

## Joint PhD between Universität Siegen / CSSB (Hamburg) and the Rijksuniversiteit Groningen

Topic: "Deconstructing the Norovirus Particle"

This PhD position is a joint position between the Prof. Uetrecht (Siegen/Hamburg) lab and the Prof. Roos (Groningen) lab.

The first year of the project is carried out in the group of Wouter Roos at the University of Groningen focusing on mechanical properties of norovirus-like particles using **atomic force microscopy**. The following three years the candidate will be based in Hamburg in Charlotte Uetrecht's group at the CSSB Centre for Structural Systems Biology focusing on **native mass spectrometry** of the norovirus-like particles.

Previous work indicated strain specific stability and the influence of the VP1 N-terminus on capsid sizes. During the project mutants will be designed based on natural variant sequences to design very stable shell assemblies. These will be combined with protruding domains from different strains to display respective antigens. Moreover, chimeric particles will be assembled and their properties probed. Thereby, fine-tuned norovirus-like particles can be designed. The combination of Mass Spectrometry and Atomic Force Microscopy has already proven to be a very strong, complementary approach to study viral particles and building onto previous, combined success of the Uetrecht and Roos groups now the structural properties of norovirus-like particles will be probed and designed.

We are looking for a team player with a MSc degree in Physics, Chemistry or a related discipline.

The position is expected to be filled as soon as possible.

Inquiries and/or applications including a CV and motivation letter can be sent to

Wouter Roos: [w.h.roos@rug.nl](mailto:w.h.roos@rug.nl)

or

Charlotte Uetrecht: [charlotte.uetrecht@cssb-hamburg.de](mailto:charlotte.uetrecht@cssb-hamburg.de)

For more information about the labs please visit

[https://www.rug.nl/\(...\)olecular-biophysics/](https://www.rug.nl/(...)olecular-biophysics/)

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