

<b>Poster Number</b>	<b>Abstract Title</b>	<b>Presenter</b>	<b>Institution</b>
<b>1</b>	Lipid droplets as substrates for protein phase separation	Advika Kamatar	University of Texas at Austin
<b>2</b>	Solids and Liquids in Clathrin-Mediated Endocytosis	Brandon Malady	University of Texas at Austin
<b>3</b>	Using Methacrylated Hyaluronic Acid Hydrogels as a model for IPF to Study the Effect of Particulate Matter on Lung Fibroblasts	Darren Loh	University of Texas at Austin
<b>4</b>	Composite-Coated Endotracheal Tubes for Restoring Vocal Fold Function After Traumatic Intubation Injury	Gabriela Cervantes-Gonzales – Travel Award	University of Texas at San Antonio
<b>5</b>	PEG Hydrogel/Shape Memory Polymer Foam Composite Biopsy Sealants with Multimodal Contrast	Matthew Jungmann	Texas A&M University
<b>6</b>	Understanding the Impact of PEG Immunogenicity on the Host Response to Hydrogel Implants	Mahmood Zabihi	Texas A&M University
<b>7</b>	Integrin Targeting Multilayer Vascular Grafts for Sustained Thromboresistance	Abbey Nkansah	University of Texas at Austin
<b>8</b>	Model-directed Design of a High Compliance Vascular Graft with Improved Kink Resistance	Andrew Robinson	University of Texas at Austin
<b>9</b>	Interpenetrating Network Design to Increase Damage-Resistant Hydrogel Coatings for Cardiovascular Devices	Ashauntee Fairley	University of Texas at Austin
<b>10</b>	Fatigue Testing of Hydrogel Electrodes for the Treatment of Ventricular Arrhythmia	Derek Bashe	University of Texas at Austin
<b>11</b>	Chemically Modified Rhamnan Sulfate Compounds as Therapeutics for Inflammation and Non-Alcoholic Fatty Liver Disease (NAFLD)	Greg Callahan	University of Texas at Austin

<b>12</b>	Introduction of Corrugation to Electrospun Vascular Grafts Improves Kink Resistance	Jonathan Leung	University of Texas at Austin
<b>13</b>	Manipulating cancer metabolism with chemically engineered biomaterials	Mohini Kamra	University of Texas at Austin
<b>14</b>	HYACINTH: A HYdrogel-based, Adhesive, Contraction-INDuctive, Therapeutic Hemostatic Material for Postpartum Hemorrhage	Sarah Hargett	Texas A&M University
<b>15</b>	In Vitro and Ex Vivo Assessment of a Hemostatic Hydrogel for Postpartum Hemorrhage	Prasenjeet Ingole	Texas A&M University
<b>16</b>	Multicenter Trial of Chlorinated Polyethylene Elastomer (CPE) for Maxillofacial Prosthetics	Lawrence Gettleman	University of Louisville
<b>17</b>	Biodegradable Microparticles Exhibiting Pulsatile Release for Single-Injection Vaccination	Alyssa Kunkel	Rice University
<b>18</b>	Near-Infrared Light-Responsive Hydrogel for on-demand Dual Delivery of Proangiogenic Growth Factors	Bryce Larsen	University of Texas at Austin
<b>19</b>	Controlled Release of Small Molecules and Biologics from a Supramolecular Peptide Hydrogel Enabled with Boronic Acid Dynamic Covalent Chemistry	Chaoyang Tang	Rice University
<b>20</b>	Delivery of Misoprostol via Lipid Coated Mesoporous Silica Nanoparticles for the regulation of BNIP3/L Mitophagy in Fat Cells during Cancer Cachexia	Cody Schiferl	University of Texas at San Antonio
<b>21</b>	Design of a Self-assembled Polymeric Oral Delivery Platform for Therapeutic Proteins	Fabiola Chapa-Villarreal	University of Texas at Austin

<b>22</b>	Synthesis and Characterization of PEG-Chitosan Hybrid Hydrogels with Polymerized Gentamicin	Joseph Duran	Texas A&M University
<b>23</b>	Electrospraying Methods to Modulate Antimicrobial Release from Polymeric Microspheres	Leopold Guo	University of Texas at Austin
<b>24</b>	Efficacy of Gallium Maltolate in Treatment of Chronic Wound Infections	Nicolai Ang	University of Texas at Austin
<b>25</b>	Development of UV-Crosslinkable Surface-Eroding Polymers for the Controlled Release of Immune Checkpoint Inhibitors	Heather Chia-Chien Hsu – Travel Award	Rice University
<b>26</b>	Liposome Coated Mesoporous Silica Nanoparticle Loaded with Forskolin Effectively Modulates Thermogenesis in Adipocytes in vitro and in vivo	David Zhang – Travel Award	University of Texas at San Antonio
<b>27</b>	Peristalsis drives a malignant mechanotransduction response in KRAS mutant colorectal cancer cells	Abbie Clevenger	Texas A&M University
<b>28</b>	Tunable hydrogel networks by varying secondary structure of hydrophilic peptoids provide viable 3D cell culture platforms for hMSCs	Aldaly Pineda-Hernandez	University of Texas at Austin
<b>29</b>	Characterizing Sex-Based Differences in hiPSC-Derived Cardiac Cell Metabolism	Anna McClain	University of Texas at Austin
<b>30</b>	Uncovering Heterogeneity in hiPSC-Derived Endothelial Progenitors from Different Differentiation Protocols	Brett Stern	University of Texas at Austin
<b>31</b>	Impact of Donor Age on Microvasculature Self-Assembly of induced Pluripotent Stem Cell Derived Endothelial Progenitors	Bryce Larsen	University of Texas at Austin
<b>32</b>	Matrix-Mechanical Memory: EMT Dynamics in PDAC	Elle Keogh Taubenfeld	University of Texas at Austin

<b>33</b>	Matrix mechanics regulates temporal changes in mesenchymal stroma	Gennifer Chiou	University of Texas at San Antonio
<b>34</b>	Self-assembly Nucleopeptide Hydrogels for Stem Cell Culture	Haidyn Ogg	University of Texas at Austin
<b>35</b>	Optimizing Vascular Tissue Regeneration: Engineering Stiffness-Controlled Norbornene-Modified Hyaluronic Acid Hydrogels for Enhanced Maturation of hiPSC-Derived Endothelial Progenitors	Jiwan Han	University of Texas at Austin
<b>36</b>	Engineering Immunomodulatory Materials: Indole-functionalized Gelatin Hydrogels	Kiara Perez	Texas A&M University
<b>37</b>	Overlapping contributions of matrix mechanics and hypoxia on glioblastoma phenotype	Mollie Harrison	University of Texas at Austin
<b>38</b>	Understanding Adipose Stem Cells Characteristics and Motility in the Endometrial Cancer Environment	Molly Chambers	University of Texas at San Antonio
<b>39</b>	Breast cancer tumor and cardiovascular microphysiological system to determine the role of HER2 in cardiac dysfunction	Paula Delgado	University of Texas at El Paso
<b>40</b>	Electrically Conductive Hydrogels for Central Nervous System Repair	Rebecca Duquette	University of Texas at Austin
<b>41</b>	Extracellular Matrix Influence on Dormancy: Insights from a 3D Bioengineered Model of Microscopic Colorectal Cancer Liver Metastasis	Sabrina VandenHeuvel – Travel Award	Texas A&M University
<b>42</b>	Role of radiation-induced, GBM-secreted extracellular matrix in tumor treatment resistance and recurrence	Alireza Sohrabi – Travel Award	University of Texas at Austin

<b>43</b>	Mimicking the viscoelastic nature of brain tissue to study neural cell behavior using a hyaluronic acid-based interpenetrating polymer network	Talia Sanazzaro	University of Texas at Austin
<b>44</b>	Cell-internalized synthetic nanogels for the induction of therapeutic phenotypes in murine macrophages	Mojtaba Ghanbari Mehrabani	University of Oklahoma
<b>45</b>	Nanogel-Cytokine Conjugates: A Platform Technology Approach for Macrophage Immunomodulation	Rana Ajeeb	University of Oklahoma
<b>46</b>	Intracerebral Immunotherapy to Accelerate Neurological Recovery after Intracerebral Hemorrhage	Christopher Pierce – Travel Award	University of Oklahoma
<b>47</b>	Impact of Molybdenum Disulfide (MoS <sub>2</sub> ) Nanoparticles on Macrophages	Samantha Foster	Texas A&M University
<b>48</b>	Investigating the Capacity of Polyelectrolyte Complex Micelles to Sequester Double-stranded RNA	Aasim Hussain	University of Texas at Austin
<b>49</b>	Effect of Poly(NIPAM) Nanoparticles on the Viability of Osteoblast-Like Cells	Asiah Lewis	University of Texas at San Antonio
<b>50</b>	Development of Chemical Tags for Universal Lipid Nanoparticle Visualization and Tracking in 2D and 3D Imaging	Hannia Balcorta	University of Texas at El Paso
<b>51</b>	Near-Infrared Afterglow Luminescence Amplification via Albumin Complexation of Semiconducting Polymer Nanoparticles for Surgical Navigation in Ex Vivo Porcine Models	Indrajit Srivastava	Texas Tech University
<b>51</b>	Molybdenum disulfide Nanoflowers Promote Intercellular Mitochondrial Transfer	John Soukar	Texas A&M University

<b>52</b>	Functionalized Hybrid Nanoparticles for Reactive Oxygen Species Scavenging in the Central Nervous System	Jordyn Wyse	University of Texas at San Antonio
<b>53</b>	Cellular and Noncellular Influences on Lipid Nanoparticle Tropism in Liver	Mario Mata Corral	University of Texas at El Paso
<b>54</b>	Cytocompatibility and Intrinsic Immunomodulation of Poly (Methacrylic Acid) Co-Polymer Nanogels to Macrophages	Paul Atiyeh	University of Oklahoma
<b>55</b>	Geometry and Surface Modification Effects on the Sensitivity of Anisotropic Gold-Hydrogel Biosensors	Priscilla Lopez	University of Texas at San Antonio
<b>56</b>	Drug Delivery Platforms for the Treatment of Ocular Diseases	J Jesus Rodriguez-Cruz	University of Texas at Austin
<b>57</b>	Matrix mechanics and external mechanical stimuli: two foundational elements for bone regeneration	Eugenia Morales	University of Texas at San Antonio
<b>58</b>	Durable and Antimicrobial Electrospun Wrap for Bone Regeneration	Isabelle Gilbert	University of Texas at Austin
<b>59</b>	Spatial Characterization over Time in a Rat Femoral Critical-Sized Defect Model	Alisa Isaac	University of Texas at San Antonio
<b>60</b>	Optimizing a Brain Inspired Bioink for 3D-Printed Neural Models	Ananya Datta	University of Oklahoma
<b>61</b>	Co-Electrospinning a Multifunctional Wrap to Treat Infection and Improve Bone Regeneration	Andres Luengo Martinez	University of Texas at Austin
<b>62</b>	Pyridostigmine Bromide Exposure Results In Neuroinflammation Impairing Enteric Neural Stem Cell Regeneration In Gulf War Illness	Claudia Collier	Texas A&M University
<b>63</b>	The Enderstruder: An accessible open-source syringe extruder compatible with Ender series 3D printers	Cody Crosby	Southwestern University

<b>64</b>	The application of iPSC-derived hMSC secreted products in a tissue-engineered tendon scaffold for ACL reconstruction	Erin Goebel	Texas A&M University
<b>65</b>	Designing Cost-effective Open-source High Resolution Multi-Material DLP Bioprinters	Gene Felix	Texas A&M University
<b>66</b>	Emulsion-Based Synthesis of PEG Microparticles using Michael Addition Chemistry	Isabella Thomas	Texas A&M University
<b>67</b>	Modelling Cardiac Atrophy Utilizing Engineered Tissue Platforms Subjected to Microgravity	Ivana Hernandez	University of Texas at El Paso
<b>68</b>	3D Microphysiological System to Model Breast Cancer Tumor Migration through the Blood Brain Barrier and Evaluate the role of ICAM-1 and VCAM-1 in Metastasis	Jose Perez	University of Texas at El Paso
<b>69</b>	Shape-dependent granular hydrogel-based bio-ink for extrusion bioprinting	Raza Ur Reman Syed	Texas A&M University
<b>70</b>	Dynamically Cross-Linked Granular Hydrogels for 3D Printing and Therapeutic Delivery	Ryan Davis	Texas A&M University
<b>71</b>	Modelling PD using Fibrinogen coated Scaffolds for the Differentiation of Human Neural Progenitor Cells into Dopaminergic Neurons	Salma Ramirez	University of Texas at El Paso
<b>72</b>	Suspension Electrospinning of Decellularized Extracellular Matrix: A New Approach to Retain Bioactivity	Sarah Jones	University of Texas at Austin
<b>73</b>	Microgel-Embedded DLP Bioink for Biomedical Applications	Yuang Zhang	Texas A&M University

<b>74</b>	Development of a Benchtop Pelvic Model for Testing Gynecological Devices	Ashley Hicks – Travel Award	University of Texas at Austin
<b>75</b>	Inorganic Nanomaterial-based Expandable Shape-Memory Hemostat for Treatment of Non-Compressible Hemorrhage	Sapartashi Biswas – Travel Award	Texas A&M University
<b>76</b>	Evaluation of In Situ Assembled Granular Hydrogel Scaffolds for Neural Progenitor Cells Delivery in a Severe Spinal Cord Injury Model	Yu-Chi Huang – Travel Award	Texas A&M University
<b>77</b>	Impact of Cardiac-Vascular Crosstalk on the Maturity of hiPSC-derived Cardiomyocytes in 3D Printed Cardiovascular Organoids	Sogu Sohn – Travel Award	University of Texas at Austin