



2022



**RESEARCH DAY**

**Monday,  
November 14th  
SEH Room B1220  
9AM-5PM**



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**THE GEORGE WASHINGTON UNIVERSITY**

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WASHINGTON, DC



# Schedule of Events

9:00 – 9:15 AM- **Introductory Remarks: Dr. Murray Loew, BME Chair**

9:15 – 9:30 AM- **Blitz Faculty Introduction**

9:30 – 10:30 AM- **Keynote Speaker: Dr. Jennifer L. West, Dean of the School of Engineering, University of Virginia**

10:30 – 10:45 AM- **Coffee Break**

10:45 – 1 PM- **Graduate Students Presentations**

1:00 – 2:00 PM- **Lunch**

2:00 – 2:30 PM- **Invited Speaker: Dr. Julie E. Bauman, Dr. Cyrus Katzen Family Director of the GW Cancer Center**

2:30 – 2:45- **Blitz Undergrad Students Presentations**

2:45 – 3:45 PM- **Career Panel**

3:45 – 4:15 PM- **Closing Remarks, Awards**

4:15-5 PM- **Reception**



# Graduate Student Presentations 10:45-1 PM

**Gabriela Ronning-Arnesen, Nanoplastics are in our blood, what now? How nanoplastics are impacting platelet function?**

**Weizhen Li, High-throughput peri-cellular oxygen consumption measurement and hypoxia study of 96-well hiPSC-CMs syncytium**

**Tara Diba, Quantitative Strain Ultrasound Elastography Using Pressure Sensors: A Feasibility Study**

**RyeAnne Ricker, Raman spectroscopy: the future of diagnostics**

**Rebekah Russo, Optogenetic stimulation of intrinsic cardiac autonomic neurons reveals the interaction between catecholaminergic and cholinergic pathways**

**John Hill, Analyzing gene expression after administration of low-intensity therapeutic ultrasound in human islet cells**

**Zhiyuan Chen, Soft and Transparent Microelectrodes and Interconnects for Multi-functional Biointerfacing**

**Baijun Xie, Empathetic Social Robot Companion with Personalized Social Games**

**David McLeod, A Standard 96 Well Based High Throughput Microfluidic Perfusion Biofilm Reactor**



# **Undergraduate Student Presentations 2:30-2:45PM**

**Uma Sharma, Super-voxel Transformation of Multi-modal Images in Patients with Fibrous Dysplasia to Detect and Predict Heterogeneity After Treatment with Denosumab**

**Arielle Maignan, The 'Pawfect' Dog: User-Centered Design of Natural Behaviors for a Robotic Dog**

**Isabelle Eskay, Sodium alginate microspheres as drug release vehicles**

**Sarah Antonevich, Optical oxygen sensing in cardiac fibroblasts**

**Salah Masri, Studying the effect of calcium on circulating tumor cell invasion**

**Rahil Patel, Anonymization and Validation of 3-Dimensional Volumetric Renderings of Computed Tomography (CT) data using commercially available T1W MRI-Based Algorithms**

**Aman Gill, Optimization of a whole heart staining approach to identify infarct size in excised perfused hearts after coronary ligation**



## Career Panel

2:45-3:45PM

Rachel Schwartz, [George Washington University](#)

Marian Acknul-Farmer, [University of Maryland](#)

Allan Guan, [FDA](#)

Hetal Odobasic, [FDA](#)

Mene Zua, [GE Healthcare](#)

Alexsis Wands, [Medtronic](#)

Kalkidan Molla, [FDA \(Moderator\)](#)