

Joint Biomedical Engineering Seminar Series

MU ▪ MCW ▪ UWM

Seminar Announcement

Friday, September 15, 2017

Noon – 1:00 pm

Olin Engineering, Room 202

Marquette University

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Abstract

TOPICS ON BIOMETRICS

The future of dental and medical research will be driven by innovations and discoveries resulting from the convergence of medicine with engineering, computational, physical, chemical, life and social sciences. Such convergence will lead to greater understanding of the etiology of diseases or disorders and technological breakthroughs in the way that we diagnose, treat and manage diseases more effectively.

The key bridge in such multidisciplinary activity is the in-depth knowledge of the understanding and usage of biomaterials. Biomaterials and their applications in dentistry and medicine have received great deal of attention in the last decade and are becoming one of the fastest growing fields in science and technology. With the new advances in biomaterials, the likelihood of making engineering tissues and safe loaded nano/micros-carriers for regenerative medicine and drug delivery applications is increasing.

This talk presents the ongoing projects in our laboratory that focuses on the use of biomaterials in regenerative medicine and drug delivery. 3D-printing method, as our current method of fabricating the medical constructs, will be highlighted. More specifically, critically sized craniomaxillofacial defects and combination of 3D printing and microfluidic techniques to overcome the challenges in their treatments, medical and dental integrated multiphasic biomaterials for single or multi-tissue reconstruction/regeneration, and materials for preservation of oral tissue will be discussed.

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Olin Engineering Center is located at 1515 W. Wisconsin Ave, Milwaukee, WI. Parking is available in Structure 1 on 16th Street between Wisconsin & Wells Aves. Refreshments will be served.