



## HUMAN & BIOTECHNOLOGY

Fields of Expertise TU Graz

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**Gernot Müller-Putz,**  
**Human & Biotechnology**

Source: Lunghammer – TU Graz

**A**fter a “hot autumn” with the deadlines for FWF START, ERC Starting, ERC Consolidator and ERC Synergy Grants, we would like to point out that there is an ERC Club at TU Graz that aims to provide applicants with the best possible support for their applications and interviews. In a relaxed atmosphere, ERC grantees talk about their experienc-

es and applicants can ask questions on all topics related to the ERC, such as When should you start? What does high risk/high gain mean? How does the review process work? How should one write the different parts of the proposal? What are the panels? These and many more questions will be addressed at the next ERC Club meeting in spring 2023. Interested parties can contact Gerald Pichler at the Research & Technology House.

However, it is also again possible to get a large grant at TU Graz. Currently, the LEAD projects are being advertised again and there is the possibility to apply with a consortium. We call on our FoE members to participate in this TU Graz-internal funding opportunity.

We have good news to report from our FoE. The Stefan Schuy Prize of the ÖGBMT (Austrian Society for Biomedical Engineering) has been awarded to Sonja Langthaler (Institute of Health Care Engineering). The prize was presented at the three-country meeting of the German, Swiss and Austrian societies in Innsbruck at the end of September.

Helmut Schwab has written an interesting article on a highly topical subject of industrial biotechnology for this issue. It is about the use of carbon dioxide and hydrogen for the microbial production of valuable substances, in his case protein as animal feed.

**Helmut Schwab**

## Protein from Carbon Dioxide: A Sustainable Perspective

The extreme release of CO<sub>2</sub> into the atmosphere by using fossil carbon resources is drastically influencing the climate of our planet. Technology to recycle CO<sub>2</sub> and turning it into valuable compounds not only provides important solutions to reduce negative impacts on the climate, but also opens up a sustainable raw material source.

With our research for developing a bioprocess for producing protein based on CO<sub>2</sub>, novel routes for food and feed production are enabled. The company Econutri GmbH, a spin-off from research work performed at TU Graz and the Austrian Centre of Industrial Biotechnology (acib GmbH), is now transferring basic research into industrial application by research at pilot scale.

### WHY PROTEIN?

The supply of protein in sufficient quantities for human nutrition is increasingly becoming a challenge due to the rising population growth. In particular people in developing countries are already severely suffering from lack of protein, thus generating hunger and problems in the development of body and brain in children.



**Helmut Schwab**  
researches at the Institute for  
**Molecular Biotechnology.**

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