Health/Bio

Current Projects:

Project Title: Mathematical Control Theory and Analysis of Partial Differential Equations Coupled Across a Boundary Interface PI/co-PIs: G. Avalos and P. **Guven Geredeli** Funding Agency: NSF Dollar Amount and Duration: \$213,787; 07/2019 - 06/2022

Project Title: Biomechanical Indicators of Bicuspid Aortic Valve Dysfunction PI: M.-C. **Hsu** Funding Agency: National Institutes of Health Duration: 06/2018 - 05/2022

Project Title: Analysis and Control Theory for Moving Boundary and Nonlinear Phenomena in Interactive Partial Differential Equations PI/co-PIs: G. Avalos and P. **Guven Geredeli** Funding Agency: NSF Dollar Amount and Duration: \$328,901; 07/2016 - 06/2020

Project Title: Novel Simulation Technologies for BHV Long-Term Durability PI: M.-C. **Hsu** Funding Agency: National Institutes of Health Duration: 05/2016 - 04/2020

Project Title: Microfluidic Fiber Fabrication for Biotech Applications PI/co-PIs: N. **Hashemi**, R. Montazami, D. Heisterkamp Funding agency: DOD - Army Research Office Dollar Amount and Duration: \$69,771; 09/2017 - 01/2020

Project Title: Three Dimensional Printed Scaffolds for Understanding Effect of Cavitation on Blood Brain Barrier PI/co-PIs: N. **Hashemi**, R. Montazami Funding agency: DOD - Office of Naval Research Dollar Amount and Duration: \$301,000; 05/2017 - 06/2020

Completed 2019:

Project Title: Microfibrous Scaffolds to Navigate Single Neurons PI: N. **Hashemi** Funding agency: DOD - Office of Naval Research Dollar Amount and Duration: \$201,709; 2/1/2016 - 1/1/2019

Completed 2016:

Project Title: Develop an Eco-friendly, Cost-effective Biogrout for Concrete Crack Repair PI/co-PIs: K. **Wang** and Z. Wen Sponsor: MTC Dollar Amount and Duration: \$44,916; 9/1/ 2015 - 5/31/2016