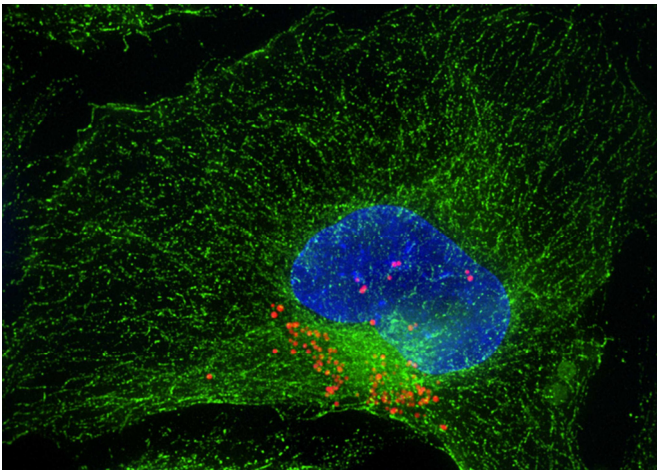


Biological Interactions of Nano-Engineered Materials



Cellular dynamics of polymer particles

Supervisor: Prof Frank Caruso (Australian Laureate Fellow, University of Melbourne)

Location: The entire PhD study will likely be conducted at The University of Melbourne

Project description: Advanced drug delivery using nano-engineered materials can overcome many obstacles associated with traditional therapies by utilizing features such as protection of fragile drugs, targeted delivery and controlled release. Such successful applications are strongly dependent on the biological interactions of nano-engineered materials. This project aims to address several key issues in this area, identify the correlation between material properties and their cellular dynamics, and thereby contributing to improved material design.

Student performance requirement: GPA of 8.5/10 or better. Applicants must belong to the top 25% of the student cohort. It is desirable that the student has good knowledge of cell biology.

Please note: the applicant must discuss the project proposal with the nominated supervisor before finalising and submitting it to The University of Melbourne. This proposal is open to IIT Kanpur-educated students only. The scholarship covers tuition and living expenses to work on the project. Applicants are not required to do any teaching. The duration of the PhD is 3-3.5 years and applicants can be admitted to the PhD candidature after the completion of a Master's degree or 4-year Bachelor degree from IIT Kanpur.

Rankings: The Melbourne School of Engineering is Australia's No. 1 engineering and technology school and No. 25 in the world.*

Website: www.eng.unimelb.edu.au

* Times Higher Education World University Rankings 2012-2013.