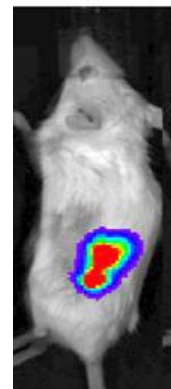
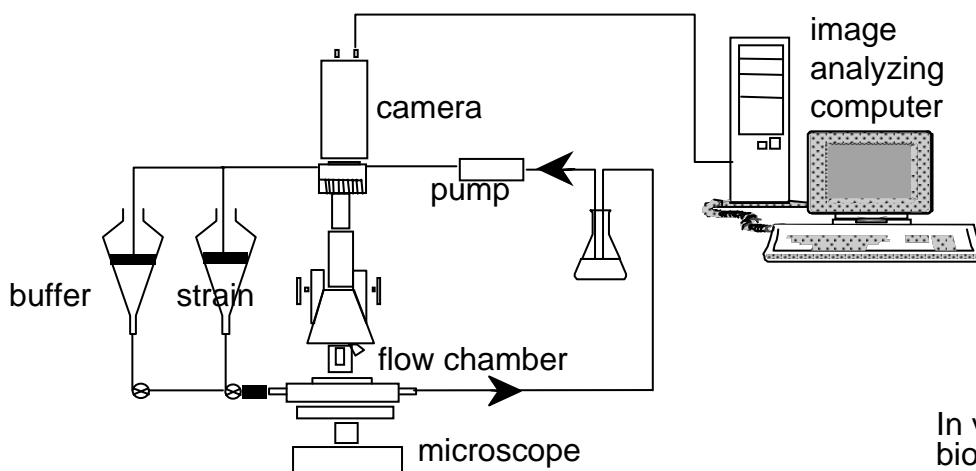


Project /PhD thesis

Physico-chemistry/Materials science/Microbiology

Topic: Biofunctional brush coating in order to inhibit biofilm formation on biomaterials



In vivo imaging of a biomaterials-associated infection in a mouse

Project description: In implant surgery, accumulation of micro-organisms is an adverse phenomenon, leading to failure of implants. Modification of biomaterial surfaces by applying a polymer brush is potentially successful to suppress microbial deposition. In this project, biofunctionalized polymer brushes will be applied on biomaterials surfaces. Biocidal compounds are conjugated with the polymer molecules to allow for brushes with dual functionality: resistance to bacterial deposition and lethal interaction. Differently modified surfaces will be evaluated in vitro and in vivo.

Type of work: experimental

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