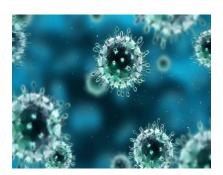
## Master Thesis position available on the topic:

## "Understanding Influenza A virus assembly viav quantitative fluorescence microscopy"

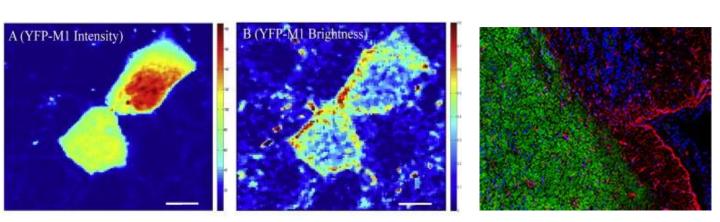
For Biology/Biochemistry students and Physics students with an interest in Biophysics



The Influenza A virus (IV A) is a serious threat to human health. The development of an effective therapeutic approach requires a deep understanding of the molecular mechanisms involved in the virus replication cycle.

The IV A is formed by a lipid envelope, in which several proteins are embedded. Below the envelope, the virus matrix protein 1 (M1) forms a layer, which is needed for new virus formation. Our research group is focused in particular on the study of M1 oligomerization and protein-protein interactions between M1 and other viral proteins. To this aim, cutting-edge microscopy techniques will be applied to perform investigations directly in single living cells.

The student will gain expertise in <u>cell culturing and imaging</u> and in all the steps involved in <u>protein expression and visualization</u>, including <u>cloning</u>, <u>purification</u> and <u>immunofluorescence</u>. The development of <u>computational scripts for data analysis</u> might be also part of the work, if desired.



## **CONTACTS**

We will be happy to answer to any questions. Contact us!

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