Website address:
https://www.gesundheitsindustrie-bw.de/en/article/press-release/innovative-forschung-soll-wundheilung-und-krebstherapie-verbessern

Innovative research aims to improve wound healing and cancer therapy

Jun.-Prof. Dr. Priscilla Briquez, junior professor at the Department of General and Visceral Surgery at the Freiburg University Medical Center and member of the Medical Faculty at the University of Freiburg, has received a European Research Council (ERC) Starting Grant from the European Commission. Her DRESSCODE project will receive a total of 1.5 million euros funding for five years. The project focuses on modifying proteins and developing new disease therapies.

"This support is a major opportunity for me to put together my own team and drive forward my research," says Briquez. The focus of the project is on equipping protein cell membranes with therapeutic receptors. This produces cells which can perform specific healing functions, such as targeted bonding to medicines or pathogens. "The research project opens up new, significant opportunities for both regenerative medicine and cancer immunotherapy," says Prof. Dr. Lutz Hein, Dean of the Medical Faculty of the University of Freiburg.

Innovations for wound healing and cancer immunotherapy

In the field of regenerative medicine, Briquez's research approach can specifically alter the vascular endothelial growth factor (VEGF) receptor-2. This promotes the formation of blood vessels in chronic wounds and assists wound healing. In connection with cancer immunotherapy the project is researching the development of chimeric antigen receptors (CAR) on T-cells. These are receptors that are placed on immune cells in order to identify and attack cancer cells.

Briquez gained her PhD in 2016 at the Ecole Polytechnique Federale of Lausanne (EPFL), where she investigated the development of therapeutic proteins and biomaterials for wound healing. After that she was a postdoc at the Pritzker School of Molecular Engineering of the University of Chicago. There, she devoted herself to the field of molecular immunoengineering and cancer immunotherapy, before moving to the Department of General and Visceral Surgery at the Freiburg University Medical Center in 2021 where she was appointed junior professor.

With its Starting Grant funding line the ERC supports junior researchers who have already done outstanding work and who have the potential to assume a leading role in research.

Press release

26-Oct-2023
Source: University of Freiburg

Further information

- University of Freiburg
- European Research Council (ERC)