

# SEMINAR SERIES

Supported by The Department of Biomechanics and  
The Center for Research in Human Movement Variability (MOVCENTR)



## BIOMIMETIC POLYMER NANOFIBER- BASED MATERIALS FOR CARDIOVASCULAR APPLICATION

Featuring Dr. Kaspars Maleckis

University of Nebraska at Omaha

February 21, 2020 | 12:00 - 1:15 pm | BRB 167

Parking Available in Lot T

### PRESENTATION ABSTRACT

Polymer nanofiber-based materials have attracted significant interest in biomedical applications due to their unique properties. Despite the high promise, these novel materials have not been able to reach their full potential due to the limited control over their manufacturing, structure, and mechanical properties. In this presentation, I will talk about my research focused on the manufacturing and properties of the polymer nanofibers and how they can be optimized to create novel biomimetic materials and devices for cardiovascular and other biomedical applications.

### ABOUT DR. MALECKIS

Dr. Kaspars Maleckis is an Assistant Professor in the Department of Biomechanics at the University of Nebraska Omaha. His research is focused on the development and characterization of mechanically-optimized nanostructured biomaterials and devices with an emphasis on polymer nanofiber-based biomaterials for cardiovascular applications. Dr. Maleckis received his Ph.D. in Biomedical Engineering from the University of Nebraska-Lincoln in 2017 and did his postdoctoral training at the University of Nebraska Medical Center.

more info at [cobre.unomaha.edu](http://cobre.unomaha.edu)

\*This seminar was supported by the National Institutes of General Medical Sciences of the National Institutes of Health under Award Number P20GM109090  
Center for Research in Human Movement Variability. | The University of Nebraska at Omaha shall not discriminate based upon age, race, ethnicity, color,  
national origin, gender/identity, sex, pregnancy, disability, sexual orientation, genetic information, veteran's status, marital status, religion, or political affiliation.

UNIVERSITY OF  
**Nebraska**  
Omaha

