

A portrait of Stefan Roos, a middle-aged man with short brown hair and glasses, wearing a dark blue sweater over a maroon collared shirt. He is looking slightly to the right of the camera with a thoughtful expression. The background is a blurred outdoor setting with trees and light. A dark blue vertical bar on the left contains the name 'Stefan Roos' in white text. A dark blue horizontal bar in the top right corner contains the word 'INTERVIEW' in white text.

Stefan Roos

INTERVIEW

Text: Susanna Eriksson Photo: Martina Sjaunja

An expert in lactobacilli

Wound management is a huge problem both for patients and entire healthcare systems worldwide. It consumes enormous resources - time, money and personnel. There are many who have tried to find lasting solutions, but nobody has succeeded yet. One obstacle is that wound healing is a complex process and there are different types of wounds. However, with Ilya Pharma's lactobacilli, high hopes are being raised for a completely new class of biological drugs that can truly improve the healing process.

Lactobacilli play a central role in Ilya Pharma's technology for accelerated wound healing. By using lactobacilli to produce a human immune protein, called a chemokine, directly on the wound surface, the inflammatory microenvironment changes and healing is accelerated. The discovery is the result of interdisciplinary research in physiology, immunology and microbiology in a long-term collaboration between Uppsala University and the Swedish University of Agricultural Sciences (SLU).

– Lactobacilli are really amazing! I am fascinated about their multifaceted properties and how useful they are. But they can also be challenging to work with and require a lot of effort to achieve results,

“Often there is a long road to success, but problem solving is something I really appreciate being a researcher - to figure out how to solve a problem in the best way. It should not be too easy, because then it would be boring.”

- Stefan Roos

says Stefan Roos, microbiologist at SLU and one of the founders of Ilya Pharma.

Since the early 1990s, he has studied lactobacilli and how they can be used as medicines. Today he is a world-leading expert on lactobacilli and his and his former supervisor Sven Lindgren’s research at SLU has also been important for probiotic products that are being commercialized by another company, BioGaia. Stefan says that the companies use similar types of bacteria, but a clear difference is that Ilya Pharma use bacteria that are genetically modified. Today he is employed by both SLU and BioGaia, but he also has a continuing role in Ilya Pharma. All his research projects are related to industrial applications which is something he really values.

– To work with a scientific question and find out how to use the results in the innovation process is fantastic! To see that your research benefits people and society is very satisfying, says Stefan Roos.

One of Ilya Pharma's drug candidates is currently being tested clinically.

– We have a product that looks very promising and the company have now produced it to the required standard quality to meet regulatory requirements. It is a complex process, but we are hopeful that this new biological drug will provide a solution to efficiently healing wounds in the skin or mucosa, he concludes.



“I do not exclude anything. Sometimes an approach does not work and then you need to find out why and rethink everything. You need to change something and then it suddenly might work. The satisfaction when you have found the right solution and it works is incredible.”