PlantLink Researcher in the spotlight

Leif Bülow

March 2017

A few weeks ago Professor Leif Bülow at the LTH Department of Pure and Applied Biochemistry received no less than 100 million SEK for the project ScanOat! This SSF founded industrial research center, for which he will be the project leader, will focus on various aspects of oats. This is one of the larger grants for plant-related research ever given in Sweden. In an already ongoing project together with colleagues at SLU he is producing hemoglobins in sugar beets — and no, this is not a substitute for beet roots! Leif is the former director of PlantLink.



-What is currently on top of your research agenda?

I am now focussing on setting up the industrial research center ScanOat. There are several administrative matters that need to be solved before the actual research projects can start.

-Tell us about your latest publication?

We have demonstrated that hemoglobins and myoglobins can bind and cut DNA. These proteins can penetrate the cell membrane and directly attach DNA in the nucleus. However, we have also shown that some hemoglobin proteins do not have this property, which we believe will have long-term implications on what type of food we should consume and eat.

-What led you into your particular field of research?

I had a very exciting research experience at ETH in Zürich where I met Prof James Bailey, or just Jay. We were working with both plants and hemoglobins, a great combination. I got so intrigued by the colour of the hemoglobins. They are not just stunningly red, they can be green, brown and....

-What are the implications of your research for the society?

It is important that we scientists face the global challenges. The upcoming oat project is an example, where we direct our efforts to national and international environmental and food issues.

-Finally, let's say you got unlimited research funds; where would your research be five years from now?

There are a whole range of challenges that need to be addressed. Besides my work on hemoglobins and oats, we are now aiming at designing a completely new group of environmentally friendly antibiotics. And they will be produced in plants...