BIOENGINEERING SEMINAR

“Injectable Biomaterials for Treating Cardiovascular Disease”

Monday – October 19, 2015 – 1:30 p.m.
EPFL – room SV1717a

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host: Prof. Matthias Lutolf

Abstract
Cardiovascular disease remains the leading cause of death in the western world. Two major types of cardiovascular disease, myocardial infarction and peripheral artery disease, have few available treatments and therefore numerous patients continue to decline towards heart failure for the former and amputation for the latter. Current clinical trials have focused on cell therapies; however it is largely acknowledged that these cells act via paracrine mechanisms to recruit endogenous cells to help repair and regenerate the tissue. In animal models, it has been established that cellular recruitment to the damaged tissue can also occur via implantation of biomaterial scaffolds. Injectable materials are particularly attractive since they have the potential to be delivered minimally invasively, thereby requiring less recovery time and reducing the chances of infection. This talk will cover recent developments and translational progress with the use of injectable biomaterials for treating cardiovascular disease.

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