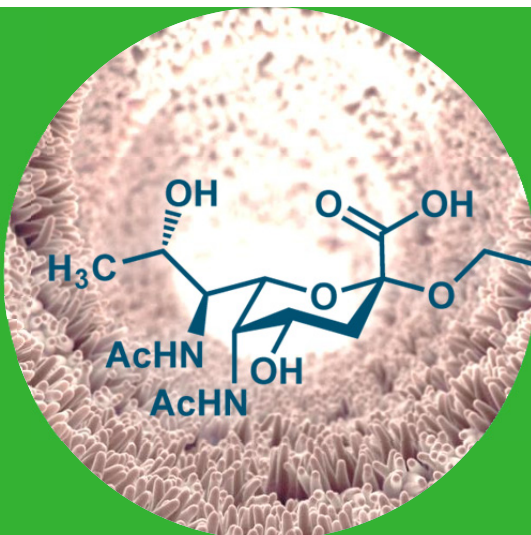


# Vacancy: PhD position in Organic Chemistry & Chemical Biology

Getting a Grip on Microbial Sialic Acids in our Gut



WAGENINGEN UNIVERSITY  
LABORATORY OF ORGANIC CHEMISTRY



## Research Topic

As a PhD student at the Laboratory of Organic Chemistry you will participate in an exciting research project at the interface of organic chemistry and chemical biology. The goal of the project is to investigate the chemical synthesis and glycochemistry of microbial carbohydrate derivatives. Many symbiotic and pathogenic microbes that interact with the human body display a wide range of structurally unique sialic acids. The roles microbial sialic acids play in the functioning of these microbes are currently not well understood. In this highly interdisciplinary project, involving organic synthesis and chemical biology, you will receive training in both areas and collaborate closely with researchers of the Laboratory of Microbiology at Wageningen University.

An important initial goal in the project will be to develop a synthesis for microbial sialic acids and derivatives with additional bio-orthogonal functionalities, e.g. reactive groups & fluorophores, to turn them into activity-based probes and in vivo labeling agents. You will use the developed molecular toolbox to investigate the role(s) of microbial sialic acids in several relevant human-associated microbes and probe the proteins that interact with them during their lifecycle, i.e. glycosyltransferases, lectins and glycosidases.

## Requirements

You should have an MSc degree in Chemistry/ Molecular Sciences, or comparable curriculum. A strong background and solid hands-on experience in synthetic organic chemistry is a prerequisite. A strong interest (or preferentially experience) in chemical biology oriented research is also essential. Your affinity for the multidisciplinary and collaborative nature of the project and good written and oral communication skills in English are additional requirements.

## We offer

A PhD position with an approximate start date of December 2012. Initially for a period of 1.5 years with extension of 2.5 years after successful evaluation. Gross salary per month € 2042 in the 1<sup>st</sup> year rising up to € 2612 per month in the 4<sup>th</sup> year.

## We are

Within Wageningen University, the Laboratory of Organic Chemistry ([www.orc.wur.nl](http://www.orc.wur.nl)) constitutes a large and interdisciplinary research team. We investigate the design, synthesis and behavior of (bio)active organic surfaces & molecules to address questions in the area of life sciences. Recently published examples of our research include chemo-enzymatic synthesis & glycochemistry of ganglioside analogues, biofunctionalized organic monolayers and microchannels, immobilized enzymes, and bio-organic nanoparticles (in journals as *Angew. Chem.*, *J. Am. Chem. Soc.*, *Chem. Com.*, *ChemBioChem*, *OBC*, *Glycochemistry*, *Carbohydrate Res.*). Our laboratories are well-equipped with all the instruments required for the synthesis and evaluation of complex (bio)molecules & (bio)organic surfaces, and have an experienced technical staff.

## Interested?

Apply by sending an application letter and your resume to dr. Tom Wennekes via e-mail ([tom.wennekes@wur.nl](mailto:tom.wennekes@wur.nl)) **before September 15<sup>th</sup> 2012.**

