

## “WE HAVE A PROFOUND IMPACT ON PATIENTS’ LIVES”

*Quality control team leader Michael Festjens applies the latest knowledge into daily work*

**The potential of stem cells sparked Michael Festjens’ imagination for years. Add to that his strong desire to help people and it’s no wonder the quality control team leader is devoting his career around bringing stem-cell treatments to those who need them. “Even though we don’t see patients directly, what we do has a profound and immediate impact on their lives.”**

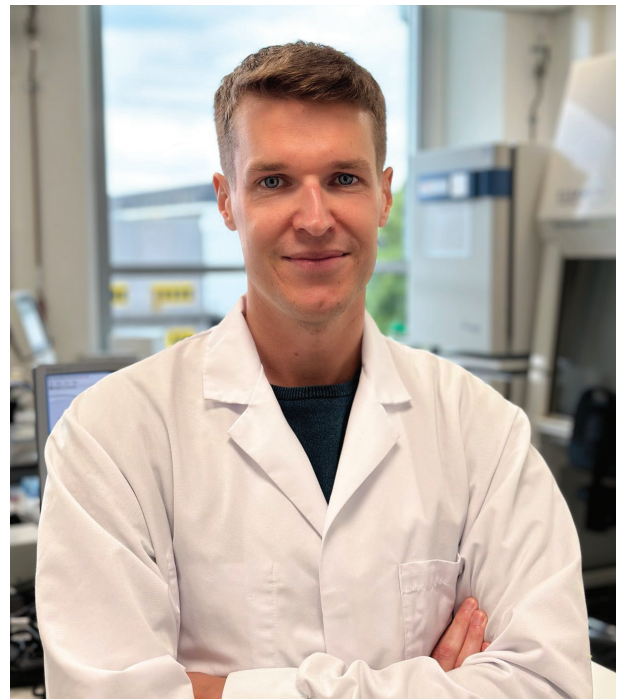
“Stem cells are wonderful,” Michael states. Already during his education in biomedical science, he was amazed with the endless possibilities they have to offer. “Just one single cell can become anything. Try to image all the damages you can repair from just one cell and how people can benefit from that!”

Helping others is important to Michael, both in his private life and in his career. For example, as an avid badminton player, he readily accepted the challenge of filling in for his trainer who had to take a long leave of absence due to illness.

It was no coincidence, therefore, that Michael decided to combine stem cells and helping others in his Master thesis. “I studied the potential role of stem cells in solving infertility problems,” the Belgian born quality control team leader explains. “There are reasons to believe we can reprogram stem cells into functioning egg- or sperm cells.” This was already successfully demonstrated in mice. Herein embryonic stem cells were successfully reprogrammed into spermatocytes and oocytes which in turn were able to produce healthy offspring through an IVF procedure! In my thesis, I focused on the effect of surrounding tissue on the development of primordial germ cells. Those cell types mark the first stage of development from stem cells into sperm or egg cells.

### **Looking for immediate impact**

While Michael happily contributed to the more fundamental side of science, he was looking for something that would have more immediate impact: “It can take decades before someone or some party picks up fundamental studies from universities and takes them to society.”



*Michael Festjens*

### **NEURO-CELLS® IS A LIVING THERAPY SUPPORTED BY GROWING CLINICAL EVIDENCE**

*Neuroplast is a clinical stage stem cell biotech combatting the common cellular processes in neurodegenerative diseases. Neurodegenerative diseases include traumatic spinal cord injury, traumatic brain injury and frontotemporal dementia.*

After working as a lab technician in a hospital for a few years, Michael took the jump and moved to industry. "At Neuroplast, I can apply the latest knowledge into daily work."

### **From infertility to neurodegenerative diseases**

Instead of infertility problems, Michael now immerses himself into neurodegenerative diseases: "We are currently running a clinical trial on traumatic spinal cord injury. But we already know that the technology can be applicable to a wider range of conditions to the central nervous system." Michael elaborates. "I believe that we will be able to do so many good things!"

*"When we produce patient treatments, we start at four in the morning and wrap up around ten in the evening. That can be heavy."*

### **Personal and company growth**

Since starting at Neuroplast, Michael experienced the growth and clinical progress of the biotech first-hand. And his personal growth followed the same pace. Michael got promoted from quality control associate to quality control team leader within three years.

Michael oversees a team of eight people and is responsible for planning and monitoring the daily quality checks in the manufacturing process. "We test if the samples and cell products meet the preset requirements before the product is released for administration to the patient. These include assessments to analyze the characteristics of cells, such as the composition of cell types and concentrations. They also include different tests to assure sterility of – or lack of damaging microorganism in – the product. In addition to these tests, we are now working on the development of a potency assay to demonstrate that our NeuroCells® product have the desired effect, such as anti-inflammatory capabilities. It is a regulatory requirement to do so for every batch."

### **Strict protocols in an informal culture**

Once he made the leap to industry, Michael had to get used to the regulatory intensity in it: "I was not fully prepared for rigidity of regulations."

"We work under Good Manufacturing Practice, which means that we establish and follow very high production standards in our facilities," Michael clarifies. "All steps are documented and are checked by a so-called witness, for example. It's a lot more time-consuming and stringent compared to doing research before any patients are involved."

*"At Neuroplast, I can apply the latest knowledge into daily work."*

Also, the working hours can be intense. "When we produce patient treatments, we start at four in the morning and wrap up around ten in the evening. That can be heavy."

The strict protocols and occasional long days are countered by Neuroplast's informal and international culture, according to the team leader, who speaks four languages: "I really like the multicultural mix of colleagues that we have here. The more international, the better."

When asked about any final remarks, Michael has only one thing to add: "Stem cells are fun!"

*"We test if the samples and cell products meet the preset requirements before the product is released for administration to the patient."*

### **WANT TO KNOW MORE?**

*Neuroplast is always looking for new talent, clinical partners, and investors to accelerate realizing our mission: Using stem cell technology to regenerate futures.*

**Contact us via [info@neuroplast.com](mailto:info@neuroplast.com)  
or follow us on LinkedIn**