

Real-Time Protein Monitoring

PhD Candidate: Laura Gabriela Rodriguez Barroso

A Versatile Monitoring Technique for Real-Time Protein Activity Tracking Within Cellular and Biomimetic Scaffold Environments

Dr. Laura Gabriela Rodriguez Barroso's work presented a versatile and straight forward technique for monitoring proteins and protein interactions within cells and other complex environments, based on a novel nano-bio-technology method. Highly sensitive gold edge coated triangular silver nanostructures (AuTSNP), which are highly responsive to molecular interactions on their surfaces, were used to probe protein behaviours within complex cellular and tissue regeneration environments, as well as recognize antibody-antigen (Ab-Ag) interactions within dynamic biological surroundings. This versatile method has the potential to provide accurate and rapid detection of proteins and to lead to better treatments for rising-infection and disease challenges.