

## PhD theses **in a nutshell**

### **Sleeping Beauty**

Strawberry plants rest in the winter, like many other plants. The cold and the shorter days (less sunlight) keep them dormant. In spring, the sun kisses the strawberry plant to wake it up. Stephan David studied which genes are involved in dormancy. He found a few genes that seem to play key roles, but that is only the tip of the iceberg. The strawberry plant is not so easy to figure out. It's a mysterious fairy tale. RK

*The regulation of winter dormancy in strawberry.*

**Stephan David** ◀ Supervisor **Leo Marcellis**

### **Good bacterium**

The gut bacterium *Akkermansia muciniphila* is thought to have significant health benefits. However, exactly how that works is still largely a mystery. Kate Ligthart showed that the bacterium makes the important neurotransmitter GABA in the acid conditions that prevail in the intestines. That could be the link between the bacterium and its influence on the brain. RK

*Akkermansia muciniphila.*

**Kate Ligthart** ◀ Supervisors **Willem de Vos** and **Hauke Smidt**

### **Healthy fish**

Interferon plays an important role in the defence against viruses. Cornelius Gunter, from South Africa, studied the eight different interferon proteins in the immune system of the carp. The role in the immune system depends on the viral load, the temperature and the time elapsed since the start of the infection. He also found the genes that code for the receptors on the cell surface that bind the interferon and help trigger the defence mechanism. However, it did not prove possible to develop a vaccine for one important carp virus, which had initially been the aim of the study. RK

*Molecular and functional characterisation of common carp interferon-phi and their receptors.* **Cornelius Gunter** ◀ Supervisor

**Maria Forlenza**