



Università di Roma "Tor Vergata"

Dipartimento di Scienze e Tecnologie Chimiche

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AVVISO DI SEMINARIO

Lunedì 8 Giugno 2015 Ore 12.00

Aula Seminari

Dipartimento di Scienze e Tecnologie Chimiche

Prof. Sheref Mansy

Centre for Integrative Biology (CIBIO)

University of Trento

Terrà un seminario dal titolo:

Cell-free genetic systems for the construction of cellular mimics

Proponente: Prof. Francesco Ricci



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Cell-free genetic systems for the construction of cellular mimics

Sheref Mansy

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Abstract:

Cell-free transcription–translation reactions are typically unresponsive to analytes and are constructed with strong transcriptional promoters and ribosome binding sites to maximize the production of gene products. Such an approach is successful for the expression of a single protein but not well tuned to building more complex systems that integrate with the surrounding environment in a manner similar to that of a living cell. To this end, we have determined the influences of mRNA and protein expression on multigene construct performance and developed a new selection strategy to build ligand-responsive systems. The data are being used to better construct cellular mimics capable of responding to the environment and to communicate with natural, living cells.