UNIVERSITA`CAMPUS BIO-MEDICO DI ROMA

Facoltà Dipartimentale di Ingegneria

Seminario

Modelling Solutions to 21st Century Healthcare Challenges

Sean McGinty,
University of Glasgow
email: Sean.Mcginty@glasgow.ac.uk

Abstract:
In this seminar, Dr McGinty will give an overview of his recent modelling approaches in the area of healthcare technologies. His research is mathematical and computational in nature and is supported by a number of collaborations with local and international modellers, experimentalists, industrialists and clinicians. His work is dedicated towards transforming the performance of medical implants, refining and improving the costly drug development process and better understanding heart disease and intervention. This talk will focus primarily on his work on drug-eluting coronary stents (DES), which has culminated in the production of a DES which is currently undergoing pre-clinical trial. As well as his models of drug-release from durable polymer coated stents, he will describe his models of nanoporous polymer-free stents, which also have application in the area of therapeutic-releasing orthopaedic implants. The second part of the talk will briefly discuss Dr McGinty's recent research in the area of advanced cell culture systems, with applications including drug toxicity testing. Finally, he will mention some developing research interests in the area of congenital heart disease intervention.

Biosketch
Dr McGinty graduated with a BSc in Mathematics & Physics from the University of Strathclyde (Glasgow) in 2010. Immediately afterwards he undertook a PhD entitled “Stents and arterial flows,” also at Strathclyde. A short postdoctoral position followed, working on “Improved Risk Assessment of Carotid Arterial Disease using Ultrasound Elastography”, before a venture into the Wind Industry. After 2 years of working for the world’s largest renewable energy consultancy GL Garrad Hassan (now DNV-GL), Dr McGinty returned to academia to undertake a second postdoctoral position at Strathclyde where he substantially developed and expanded his earlier work on stents. After a brief spell as a Knowledge Exchange Associate with responsibilities for establishing and developing links with Industry and external organizations, Dr McGinty moved to the University of Glasgow in 2015 to take up a lectureship in Biomedical Engineering.

05 aprile 2016 - ore 14:30
Sala Conferenze - PRABB
Università Campus Bio-Medico di Roma
Via Álvaro del Portillo, 21
Info: Dott. Alberto Rainer email: a.rainer@unicampus.it