



UNIVERSITÀ  
di VERONA

Scuola di Dottorato  
di **SCIENZE NATURALI ED INGEGNERISTICHE**  
Corso di Dottorato in Biotecnologie

Scuola di Dottorato  
di **SCIENZE DELLA VITA E DELLA SALUTE**  
Corso di Dottorato in Medicina Biomolecolare

# “Exploitation of nanoparticle–protein corona for emerging therapeutic and diagnostic applications”

April 3<sup>th</sup>, 2017 - h. 14.30

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## Abstract

Despite the advances in biomedical applications of nanoparticles and numerous publications, few nanoparticles have made it to clinical trials and even fewer have reached clinical practice. This wide gap between bench discoveries and clinical applications is mainly because of our limited understanding of the biological identity of nanoparticles. In biological environments (e.g. blood, saliva, interstitial fluids etc.), nanoparticles are coated by a ‘protein corona’, critically affecting physiological and therapeutic responses. In this talk, we highlight the emerging applications of protein corona towards its use in therapeutics and diagnostics. In particular, special emphasis is given to the exploitation of protein corona for targeted delivery of nanomaterials and early cancer detection. By highlighting such recent applications of protein corona, we hope to demonstrate that this bio-entity has the potential to determine the future success of nanoparticles in biomedicine beyond their currently envisioned purposes.

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The lecture will take place **at 14.30 – Sala Verde – Cà Vignal – Strada Le Grazie, 15**

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For each hour of seminar, 1 CFR (provided for the specific activities of PhD Program in Biotechnology) will be recognized to students attending the event.

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