

SESEY 2025 Projects	Topic	Projects (General Topic) Summer 2025	SESEY 2024 Projects	Projects (General Topic)
<b>Faculty Mentor</b>			<b>Faculty Mentor</b>	
<b>Chih-hung Chang</b>	ChE	Chemical Sensor and Mobile robot	Chih-hung Chang	1) Robotics 2) Chemical sensors
<b>Zhenxing Feng</b>	ChE	1) Li-ion battery manufacturing	Kaitlin Fogg	1) Gel Diffusion 2) Tampon nanoplastics 3) endometriosis imaging
	ChE	2) Green Hydrogen with efficient electrolysis		
<b>LineyArnadottir</b>	ChE/CS	experiments	Elaine Fu	1) 3D printed microneedle arrays for sensing 2) Electrochemical sensors for personalized medicine
<b>Melissa Santala</b>	MatSci	Using electron microscopy to image materials and determine atomic structure of elements		
<b>Lucas Ellis</b>	ChE	plastics!		
<b>Skip Rochefort</b>	ChE/EnvE	1) Plastics to Fuel - Helenator Drip Tape		
	ChE/EnvE	2) Plastics to Fuel - Analytical Techniques		
<b>Skip Rochefort</b>	ChE/EnvE	Novel Polymer Technique for a Wildfire Resistant Roof	Zhenxing Feng	1) Li-ion battery manufacturing 2) Green Hydrogen production
<b>Greg Rorrer</b>	ChE/Biotech	Clean Water for Algae Cultivation in a raceway	Donghua XU	Metallic Glasses
<b>Wendy/Christine</b>	EnvE/ChE	Using Fluorescent Molecules to Trace the Flow of Water	Tyler Radniecki	Anaerobic Digestion
<b>Tala Navab</b>	EnvE	Disinfection Methods for Drinking Water	Tala Navab	Disinfection Methods for Drinking Water
<b>Yuanzhe Liang</b>	EnvE	"Clean Water from Dirty Water" – DIY Water Filtration Challenge	David Ji/Chong Fang	High Energy Cathode Materials for Li-ion Batteries
<b>Lew Semprini</b>	EnvE	Hydrogel Beads for Remediation of Groundwater Contaminants	Kostas Goulas	Fuel Production from Plastics
<b>Jeff Nason</b>	EnvE	1) Metals and organic carbon removal from water by adsorption (3-4)	Lucas Ellis	Using Catalysts to convert lipids into Renewable Chemicals
<b>Kaitlin Fogg/Sam</b>	BioE	Investigating Diffusion Differences Across Cell Types	LineyArnadottir	Renewable Energy Computational Studies
<b>Joe Baio</b>	BioE	1) Nanoplastics in tampons	Jason Clark	Artificial Muscle
	BioE	2) Nanoplastics in cardiovascular plaque		
<b>Elaine Fu</b>	BioE	3D printed needles	Yuanzhe Liang	Sustainability Uncovered: Environmental and Economic Impacts
<b>David Blunk</b>	ME	Solid fuel ignition and flame spread	Lew Semprini	Microbial Hydrogel Bioremediation
<b>Amir Nayerri</b>	Computer Science	1) Self-similarity - Fractals in Nature	Amir Nayerri	1) Self-similarity - Fractals in Nature 2) Graph Theory - Solve the Maze (Python)
	Computer Science	2) Graph Theory - Solve the Maze (Python)		
			Skip Rochefort	1) Plastics to Fuel - Circularity 2) Plastics to Fuel - Analytical Techniques
			Skip Rochefort	1) Chitosan Sol-Gel Phase Diagram 2) Hydrogels for Bioremediation