, taste and demo stands at retailers, and promotion via life-style channels, health food events and TV food and cooking channels.

**Contact:** Benny Shoham Benny@greenonyx.biz



#### **Business Creation**

GreenOnyx addresses three key success factors for the fast growing health & wellness food segment: Costs - stable and competitive costs year-round, with a clear technology roadmap to 50% produce costs reduction. Supply – is secured year-round with fast scalability to meet new demand, easy global expansion coupled with high safety, tractability and sustainability. Value – high nutrition value with endless food applications and no consumption limitations (e.g. no allergens, food intolerances).

By addressing the costs, supply and nutritional value challenges, the GreenOnyx platform enable the food industry to profitably deliver nutrition dense food which consumer in Europe and around the world demand today.

**Contact:** Benny Shoham Benny@greenonyx.biz



#### Education

As a young start-up, we are not yet in a position to take an active leading role in market education efforts. We would be more than willing to join and support such efforts to the best we can.

**Contact:** Dr. Tsipi Shoham Tsipi@greenonyx.biz

## KONTAKT.IO

Asset utilization



## Profile

Kontakt.io empowers businesses to build Bluetooth-based asset tracking solutions cheaper and faster.

Having shipped over 800,000 beacons and serving more than 17,000 customers, we design products that deeply integrate into clients' solutions, enabling them to build, scale, and succeed—seamlessly.

#### Master Contact

Szymon Niemczura CEO & Co-founder

Kontakt.io ul. Stoczniowców 3 30-709 Kraków POLAND

kontakt.io

E: szymon@kontakt.io T: +48 668 450 770

### Competences & Capabilities

Kontakt.io's main area of specialization and technological expertise is Asset Utilisation with Bluetooth-based Real-time Location Tracking.

Our complex IoT systems for the food industry are designed to optimize processes on 3 levels:

- Reduce food waste by introducing ultra low cost end-to-end condition monitoring solutions
- Shorten the farm-to-fork distance by optimizing manufacturing and logistics processes (based on real-time tracking and Al/machine learning algorithms)
- Reduce manufacturing costs through better Asset Utilization (optimizing workforce, tools and space)

### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Kontakt.io technology brings innovation to 3 key EIT Food objectives:

- Overcome low consumer trust by sharing monitoring and tracking data publicly with consumers
- Create consumer-focused food by shortening farm-to-fork distance and offering fresher, more nutritious food
- Enhance sustainability by reducing food waste with ultra low cost condition monitoring, reducing manufacturing costs and carbon footprint

Inexpensive tracking and condition monitoring enables the monitoring of a large variety of foods in quantities not before possible, greatly reducing food waste and improving food quality.

**Contact:** Szymon Niemczura szymon@kontakt.io



### Communication

At Kontakt.io, we value the importance of sharing knowledge. We boast a portfolio of successful and diverse international events focused on IoT and beacons.

Kontakt.io heads ProximityTalks, Beacon Valley hackathons, and the educational BeaconWeek series. We have 1000+ registered industry leaders from 15+ different verticals.

On top of that, we are building a community of innovators, giving businesses online access to first-hand IoT Market Insights including a full overview of location-based solutions and the use-case landscape from global players to emerging start-ups.

**Contact:** Joanna Bucior j.bucior@kontakt.io



### **Business Creation**

Kontakt.io provides a low cost asset utilization and condition monitoring system (Hardware, Cloud Software, and Mobile App). The world's biggest beacon provider, we also offer Reusable Tracking Tags and Condition Monitors (temperature, humidity, light, and vibration).

Leveraging our position as beacon industry leaders, we have created a network of innovative businesses and solution providers. We are bringing together all parts of the IoT technology chain in order to establish beneficial business partnerships and mold the future of the industry.

Kontakt.io consulting offers insight for every stage of development and acts as your personal interface to market knowledge.

**Contact:** Wojciech Caban w.caban@kontakt.io



### Education

- We collaborate with European and US
   Universities, offering students and graduates in related fields access to our library and technology.
- Kontakt.io promotes IoT education and training of students through scholarships and tailor-made workshops.

**Contact:** Joanna Bucior j.bucior@kontakt.io

# **MICROBION**

### Open Innovation Microbiology





#### **Master Contact**

Antonio Del Casale

Dept. of Biotechnology, Verona University Strada Le Grazie 15 37134 - Verona Italy

www.microbion.it

E: a.delcasale@microbion.it T: +39 347 483 1103

#### Profile

Microbion is a Contract Research Organization in the field of molecular microbiology applied to agriculture, food, nutraceutical, pharma industry.

We are a Verona University spinoff serving start-ups, SME and large enterprises with technology transfer applied to products development and processes optimization.

Microbion provides custom-based research services and is developing innovative tools to understand and valorize microbial biodiversity.

#### Competences & Capabilities

Main specialization is the application of cuttingedge DNA based technologies for the detection, identification, characterization and tracking of microorganisms and microbial communities.

Microbion know-how includes:

- Genes, genomes and metagenomes characterization
- DNA fingerprinting typing and authentication methods
- Selection of best-performing strains
- Detection of emerging contaminants
- Microbial stability of products and challengetest of processes
- Optimization and validation of new technologies for microbial load reduction

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Our know-how is applied either in the exploitation of pro-technological microbes which are the product or ingredient; as well as control of microbial contaminants. We combine deep scientific knowledge and pragmatic problem-solving approach. Most extensive industrial expertise are:

- Phages, Bacteria, Yeasts and Molds in fermented foods and beverages
- Pre, Probiotics and Microbiome therapeutics
- Agriculture bio-control, PGPB and stimulants
- Bio-banking and pheno/genotyping screen
- Biofilm and spore-forming contaminants
- Antimicrobial resistances

**Contact:** Antonio Del Casale a.delcasale@microbion.it



#### Communication

Despite consumers perception, microbes are the most abundant live organisms on earth and only a very few are related to disease development.

We can engage consumer trust by developing citizen science projects, engaging the society in collecting and catalogue microbial biodiversity.

We have extensive experience in technical communications as disseminators of research results and as developers of industrial demonstrators.

**Contact:** Antonio Del Casale a.delcasale@microbion.it



#### **Business Creation**

As contract research organization, we enable innovators and SME to develop new products also through our Open Innovation Network; we provide a fast-track to market coordinating multidisciplinary expertise, from patent attorneys to process engineers, as well as regulatory affairs and marketing experts.

Microbion is also developing new tools for accurate microbial identification and authentication. The first patent in our portfolio is a new class of molecular markers that will allow every laboratory to quickly identify bacteria even behind the species level. We are looking for partners in the diagnostic industry in order to develop the end-user applications.

**Contact:** Antonio Del Casale a.delcasale@microbion.it



#### Education

Microbion is keen on training students interested in applied microbiology, providing them the opportunity to work on real industrial challenges and develop their ideas for next generation microbial diagnostics.

Moreover, Microbion can provide training to professionals who want to update their skills in molecular microbiology and put into practice innovative technologies.

**Contact:** Giovanna Felis g.felis@microbion.it

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# N-ZYME BIOTEC

Biotechnology





Joachim Tretzel Managing Director

Haasstr. 9 64293 Darmstadt Germany

www.n-zyme.de

E: tretzel@n-zyme.de T: +49 6151 3912751

#### Profile

N-Zyme BioTec is a modern biotechnology enterprise founded in 2012. N-Zyme BioTec focus on the development and production of bioactive substances from natural sources for food/feed, preventive nutrition and cosmetic applications. N-Zyme BioTec is a science-driven company with a biotechnological platform to generate, modify and functionalize biomolecules from natural sources. N-Zyme BioTec is a privately owned SME according to EU definition.

#### Competences & Capabilities

N-Zyme BioTec has specialized expertise in the fields of bio- and protein-chemistry, biotechnology, microbiology and analytics, mainly for applications or services in the food area.

N-Zyme ioTec has comprehensive access to a network of different olive oil- and table olive producing companies all over in Europe.

An interdisciplinary team of 17 N-Zyme BioTec colleagues work mainly in the field of product and process development and closely cooperate with academic and industrial partners in the fields of basic research, technology development and application.

N-Zyme BioTec operates ~1.000 sqm laboratory, office and pilot plant spaces for research and developmental activities.

#### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

N-Zyme BioTec unlocks nature's biological principles with biochemical and analytical tools, make them accessible using our biotechnological platform and develop customized functional products for various applications.

We re-design current technical processes for naturalness and sustainability and replace hazardous chemicals by biological agents from sustainable natural sources to assure safe and stable products.

**Contact:** Joachim Tretzel tretzel@n-zyme.de



#### Communication

Members of N-Zyme BioTec are engaged in several national and international industrial associations and scientific organizations and promote the communication with different stakeholder groups.

Presentations are given regularly either to general public or scientific communities at conferences or symposia.

News in regard to the company, projects or products are disseminated either by press releases or website updates.

Novel scientific data achieved in cooperation with our academic partners are published as peer-reviewed articles.

**Contact:** Joachim Tretzel tretzel@n-zyme.de



#### **Business Creation**

Based on our technology platform N-Zyme BioTec offers a portfolio of olive extracts and functionalized and concentrated olive leaf extracts for broad applications in food/feed, cosmetics, biomedicine, (phyto)pharmacy and technical applications commercialized under N-Zyme Hydroxytyrosol-Complex®.

The product portfolio is continuously enlarged by valorization of further unutilized sidestreams derived from food industries.

N-Zyme BioTec offers not only proprietary products but also knowledge and technologies within a B2B service model to companies. In cooperation with our partners we develop new, innovative concepts and offer access to tools of applied biotechnology.

**Contact:** Joachim Tretzel tretzel@n-zyme.de



#### Education

N-Zyme BioTec cooperates with several national and international academic institutions in biand multilateral projects.

We offer for students studying in the field of Life Sciences practical work experience within mandatory or voluntary internships.

Bachelor or Master studies could be performed at N-Zyme BioTec as well.

**Contact:** Joachim Tretzel tretzel@n-zyme.de

# NANOIMMUNOTECH

Biotechnology



#### Profile

nanoimmunotech was founded in Spain in 2009 to be your benchmark and reference partner within the nanobiotechnology world. Our core business is the Oriented Functionalization and Characterization of nanoparticles, prior to their use in different applications and industries.



#### **Master Contact**

Elena C. Rivas Pérez Business Development Manager

NANOIMMUNOTECH S.L. C/ Manuel González Longoria 7, 4° dcha. 28010 Madrid, Spain

www.nanoimmunotech.eu

E: info@nanoimmunotech.es T: +34 976 369 300

#### Competences & Capabilities

We offer you a complete range of products, services and tailor-made projects:

- design of your nanoparticles and nanomaterials
- oriented bioconjugation of biomolecules to nanoparticles
- design of highly competitive biosensors allowing a fast and highly-sensitive multianalytes detection.
- characterization assays to check the properties of your products, the reproducibility of their production or their biological effects.

nanoimmunotech is highly committed to R&D as demonstrated by their participation in many European projects with the aim of providing better solutions in the field of nanotechnology.

#### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

nanoimmunotech has developed an innovative biosensing technology with high potential based on the peculiar properties of metallic nanostructures, as new transduction system. This improvement implies a greater sensibility in the detection protocols and more cost-effective industrial processes.

Our expertise in the biosensing field, allows us to optimize this technology for the detection of a very large range of biomolecules in many sectors and industries, adapting to our customers' needs.

heatsens is the expert brand in the biosensing field and will be your best partner for the design of any of your detection tool for your analytes of interest.



#### Communication

We communicate with potential customers through direct contact at fair markets and conferences, through recommendations from other clients or partners and also with the help of our distributors.

In addition, our customers can find all the information about our products and projects on our website <a href="https://www.nanoimmunotech.eu">www.nanoimmunotech.eu</a>, as well as access to the online ordering system.



#### **Business Creation**

nanoimmunotech was born from the collaboration of the Institute of Nanoscience of Aragon (INA) and the Center for Biomedical Research (CINBIO) of Vigo, within project called NANOBIOMED.

We are currently undergoing an expansion process. Our workforce is now 22 workers, five of them hired during the last year, located at our headquarters in Vigo, Zaragoza and Madrid.



#### Education

nanoimmunotech promotes scientific education and training of students through scholarships and internships.

We offer the opportunity to acquire practical experience in R&D and industrial processes through collaboration agreements with our customers and partners.

# NATURAL MACHINES

Professional & Consumer Smart Kitchen Appliances:

3D Food Printing + IoT Services



#### Profile

Natural Machines are the makers of Foodini-the first smart kitchen appliance peeding up the process of making food with fresh ingredients: encouraging more people to eat healthier and rely much less on highly processed foods.

We have created a new type of kitchen appliance that utilizes 3D printing, IoT data and Artificial Intelligence technologies to conveniently make a wide range of fresh savory and sweet foods.

Recipient of 20+ awards including being named as an incredible food innovation that will change lives and a top emerging health & wellness startup.

#### Master Contac

Emilio Sepulveda Co- Founder & CEO

Duran i Bas 1, 1° 2ª 08002 Barcelona Barcelona Spain

www.naturalmachines.com

E: emilio@naturalmachines.com T: +34 933 094 412

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- 3D food printing
- IoT (Internet of Things) appliance & data
- Al (Artificial Intelligence) & artificial vision
- NFC (Near Field Communications)
- New energy efficient patented cooking system
- Food customization

With IoT and sensors in Foodini we can collect, record and process data to provide services such as tracking nutritional information and printing foods with customized nutrients per individual. Via APIs third parties can create applications on our platform and integrate with other services, e.g. health apps and wearables.

Foodini is now in production and shipping to customers in Europe, the US and China. Our initial focus is professional kitchen users: mainly Michelin starred chefs, food brands, restaurants, clinical nutrition companies and educational institutions. With the introduction of our cooking version we will target home kitchen consumers.

#### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

Foodini will revolutionize every kitchen, outpacing the functionality of the last kitchen revolution: the microwave. We have created a new type of kitchen appliance that will enable anyone to incorporate 3D printing technologies to simplify and conveniently prepare fresher, exceptionally delicious food.

We are the pioneers, acknowledged creator, first movers and leader in the 3D food printing category using fresh, real ingredients, both savory and sweet. We've been described as innovative and on the cutting edge of the next step for the food industry.

We offer an efficient and sustainable way of providing freshly made customized foods per individual.



#### Communication

Natural Machines generates a lot of worldwide press including multiple hits on the same Tier 1 news outlets, proving our story is multifaceted and that there is huge interest in what we do. Having access to such a vast press platform permits us to educate and communicate the benefits of 3D food printing, promoting our vision of enabling healthier eating habits.

We participate as a key speaker/educator in a number of large international events and trade shows, both related to food and technology. Examples include Web Summit, Slush, TEDx, SIAL, Maker Faire, IEEE, 4YFN/Mobile World Congress, South Summit, and more.

We have a direct communication path to our 20,000+ inbound leads – consisting of professional and home kitchen users, individuals and companies.



#### **Business Creation**

We collaborate with all types of players in the food and health industries, including food brand, medical nutrition companies and educational institutions. Projects range from new products to new business lines to entirely new business opportunities.

We offer a fast-tracking service designed so that you can quickly understand 3D food printing hands-on with Foodini, how it can benefit your business offering, and test Foodini using your ingredients/ products. We send one of our senior staff with a Foodini to your site to work on customized prints with your team. This includes testing recipes/ ingredients and printing designs that can be a unique offering to your customers.



#### Education

We collaborate with several leading universities, research grant agencies, technological R&D centers, and food hubs that are linked to universities, chefs and food startups. We are also part of a global research collaboration initiative between university and enterprise. Projects range from design intricacies of the machine itself, R&D, to innovative printable food projects

Educational institutions including culinary schools and general education schools ranging from K- level up through university level are working with us to teach students about the intersection of food and tech. Foodini educates students on the technicalities of 3D printing and data, at the same time teaching about healthy nutrition.

# **NURITAS**

### Artificial Intelligence - Peptide Discovery





#### **Master Contact**

Neil Foster

Loft 31 3 Westland Court Cumberland Street South Dublin2, Ireland

www.nuritas.com

E: foster.neil@nuritas.com T: +353860461677

#### Profile

Nuritas uses Artificial Intelligence and DNA analysis to data-mine the billions of molecules locked within everyday sustainable foods and food side-streams.

Our unique technology enables the rapid discovery, validation and full characterisation of high value bioactive peptides "on demand".

#### Competences & Capabilities

As our technology allows us to discover molecules on a "target focused" basis the potential areas of application are unlimited.

These could include:

- Plant health
- Food preservation from food waste
- High-value nutritional ingredients to address:
- Aging population
- Malnutrition
- Metabolic disease

Nuritas has received global recognition for the impact its technology will have on the future of food and health. This includes winning the Forbes Reinventing America overall Innovation Award and being recognized as one of the 21 most innovative startups globally by Business Insider.

..... 1ST EIT FOOD INNOVATION MARKETPLACE

#### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

By discovering molecules "on demand" the Nuritas peptide-finding technology enables true 'white space' innovation.

Peptides characterised by Nuritas are new discoveries and will therefore be patented by composition of matter.

**Contact:** Neil Foster foster.neil@nuritas.com



#### Communication

Nuritas has already garnered a high level of media interest, and also benefit from an investor community with tremendous global reach (both social and governmental).

**Contact:** Neil Foster foster.neil@nuritas.com



As a nimble start-up we are flexible in approach and entertain the idea of various business models including joint venture.

We are also based in Ireland, which has in place a very favourable business framework.

**Contact:** Neil Foster foster.neil@nuritas.com



### Education

As a business born out of academia we maintain close relationships with local Universities and are open to continued involvement including industry led PhD programs, enterprise partnerships and industry fellowships.

**Contact:** Neil Foster foster.neil@nuritas.com

# **PORPHYRIO**

### Farm Business Intelligence Software





#### Master Contact

Dr. Kristof Mertens Managing Director

Warotstraat 50 3020 Herent Belgium

www.porphyrio.com

E: kristof.mertens@porphyrio.com T: +32 496 92 72 46

#### Profile

Porphyrio is a spin-off company of the KU Leuven University, founded in 2013. Porphyrio develops cloud based Business Intelligence software (SaaS) for professional livestock & pig production.

The Porphyrio solutions "Lay-Insight", "Broiler-Insight" & "Pig-Insight" make use of state-of-the art concepts of IoT, Big Data & Analytics to monitor and predict performance & quality of livestock production chains.

Dr. Kristof Mertens is an expert in the EU EIP focus group "Mainstreaming Precision Agriculture".

#### Competences & Capabilities

The main expertise & technology of Porphyrio are:

- IoT data platform
- Big Data ICT
- Advanced Biostatistics
- Livestock production
- Animal protein supply chains
- Sustainable livestock production

The innovation we generate guarantees shortterm competitiveness and long-term economic, environmental and social sustainability of the food sector.

The multidisciplinary expertise of the Porphyrio team, enables development of solutions for the challenges of modern animal protein production.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

The innovative Business Intelligence solutions of Porphyrio aim at improving the efficiency and the sustainability of European animal protein production systems & supply chains.

By applying IoT – Big Data – Statistical Analytics technologies to these processes, problems are signaled in an early stage, performance is predicted and hence production systems & supply chains optimized.

**Contact:** Kristof Mertens, Managing Director **e-mail:** kristof.mertens@porphyrio.com



#### Communication

Porphyrio first of all strongly utilizes the possibilities to interact with stakeholders, customers, consumers and technology followers via the social media (Twitter, LinkedIn) and newsletters, including press releases.

Dr. Kristof Mertens is involved as an expert in the EU EIP focus group on Precision Agriculture, and in that role he is giving lectures on the importance and the role of technology in achieving sustainable food production.

**Contact:** Kristof Mertens, Managing Director **e-mail:** kristof.mertens@porphyrio.com



#### **Business Creation**

Porphyrio itself is a University Spin-Off, valorizing a PhD research topic originating from 2004. Today, customers in 13 countries make us of the productized version of this idea: "Intelligent Monitoring of Livestock Production."

Within the framework of the project, Porphyrio is looking for partners and possible strategic alliances to increase its footprint in the market of Agri-technology.

**Contact:** Kristof Mertens, Managing Director **e-mail:** kristof.mertens@porphyrio.com



#### Education

Dr. Kristof Mertens regularly gives guest lectures at the University of Leuven (B), the University College of Geel (B) and is an invited speaker at conferences on Industrial Statistics & Animal Science.

**Contact:** Kristof Mertens, Managing Director **e-mail:** kristof.mertens@porphyrio.com

# PROLUPIN GMBH

Plant proteins





Malte Stampe CEO

Prolupin GmbH Tribseeser Chaussee 1 18507 Grimmen Germany

www.prolupin.com

E: ms@prolupin.de T: +491726040322

#### Profile

Prolupin produces unique, premium lupine-based plant proteins. We are creating value through our patented extraction process, our own B2C food portfolio and B2B business partners.

We want to contribute to a more sustainable living. That's why we focus on producing and offering the world's top high-value plant proteins.

We want to inspire all of us to enhance the health of people and the planet by providing best plant-based protein alternatives. Our local sourceable plant-based protein alternatives ignite the acceptance and usage around the world. Without any compromise on your sensorial requirements due to replacing animal protein.

#### Competences & Capabilities

Prolupin facilitates the whole value adding chain starting from planting lupines towards the process technologies and further product innovations.

We may optimally process regional lupines mainly due to our knowledge on ingredients and specific properties of various lupine seed varieties. However, we are focused on Sweet Blue Lupines.

The food industry uses in limited amounts mainly flour or concentrates from lupines. However, the isolates we are producing contain more than 90 % of proteins in dry matter. Lupine Protein-Isolates (LPI) provide compared to flours very specific technological, functional and material properties such as emulsion capacity, gel and foam creation and solubility. These properties may shift structure, texture or sensory properties in food. Protein isolates also may completely substitute milk, meat or egg in foodstuff.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

What is so innovative about our products? In contrary to other plant based proteins, our unique Lupine Protein-Isolate (LPI) – awarded by The Federal Presidents Award for Innovation and Technology 2014 – enables a sensory neutral product profile, unmatched by any other plant protein based food/beverage offers.

Thus our vegan end consumer products provide superior taste and usage, comparable to milk protein products.

A simple story: It's a global sustainable, patent defendable business model and we simply have to scale our existing business.

**Contact:** Malte Stampe, CEO ms@prolupin.de



#### Communication

Based on a breakthrough and worldwide patented process enabling better taste, developed by Fraunhofer IVV, Germany, we launched the innovative vegan consumer brand MADE WITH LUVE.

LUVE means LUpine & Vegan und underlines our dedication to Lupine.

For any further references you might visit our brand site:

http://madewithluve.de/

Or Facebook:

https://www.facebook.com/madewithluve

Or watch our short LUVE Story (1:47): https://youtu.be/4fWw1wyMFVY

**Contact:** Malte Stampe, CEO ms@prolupin.de



#### **Business Creation**

Consumers love our story and approach. They are our best lupine ambassadors by providing extraordinary positive recommendations. That's how we are igniting the awareness of lupine. Simply by great products consumers love — and buy.

We already proofed our ambition by numerous store-by-store distribution building of MADE WITH LUVE within German top retailers: i.e. Edeka, Rewe, Metro and other European countries. More than 2,5 Mio. products sold within 1st year. All retailers listen carefully on "how we want to grow the cake" by introducing a GMO-, lactose-, cholesterol- and gluten-free assortment, 25 SKU's, locally sourced from lupines. They "luve" our unique and innovative products for affordable RSP's.

**Contact:** Malte Stampe, CEO ms@prolupin.de



#### Education

Lupines are a traditional crop rich in proteins. They have been cultivated for centuries to provide food for people and feed for livestock. Farmers use lupines as an intermediate crop to improve fertility and soil structure of arable land also. Our goal is to support lupines returning back to landscapes, agriculture and as a source for human nutrition. GMO-free.

We separate various fractions from the lupine seeds. The most valuable fraction is Lupine Protein-Isolate (LPI) containing more than 90% of protein in the dry matter. Unique properties of our LPI are a high capacity of emulsion ability and stability as well as the neutral taste. Fibers from the inner most fiber of the seed are another fraction. They can be used to enrich roughage content in food.

**Contact:** Malte Stampe, CEO ms@prolupin.de

# PROTIX

Bringing our food system back in balance with nature.



#### Master Contact

Tarique Arsiwalla

Industriestraat 3 5107 NC Dongen The Netherlands

www.protix.eu

E: Tarique.Arsiwalla@protix.eu T: +31-6-39481881 Founder & CCO

E: Kees.Aarts@protix.eu
T: +31-6-10556811
Founder & CEO

#### Profile

It has been our life mission since 2009 and will be in the decades to come. We have developed smart technologies that efficiently convert end-of-life organic waste into valuable nutrients like proteins for humans and animals. Our insect derived ingredients are used across the food chain in concepts that disrupt the status quo.

With our rapidly growing and dedicated team of 55 people today, we already serve customers in food, animal feed and petfood markets across Europe.

We are excited to further increase our impact together with EIT Food consortium partners.

#### Competences & Capabilities

Our production methods and insect derived ingredients can offer you:

- Sustainable food concepts through a closed circular nutrient cycle
- Animal friendly and sustainable egg, meat and fish production
- Functional food ingredients
- Functional ingredients for young, sensitive animals
- Functional pet food ingredients
- Produced under strict EU food and feed quality standards and certification schemes

#### Expertise related to the EIT Food Strategic Pillars









# **QUALYSENSE AG**

Food tech





#### Master Contac

Francesco Dell'Endice Chief Executive Officer

Unterrietstrasse 2a 8152 - Glattbrugg Switzerland

www.qualysense.com

E: info@qualysense.com T: +41 44 824 35 80

#### Profile

QualySense, a Swiss company, is pioneering the proprietary QSorter® technology, a sophisticated high-speed single-kernel robot designed to measure the compositional and physical properties of each individual grain and to sort it accordingly.

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Food quality and safety
- Quality inspection of grains
- Allergen-free ingredients
- Development of new products
- Enabling premium quality

..... 1ST EIT FOOD INNOVATION MARKETPLACE

The QSorter® technology is at the heart of the new generation of sorting and analysis devices for soft commodities, with the objective to bring efficiency, productivity and outstanding benefits in the food industry.

The unique single-kernel approach provides food companies with unprecedented quality-based sorting capabilities facilitating the development of new products, premium quality ingredients, and giving access to the full data for each grain.

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

The innovative QSorter® technology provides food companies with unbeatable advantages in terms of quality inspection, process monitoring, product development and food safety.

The proprietary technology locks the grains in place, allowing multiple non-destructive analyses to be conducted on the same kernel, and in a fraction of a second, whilst a sorting decision is being taken.

QualySense offers sorting solutions to the food industry based on the nutritional content, but also sensory attributes like flavor, taste and texture.

**Contact:** Francesco Dell'Endice, CEO info@qualysense.com



#### Communication

We promote communication within the scientific society by organizing working groups around different commodities and facilitating knowledge transfer between different fields of expertise.

We are part of various international research associations focused on food quality, safety and food technology innovations.

We interact with hundreds of specialists from academia, industry and governmental agencies to bring innovation on the market.

**Contact:** Francesco Dell'Endice, CEO info@qualysense.com



#### **Business Creation**

Our technology has helped food companies to develop and expand their businesses by opening new opportunities and facilitating the development of new products.

Premium and super-premium markets are being explored, functional foods and other specialty products are being envisioned.

**Contact:** Francesco Dell'Endice, CEO info@qualysense.com



#### Education

We collaborate with international students' organizations like IAESTE, and we offer different internship and training programs for international students and graduates.

Most of our interns are finalizing their Master's thesis while gaining valuable industry experience. We encourage our employees to take ownership of their projects, to attend qualification courses and develop new skills.

**Contact:** Olga Peters, CFO & HR Responsable Olga.peters@qualysense.com

# RETHINK RESOURCE

Marketplace





#### **Master Contac**

Linda Grieder Founder & CEO

Mühlebachstrasse 174 8008 Zürich Switzerland

www.rethink-resource.com

E: linda@rethink-resource.com T: +41 79 726 35 00

#### Profile

RethinkResource creates an online marketplace where producing and processing companies can trade their side and waste streams. To jumpstart product and process innovation with secondary resources we offer an associated consulting business. As early adopters our customers profit from cross-industry know-how sharing. This combination of a marketplace and community is a platform solution that allows active users to emerge as industry leaders with resprect to resource stewardship.

#### Competences & Capabilities

Main areas of spezialisation and expertise are:

- Analysis of material flows
- Development of innovation scans
- Trading and know-how sharing platform
- Matchmaking

The innovative approach of RethinkResource brings waste stream management to a digital level thus removes barriers from access to secondary materials and increases transparency.

#### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

Our approach enables new intersectoral collaborations. The RethinkResource marketplace removes barriers from access to secondary materials and increases transparency which creats a plethora of innovation opportunites.

By establishing the best possible reuse opportunites for our customer's waste and side streams, we support the food industry on its way to a circular economy.

**Contact:** Evelyne Zürcher, Project Manager evelyne@rethink-resource.com



#### Communication

Our digital platform will be one of our main communication channels via our interactive blog where our customers profit from crossindustry know-how sharing in a community among executives, production and procurement managers, startups, consultants and scientists.

We also want to promote communication within businesses by organizing events where the community can exchange experiences and gets to know future trends and innovation.

We show presence at different specialized fairs and magazines. It is very important to us to stay in direct, personal contact with our customers.

**Contact:** Linda Grieder, CEO linda@rethink-resource.com



#### **Business Creation**

Bringing an additional value stream to the food value chain will ecourage new technology development, new business models and new products.

As a direct impact of facilitating a circular conomy also many new jobs will be created.

**Contact:** Linda Grieder, CEO linda@rethink-resource.com



#### Education

We are planning a series of open lectures and interactive education sessions called "Dinge wissen" at diffent european universities and schools to raise awareness and directly involve the future generation of decision makers. We would also like to invite innovative speakers from the industry and research for these lectures.

**Contact:** Evelyne Zürcher, Project Manager evelyne@rethink-resource.com

# **TELLSPEC**

# Food Testing and Diet Tracking





#### **Master Contact**

Isabel Hoffmann Founder & CEO

Tellspec Europe Agro Food Park building 13, 8200 Aarhus N, Denmark

www.tellspec.com

E: info@tellspec.com T: +45 5281 4966 T: +416 964 0830

#### Profile

Tellspec is a data company that offers real-time, affordable, reliable, non-destructive, handheld food analysis.

We provide predictive intelligence about food, by combining spectral sensors, bio-informatics techniques and learning algorithms, in a revolutionary technology that analyzes foods, in real-time and at the molecular level.

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Food quality, safety and authenticity;
- Diet tracking, calorie counting and nutrient information:
- Spectroscopy and chemometric analysis;
- Data analysis, data treatments and machine learning;
- Android and iOS Mobile application development;
- Cloud computing: front end platform, back end platform and cloud-based delivery.

..... 1ST EIT FOOD INNOVATION MARKETPLACE

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

Our technology includes a three-part system:

1. a hand-held food sensor able to scan food at a molecular level; 2. a patented cloud-based analysis engine; 3. and a mobile app that all work together to scan any food, identify calories, macronutrients and micronutrients, contaminants, possible food fraud, food adulteration and provide relevant nutritional information with one simple scan of less than 5 seconds.

Today our food sensor is based on NIR spectroscopy but we are already working on a future scanner that will integrate other sensors and make the current scanner much more powerful and capable of even more accurate detection for all foods.



#### Communication

Tellspec customers are all the players from farm to fork on the food chain. Agriculture producers benefit from optimizing their harvest by using our technology to test for proteins, fats and moisture content; Distributors need to ensure that the raw materials they are buying are pure, not adulterated and are of high quality; Supermarkets and food retailers need to regularly test the quality of fresh produce, meat and fish, in order to minimize food spoilage; Restaurants need to ensure that their menu offerings are not contaminated with possible bacteria, or with allergens that may cause their customers a serious health reaction; and finally the consumer that wants to know what exactly is in their food.



#### **Business Creation**

Tellspec is a disruptive technology, with a potential for high growth and strong economic impact. It will impact several industries, ranging from agriculture, food manufacturing and distribution to food consumption. The major impact of our initiative will be seen when consumers become more selective about what they eat and in turn demand food that is more nutritionally dense and less contaminated. In turn, the agro-food chain will change to meet this demand.



#### Education

Tellspec offers an educational, searchable online database with evidence-based information on global food ingredients and their health implications. Tellspecopedia currently covers the most common and controversial 1,500+food ingredients ranging from additives and contaminants to manufacturing by-products, and delivers scientific research about how these food components can affect our health.

# TIPA CORP.

### Compostable packaging



# Profile

TIPA is a developer and producer of breakthrough compostable packaging for the food industry. The company's game changing technology addresses a particular segment in packaging: flexible packaging, which today are non-recyclable and as a result end their life in landfills where they will remain for 500 years or more.

The company's novel technology is relevant for packaging a wide variety of food goods including: snack food, confectionary, baked goods, fresh produce, frozen food and more

# Master Conta

Dr. Yifat Bareket CTO

3 Hanagar St. Hod HaSharon Israel 4501306

www.tipa-corp.com

E: yifat@tipa-corp.com T: +972 52 47 08 073

#### Competences & Capabilities

TIPA develops fully compostable and biobased flexible packaging solutions for the food industry. Key capabilities include:

- Producer of breakthrough compostable/ bio-based films and laminates with matching properties to conventional films.
- Customization based on customers' needs
- Strong R&D team
- Production throughout supply chain based in Europe with local partners at all relevant countries

...... 1ST EIT FOOD INNOVATION MARKETPLACE

#### Expertise related to the EIT Food Strategic Pillars





Communication

TIPA continues to develop its next generation of materials and packaging applications which are all fully compostable and bio-based. The company actively seeks partners to collaborate with for its current and new application range including:

- Compostable/bio-based packaging for fresh produce which can also extend shelf life
- Composable/bio-based packages for highbarrier dry foods such as: coffee, tea, snack food, etc.
- Compostable/bio-based hybrid packages
- Compostabe anti-microbial and anti oxidant packaging solutions





# YASO

### Functional Food Development





Daniel Vincz Head of Business Development

3/A Montevideo street Budapest 1037 Hungary

www.yaso.hu

E: Vincz.daniel@yaso.hu T: +36706695674

#### Profile

Fitorex Ltd. is a Hungarian R&D oriented innovative company devoted to the development and production of YASO specially sprouted soybean and value added functional products based on YASO.

Fitorex has pioneered the world's first high yield, industrial-scaled sprouting process of soybean with unique patented composition.

By exploiting the favourable composition and nutritional benefits of YASO® Fitorex aims to develop products that are: innovative, highest quality, value added, GMO free, nutritious, 100% natural, chemical free and fit into the line of sustainable development.

#### Competences & Capabilities

Fitorex offers a solution for industrial scale sprouting, with the following uniqueness:

- Standardized germination process
- Maximized germination ratio (95% of germination ratio compared to average 60%)
- Minimized germination surface (small area need compare to monolayer sprouting)

Know-how elements:

- New sprouted raw materials and their use
- New food product recipes
- Production technologies
- Production equipment
- Flexible production system
- Specific information (Weight Management, hospital catering, healthy aging)

#### Expertise related to the EIT Food Strategic Pillars



#### **Innovation**

With our innovative solution we offer Valueadded tailor-made products and product families to consumers keen on healthy living and environment consciousness.

From new raw materials - rich in ideal combination of bioactive ingredients - we will create novel functional food lines specifically designed to reduce disease risk for certain groups of people in the future.

Through our patented innovation our branded products keep all the nutritional advantages of soybean, but eliminate the disadvantageous properties of soy, thus making it unique on the market.



#### Communication

We focus on current and future demands of consumers by identifying food trends and integrating them into the creation of new products and services.

We work together with the whole value chain from food industry to retail and even catering.

As we directly control our raw material supply chain we have the opportunity to gather information about the changing trends and new waves of the whole food industry.

We are committed to providing healthy food products to people and educating them about healthy food options.



#### **Business Creation**

The owners of the company have significant experience in research, product development, commercialization of products, innovative company management, research coordination and IP. Fitorex offers

- Financial and investment projection and business planning of plants
- Preliminary factory design
- Complete factory planning (according to order of partner)
- Supervision of plant implementation
- Complete technology transfer documentation (incl. production manual)
- Quality assurance system
- Full scale operation services for the first 3
- New product and technology development (optional)



#### Education

We have an acknowledged scientific background at Hungarian Universities such as Budapest University of Technology. The Economics Department of Applied Biotechnology and Food Science, the Agricultural Research Institute of Hungarian Academy of Science are amongst our partners as well as Canada's Smartest Kitchen, a food brand and product development center located in Charlottetown, PEI, Canada. We are dedicated to educating people on a better, healthier life.

# YPSICON ADVANCED TECHNOLOGIES

Food Technology Development



#### Profile

Ypsicon is a technology-based company with headquarters in Barcelona. Its activity is focused on the development of new technologies, as well as on the design and manufacturing of components and equipment for the food, pharmaceutical and cosmetics industries.

Ypsicon commercializes three patented technologies on a global basis which have great potential for the beverage industry: Ultra-high pressure sterilization / homogenization, Ultraviolet-Thermal pasteurization and UV-C bottle sterilization

# Master Contac

Leo Moreta Chief Marketing Officer

C/Vía Trajana 50-56 Nave 21 08020 Barcelona Barcelona SPAIN

www.ypsicon.com

E: leo.moreta@ypsicon.com T: +(+34)93 313 32 37

#### Competences & Capabilities

Main areas of specialization and technological expertise are:

- Food technology development
- Design and development of equipment based on its patented technologies
- Sterilization of pumpable fluids (beverages, liquid foodstuffs, etc.) by means of continuous ultra-high pressure
- Pasteurization by means of combination of ultraviolet light type C and thermal treatment at moderate temperatures
- Sterilization of bottles by means of ultraviolet type C for aseptic bottling (no chemical products are used during the process)

#### Expertise related to the EIT Food Strategic Pillars



#### Innovation

All technologies developed, patented and commercialized by Ypsicon have the same objective: To provide solutions applicable on an industrial-scale in order to obtain high value-added beverages and liquid foodstuffs, guaranteeing a long shelf-life and safety for human consumption, while at the same time preserving or even improving their original properties. Ypsicon's technologies also deliver 100% natural products that do not require preservatives or additives. Ypsicon's technologies have a wide range of potential applications in a variety of sectors, including food & beverage, pharmaceutical and cosmetic sectors, and they offer a wide range of possibilities for the development of new products.



#### Communication

Ypsicon organizes open sessions about the potential applications of its disruptive technologies.

The company is in very close contact with the main food & beverage companies on a global basis, focusing on solving their most relevant challenges.



#### **Business Creation**

Ypsicon is a technology-based company formed at the Autonomous University of Barcelona in 2011.



#### Education

As a spin-off formed at the Autonomous University of Barcelona, Ypsicon collaborates with the University's food technology professors and its students in order to test new potential applications of its technologies

Ypsicon also collaborates with students who are interested in deepening their knowledge about its technologies and their potential applications. The company has included some of them in their staff.

# Notes



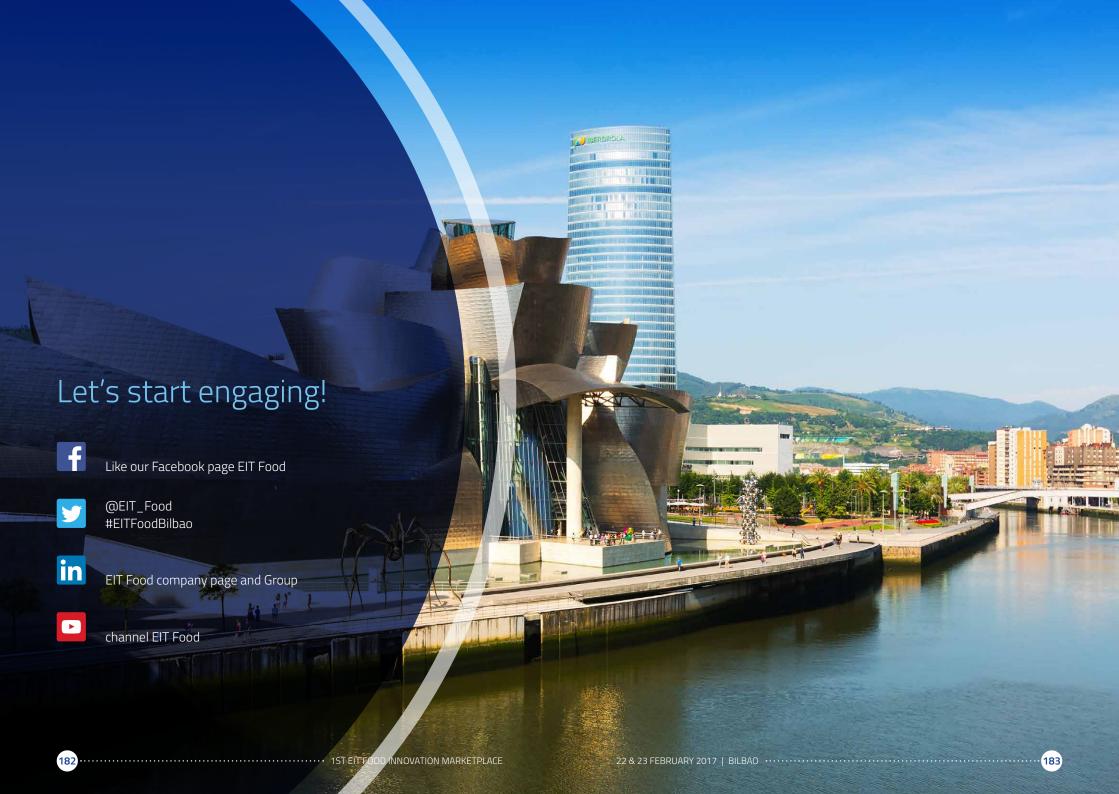














# Teams

### Interim Supervisory Board

Prof. Dr. Peter van Bladeren

Chair Board

**Bogdan Tyrybon** 

CLC North-East

Prof. Dr. Christine Williams

CLC North-West

### Interim Management Team

Frank Segebarth

CFO

fsegebarth@icloud.com frank.segebarth@eitfood.eu

Prof.Dr. Jochen Weiß

Director of Education j.weiss@uni-hohenheim.de jochen.weiss@eitfood.eu

Dr. Thorsten Koenig

Director of Business Creation thorsten.koenig@givaudan.com thorsten.koenig@eitfood.eu

Ellen De Brabander, PhD

ellen.debrabander@pepsico.com ellen.debrabander@eitfood.eu

Prof. Dr. Thomas Hofmann

CLC Centrum

Prof. Dr. Jan Delcour

CLC West

David Shem Tov

CLC South

#### Begoña Pérez-Villarreal

Director of Innovation

bperez@azti.es

begona.perezvillarreal@eitfood.eu

#### Klaus Beetz

klaus.beetz@siemens.com klaus.beetz@eitfood.eu

#### Mieke Vercaeren

Director of Communication mieke.vercaeren@colruytgroup.com mieke.vercaeren@eitfood.eu

#### Interim Management Co-Location Centers (CLC's)

#### **Kurt Gebruers**

Director CLC West kurt.gebruers@kuleuven.be kurt.gebruers@eitfood.eu

#### Thomas Becker

Director CLC Central tb@tum.de thomas.becker@eitfood.eu

#### Ian Givers

Director CLC North-West d.i.givens@reading.ac.uk ian.givers@eitfood.eu

#### Begoña Pérez-Villarreal

Director CLC South bperez@azti.es begona.perezvillarreal@eitfood.eu

#### Krzysztof Klincewicz

Director CLC North-East kklincewicz@wz.uw.edu.pl krzysztof.klincewicz@eitfood.eu

