

# **Innovation Europe**

This is one of a series of bi-monthly newsletters highlighting upcoming events and related research and innovation stories. It demonstrates how EU-funded research and innovation is helping to exit the current crisis, create jobs and improve the quality of life in Europe.

### **Summary**

Funding the next generation of innovative research projects

Nutrition & well-being: getting a head start

Healthy ageing: food for thought

Harnessing the power of natural biodiversity

Biotechnology at its best

Sustainable energy at work and at home

**Building the cities of tomorrow** 

**Upcoming events** 

## Funding next generation of research projects

### Horizon 2020 video - General overview

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over seven years (2014 to 2020). Find out more about Horizon 2020 in this three minute animation clip which will give you a general overview of the programme © European Commission, 2014 specifics.



Link: <a href="https://www.youtube.com/watch?v=CimJI88c4fE">https://www.youtube.com/watch?v=CimJI88c4fE</a>



© European Commission, 2014

#### Horizon 2020 video - How to apply?

Interested in learning more about EU funding opportunities for your research or innovation project? This short video animation will guide you through the first steps you will need to take to apply to Horizon 2020.

#### Link:

https://www.youtube.com/watch?v=mm N0NccQCD0

## Nutrition & well-being: getting a head start

Obesity increasingly is common among children, with 60% of those obese before puberty going on to overweight in early adulthood. **Excess weight not only carries** serious health risks but is also linked to low self-esteem, social isolation and academic underachievement. However, research shows that there may be a way to put a stop to obesity from a very © Shutterstock, ID 130117133? Oksana Kuzmina early age.



The **EARLYNUTRITION** project is the largest to date to investigate the effects of pre- and early post-natal nutrition on obesity in thousands of European children. The project is conducting ambitious research into how nutrition at these crucial stages can 'programme' or dispose children towards being overweight, affecting long-term health and well-being into adulthood and old age. The team hopes to use its findings to help combat the growing, costly issue of obesity in Europe by enhancing EU policies on nutrition, and to bridge the gap between scientific advances and everyday life through practical recommendations to parents and quardians.

Coordinated from Germany, the project brings together researchers from 36 institutions in 15 countries in Europe and abroad: Spain, Italy, Austria, Belgium, Ireland, the UK, the Netherlands, Australia, the USA, Greece, Poland, Norway and Denmark.

For the latest updates on the project, follow the team on Twitter <a>@EarlyNutrition</a>

Contacts / Project website

### Healthy ageing: food for thought

Some 10% of those over 65 have already been given the devastating diagnosis of Alzheimer's disease. As the population ages, the number of those afflicted by dementia is expected to reach 81 million by 2040. However, keeping our brains healthy could be within our sights with a little help from the humble blackcurrant.

The **BRAINHEALTHFOOD**Consortium, coordinated from Finland and involving leading experts from Spain, Germany, the UK and Poland, has carried out groundbreaking research combining food chemistry, clinical

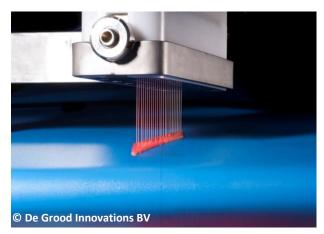


research @Alexandr Mitiuc

nutrition and neurology that has led to the discovery of very special bioactive compounds in blackcurrants. These compounds can protect the brain from risk factors thus helping prevent the onset of Alzheimer's disease and improving the health and well-being of elderly people in Europe. The Consortium has used extracts from blackcurrants to create the novel pilot dietary supplements and 'BrainHealth' juices in collaboration with SMEs. The project findings now provide excellent opportunities for European companies to develop high value "BrainHealth' food products for international markets and is the next step for the SMEs involved in the consortium.

### **Contacts**

Futuristic technologies may traditionally be the domain of the young, but a revolutionary new food service is offering the first taste of 3D-printed food to Europe's elderly.



The **PERFORMANCE** project is using cutting-edge technology to produce a 3D food printer which will "build" food layer by layer. The technique results in food that is soft to bite and to chew, making it the ideal way to create a personalised food service for the elderly, whether still living at home, in assisted housing or in a nursing home. By 3D printing the food, the project will be able to cater to the swallowing issues that

many elderly people face as well as other dietary specifications, but also to the personal tastes of each individual. With 60% of nursing home residents currently

having to eat liquid, 'porridge-like' food, the new technology has the potential to vastly improve their quality of life, not only by offering a nutritionally-tailored diet plan but also by ensuring a sense of independence and control which might otherwise have been lost.

Coordinated by and with a partner in Germany, this project has additional partners in Denmark, the Netherlands, Italy and Austria.

Contacts / Project website

## Harnessing the power of natural biodiversity

It seems that Mother Nature holds the key to natural beauty. Extracts in plants found in far-flung corners of the world could be the secret ingredient to keeping the wrinkles at bay...

The European project AGROCOS is sifting through nature's molecules to find precious substances for future development of cosmetics that would help protect against UV rays, delay ageing and prevent age spots. The study is testing extracts from 1,800 different species of plant from six major biodiversity hotspots in Greece, Madagascar, South Africa, Panama Caledonia, and French Guyana. AGROCOS has selected the 10 most promising plant families for the final stage of the research © KORRES programme, and Greek SME KORRES,



renowned in the natural beauty industry, is planning to launch an innovative antiageing line based on the project's findings in 2015. The project's ultimate goal is to develop innovative products which are environmentally-friendly and sustainable and which can enhance the competitiveness of European industry through innovation.

The project is coordinated out of Greece and involves scientists from France, South Africa, Denmark, Panama and Switzerland.

Contacts / Korres website

## Biotechnology at its best

We're all aware of the importance of reducing our carbon footprint, yet we often don't realise the significant environmental damage that can be caused by the non-sustainable management of our urban, farming and food-industrial waste streams.

© REFERTIL

The **REFERTIL** project aims to improve current bio-waste treatment systems and nutrient recovery processes to produce high quality and safe biochar and compost products, and reduce the use of mineral fertilisers and intensive chemicals in agriculture. Biochar, a porous charcoal that can either be plant-based or animal bone-based, helps soils retain nutrients, water and also to hold carbon. The plant-based biochar acts as a soil improver while the Animal Bone bioChar (ABC) is an organic fertiliser.

The project results will enhance the "3R" Recycle-Reduce-Reuse of organic waste streams from agriculture and the food industry and lead to enhanced environmental, ecological and economical sustainability of food crop production, a significantly reduced carbon footprint as well as contribute to climate change mitigation.

In addition to the Swedish coordinator and development company in Hungary, the project brings together participants from Denmark, Germany, Italy, Spain, Ireland, the Netherlands, the UK and Slovenia.

Contacts / Project website

# Sustainable energy at work and at home

Home and office buildings account for almost 40% of Europe's energy consumption. By tapping into the natural power of one of the planet's most renewable energy resources, it may soon be possible for homes and workplaces alike to support their own energy needs.

The **DIGESPO** research project © DIGESPO has developed a unique



concentrated solar power (CSP) system that uses mirrors with a tracking system to focus the sun's rays, convert the light energy into heat energy and then uses it to drive a stirling engine to generate electrical power. The technology will allow

buildings to become energy self-sufficient, able to generate their own electricity as well as manage their heating and cooling requirements, while also boosting the competitiveness of the European solar energy market.

The project is managed by the Fondazione Bruno Kessler in Italy with the involvement of Sweden, Malta, the UK and Germany.

<u>Contacts</u> / <u>Video</u>

## **Upcoming events**



The Greek Presidency of the European Union will hold a major conference in Athens, June 12-13, on access to finance for innovative companies in Europe. The conference aims to raise awareness on the potential

of financial instruments, facilities and accompanying measures launched under the Horizon 2020 programme to enhance growth by improving access to finance for research and innovation. The event will bring together policy-makers, financial intermediaries and representatives of the research, innovation and business communities.

#### Contacts / Conference website

The collaborative research project **PLEASURE** aims to produce new "reduced-in" foods with less unwanted fat, salt and sugar. However rather than replacing these with substances like sweeteners, the project hopes to develop new taste alternatives that



will result in products that are not only healthy, but that tickle consumers' taste

The First International PLEASURE Conference will take place from 18<sup>th</sup> to 19<sup>th</sup> June, 2014 in La Rochelle, France. The conference is linked with the "Health & Food Days" where 800 delegates from the French and European industry will gather to promote their expertise.

### Conference website



Science is a gateway to a better future and economy for Europe. The **EuroScience Open Forum**, Europe's most important biennial general science event, is taking place in Copenhagen from 21<sup>st</sup> to 26<sup>th</sup> June 2014 to

discuss the latest scientific discoveries and debate the direction that research is taking in the sciences, humanities and social sciences. The Forum gathers together leading scientists, researchers, business people, entrepreneurs and innovators, policy makers, science and technology communicators and the general public from across Europe.

### Conference website

### New industrial partnerships to announce funding in July

Most of the **Joint Technology Initiatives** (JTIs), public-private partnerships set up under Horizon 2020, will launch their first calls on 9 July 2014 at a joint event in Brussels. The partnerships work in strategic areas such as medicines, fuel cells, air and rail transport or electronics. They pool Europe's public and private resources to tackle the biggest challenges, support competitiveness of sectors that deliver high quality jobs, and encourage greater private investment in research and innovation.

More information: <u>Horizon 2020</u> | <u>Horizon magazine</u> | <u>Participant Portal</u> | <u>RTD-RESEARCH-PRESS@ec.europa.eu</u>







© European Union, 2014