## Potential SURF projects for 2026

**Project Title:** Dental injury with maxillofacial miniplate hardware in facial trauma patients

**Investigator:** Kevin C. Lee, kcl2136@uw.edu

What is the incidence and what are the risk factors for mandibular and maxillary dental injury with miniplate **Study Question:** 

fixation among patients with maxillofacial fracture repair

**Background** 

Data collection, data organization, scientific writing Requirements

**Project Title:** A lifecycle assessment of digital and traditional workflows for a single unit zirconia crown

**Investigator:** Ivy Lin, ivylin2@uw.edu

**Study Question:** Does the digital dental workflow have less environmental impact than the traditional workflow?

**Background** 

Requirements

N/A

**Project Title:** OMV formation in P. gingivalis Sumita Jain, sumita@uw.edu **Investigator:** 

Does a particular lipid A structure (found in outer membranes of Gram-negative bacteria) impede OMV formation?

**Study Question:** We hypothesize that C4'-mono-phosphoryl lipid A (MPLA) inhibits vesiculation in P. gingivalis. We will assess

different wild-type strains and known hypo-vesiculating mutants for C4'-MPLA content.

**Background** 

Requirements

Interest in Microbiology and Host-pathogen interactions