

Università di Pisa Dipartimento di Patologia Chirurgica, Medica, Molecolare e dell'Area Critica Dipartimento di Ingegneria Civile e Industriale



AVVISO DI SEMINARIO



Prof. Cesare Stefanini The BioRobotics Institute, Scuola Superiore Sant'Anna

15 Maggio ore 18 - 19

Presso l'<u>Aula Pacinotti</u> Scuola di Ingegneria

Design and Prototyping of Miniaturized Systems for Medical Applications

The objective of this seminar is to provide participants an introduction to methods used in many international universities, and in some design firms in "Silicon Valley," to promote user-centered design and fabrication of for miniaturized systems for medical applications. The seminar focuses on the early stages of product development when the main challenge is to determine "what" to design and "how" to fabricate. Specific methods introduced in the course include: structured brainstorming and design definition, user and technology benchmarking, personal development and critical experience and critical function prototyping. Eventually, actual case studies on the application of Creative Design for Addive Manufacturing technologies will be presented and discussed.

Cesare Stefanini [M.Sc. in Mech. Eng. (honors): 1997, PhD in Microengineering (honors): 2002)] served as Assistant Professor, from November 2014 as Associate Professor and then from October 2018 as Full Professor at the BioRobotics Institute of Scuola Superiore Sant'Anna of Pisa, Italy, with the role of Area Leader in "Creative Engineering Design". His research activity is applied to different fields, including small scale biorobotics, actuators for compliant robots, biomechatronics and micromechatronics for medical applications. He received international recognitions for the development of novel actuators for microrobots and he has been visiting researcher at the University of Stanford, Center for Design Research, where he focused his activity on the issue of high-efficient, high performance mechanisms for bio-robotics.