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INM-KOLLOQUIUM

"REWIRING CELL SURFACES WITH CLICK CHEMISTRY FOR APPLICATIONS IN CELL BIOLOGY AND TISSUE ENGINEERING"

Prof. Dr. Muhammad N. Yousaf
Department of Chemistry, York University, Toronto, Canada

Dienstag, 22.08.2017, 11.00 Uhr

INM, Leibniz-Saal, Campus D2 5
Gastgeberin: Prof. Dr. Aránzazu del Campo

The rapid development of new small molecule drugs, nanomaterials, and genetic tools to modulate cellular function through cell surface manipulation has revolutionized the diagnosis, study, and treatment of disorders in human health. Since the cell membrane is a selective gateway barrier that serves as the first line of defense/offense and communication to its environment, new approaches that molecularly engineer or tailor cell membrane surfaces would allow for a new era in therapeutic design, therapeutic delivery, complex coculture tissue construction, and in situ imaging probe tracking technologies. In order to develop the next generation of multimodal therapies, cell behavior studies, and biotechnologies that focus on cell membrane biology, new tools that intersect the fields of chemistry, biology, and engineering are required. Herein, we develop an integrated method that combines bio-orthogonal chemistry, liposome fusion and cell surface engineering to rapidly tailor the cell surface with a variety of molecules, ligands and proteins for applications in cell biology and tissue engineering.

Wir laden 15 Minuten vor Beginn zu einem Get-together mit dem Referenten ein.

KONTAKT

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