

# EARTO INNOVATION AWARDS 2020

attributed to

**Helmholtz Association – Osteolabs – Calcium Isotope Based Biomarker**

&

**VTT – Eggs without Chickens**

Brussels, 28 October 2020

The EARTO Innovation Awards 2020 were given today to EARTO members **Helmholtz Association** and **VTT** during a ceremony held digitally. Helmholtz Association received the award in the Impact Delivered category for the development of **a novel non-invasive biomarker (CIM) method**, which contributes to early diagnose calcium loss and osteoporosis in humans. VTT received the award in the Impact Expected category for the development of **a unique cellular agriculture-based technology**, which enables mass production of high value proteins (e.g. egg proteins), without using animals and with low environmental impact.



**Helmholtz Association – Osteolabs - Calcium Isotope Based Biomarker**



**VTT – Eggs without Chickens**

**HELMHOLTZ**  
RESEARCH FOR GRAND CHALLENGES

**GEOMAR**

**VTT**

## Slowing down osteoporosis



About **1,000 kits** have been sold to customers and approximately received **€240,000 in the first six months**.



**94-100% sensitivity** can be reached compared to previous DXA method.



There are currently **15 home- and med-kit orders per week**.



**120 internet-based sales per month** are expected in the third quarter of 2020.

## Taking the egg white protein production to the next level



VTT's technology will enable food producers to **decrease greenhouse gas emissions by up to 74% and land use by 90%**.



**The cost to produce egg white protein by cellular agriculture is competitive** when compared to the production costs of chickens' egg white protein.



The production cost of the egg white protein is **estimated to be less than €10 per kg** and is suitable for large-scale industrial production.



**VTT's current and under negotiation projects** in the cellular agriculture domain **are worth nearly €9M**.

Created in 2009, the EARTO Innovation Awards highlight the various areas of RTOs' activities and illustrate RTOs' concrete contributions to innovation with high societal impact through the two categories: "Impact Delivered" and "Impact Expected". The Awards' independent jury chose the best innovations of the year. Our Jury Members this year were:



On the same day, EARTO has published the 2020 edition of its **Innovation Awards brochure**, a collection of thirty two innovations featuring EARTO members, which gives a flavour of the wide range of RTOs' work. Such innovations demonstrate RTOs' capacity to support Europe's innovation performance and their focus on solving today's challenges and delivering impact. The brochure includes articles on all RTOs that took part in this year's competition with a special focus on the 6 finalists which are, in addition to the two above-mentioned winners:



**csem**

#### IMPACT DELIVERED – 2<sup>ND</sup> PRIZE

**CSEM – Optical Blood Pressure Monitoring Technology**, an easy-to use sensing technology which provides continuous blood pressure estimations capable of tracking short- to long-term blood pressure variations.



**Fraunhofer**

#### IMPACT DELIVERED – 3<sup>RD</sup> PRIZE

**Fraunhofer – Fire-protection gel and production process for fire-resistant glazings**, a brand-new production process for the manufacture of continuous, automated, and digitalised fire-resistant glazings based on a non-toxic gel component.



**tecnalia** Inspiring Business

#### IMPACT EXPECTED – 2<sup>ND</sup> PRIZE

**TECNALIA – ISMORE**, an innovative system which reconnects brain, muscles and movements of paralysed patients, directly hacking the nervous system and decoding the movement intention to restore joints' control.



**RISE**

#### IMPACT EXPECTED – 3<sup>RD</sup> PRIZE

**RISE – Super Filaments**, replacing the existing filaments' production process and paving the way for a new natural-based development that fulfils all environmental and economic requirements.

Full EARTO Innovation Awards 2020 brochure available [here](#).

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**EARTO Innovation Awards** are given since 2009 to illustrate RTOs key contribution to innovation. Two categories have been created: Impact Delivered and Impact Expected. The Impact Delivered Award is given to an innovation already in the market and which has proven its impact on Europe's economy and/or society, while the Impact Expected category rewards an innovation which is not yet on the market but has great potential.

**RTOs - Research and Technology Organisations:** From the lab to your everyday life. RTOs innovate to improve your health and well-being, your safety and security, your mobility and connectivity. RTOs' technologies cover all scientific fields. Their work ranges from basic research to new products and services development. RTOs are non-profit organisations with public missions to support society. To do so, they closely cooperate with industries, large and small, as well as a wide array of public actors.

**EARTO - European Association of Research and Technology Organisations:** Founded in 1999, EARTO promotes RTOs and represents their interests in Europe. The EARTO network counts over 350 RTOs in more than 20 countries. EARTO members represent 150,000 highly-skilled researchers and engineers managing a wide range of innovation infrastructures.

**Helmholtz Association** is Germany's largest scientific organisation. It represents more than 40,000 employees in 19 research centres across Germany. The Helmholtz Association conducts top-level research to identify and explore the major challenges facing society, science and the economy. Its work is divided into six research fields. Helmholtz transfers scientific knowledge into innovation and on into the market and so contributes to creating the technological basis for a competitive society.

**GEOMAR Helmholtz Centre for Ocean Research Kiel** is a world-wide leading institute of marine research. It investigates chemical, physical, biological and geological processes of the seafloor, oceans and ocean margins and their interactions with the atmosphere.

**VTT** is a visionary research, development and innovation partner. VTT is one of Europe's leading research institutions. Its goal is to turn large global challenges into sustainable growth for businesses and society, through science and technology. Its research concentrates in 5 main themes: climate action, resource sufficiency, good life, safety and security and industrial renewal.