



DIPARTIMENTO DI FARMACIA E BIOTECNOLOGIE

AVVISO DI SEMINARIO

Il giorno **18 Aprile 2019**
alle ore **14:30**
presso l'Aula 2, via Belmeloro 6

la **Dott.ssa Valentina Vignali**
University of Groningen, University Medical Center Groningen,
Department of Biomedical Engineering, Groningen, The
Netherlands
(ospite Dott. Zuccheri)

terrà un seminario dal titolo:

ENGINEERED VIRUS PARTICLES AND VIRUS- LIKE PARTICLES

I colleghi e gli studenti interessati sono cordialmente invitati

Commissione Ricerca e Attività Correlate - FaBiT

ABSTRACT

Over the last years viruses proved to be versatile particles with a large variety of applications in basic, translational research and materials science.

The control of the surface properties as well as the geometries of these self-assembled nanoparticles is crucial for tuning their functions. With this purpose, in our lab we are investigating the possibility to introduce new functionalities onto the viral capsids through a single-step biocatalytic reaction. Moreover, we are also developing a reversible approach which can allow the direction of the assembly of single capsid proteins on different templates.

At the moment, the tobacco mosaic virus and the bacteriophage M13 are at the center of our studies, but our methods can be potentially applied to other types of viruses and to proteins of non-viral origin.

BIOGRAPHICAL SKETCH



Dr Vignali obtained a Master's Degree in Pharmaceutical Biotechnology at the University of Bologna in 2014, with a thesis focused on the conformational study of the murine prion protein. Afterwards, she continued her Master's research at the Department of Pharmacy and Biotechnology of the University of Bologna, as research fellow in the group of Prof. Bruno Samorì. In 2017 she moved to Groningen to start her doctoral studies in the group of Patrick van Rijn, and she is currently working on the development of engineered virus particles for biomedical applications.