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BEN FERINGA, 2016 NOBEL PRIZE IN CHEMISTRY. “

## Groningen advances in antibiotics research

The development of new drugs, from discovery to clinical testing, all taking place on Campus Groningen, the innovation engine of the Northern Netherlands.


**C**ONTROLLING ANTIBIOTIC ACTIVITY by light. Nobel Prize winner Ben Feringa and his colleagues on Campus Groningen developed this method, allowing the precise activation of antibiotics while avoiding collateral killing of human microbiota and spreading of resistance. “This is a whole new way of thinking about drug research”, says the laureate. And this out-of-the-box thinking is exactly what makes Campus Groningen stand out.

The ‘triple helix’ model of collaboration between companies, governments and knowledge institutes is commonplace at Campus Groningen. Researchers on this Campus work at the forefront of fundamental and applied knowledge, in multiple societal impact fields. The Campus gains worldwide attention for its ability to discover, develop and test new types of drugs, of which antibiotics are one of the most eye-catching.

“While most universities have two or three research groups working on the development of new antibiotics, we have closer to twenty with more than 40 principal investigators”, says Oscar Kuipers, Scientific Director of the Center for Sustainable Antimicrobials (CeSAM). CeSAM was recently founded by the University of Groningen and the

University Medical Center Groningen. Its aims: development of fully characterized and successfully clinically tested (phase I) new and smart antibiotics; the comprehensive understanding of antimicrobial resistance of eminent pathogens; the establishment of novel so-called personalized therapeutic concepts; prevention of antimicrobial resistance.

It’s not only the number of world-leading researchers, it’s also their vast variety of backgrounds that puts CeSAM at the forefront of antibiotics research. Their backgrounds range from chemistry, (medical) biology, biotechnology, and pharmacy to direct patient care. By working together in CeSAM their innovative potential has increased drastically.

**CAMPUS GRONINGEN HARBOURS** the entire drug development pipeline, from compound discovery and synthesis all the way to clinical trials. CeSAM collaborates with regional Life Science companies to drive the development of new antibiotics. All of this is with the goal of further improving patient care. And in that aspect CeSAM is already excellent. The number of patients coming to the University Medical Centre for the treatment of antimicrobial resistant infections – a increasingly as a last resort – says it all. 

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OSCAR KUIPERS, SCIENTIFIC DIRECTOR OF THE CENTER FOR SUSTAINABLE ANTIMICROBIALS