Introduction
Primary methods to determine burn severity are visual observation and histology. Visual diagnoses are only 50% accurate.

CHALLENGES
Similar in clinical appearance
Heterogeneity

Differences in Management
SPT generally heals in 2-3 weeks
DPT requires grafting (surgery)

Project Goal
We seek to develop a low cost, handheld imaging device for the rapid and accurate assessment of burn wound injuries. This device will be available at all types of health care institutions.

The Vesta Imager: Project Design & Current Status
The camera is mounted on top of the casing by a slider and screws. The projector is placed on the bottom part of casing. Material used for the housing is Polyactic Acid (PLA).

The alpha prototype uses LabVIEW to project spatially patterned light onto skin and have the camera captures images of each pattern. From there, MATLAB performs image analysis and reveals scattering and absorption of the skin.

Device Testing and Validation
Construct tissue simulating phantoms with varying skin properties

Test phantoms using Alpha Prototype & BLI SFDI technology

Validate device using an optical model for graded burn severity

Timeline

SALUX Diagnostics: Meet our Team
It is our mission to promote excellence in diagnostic imaging technology and patient care.

Contact Info:
Akshita Agrawal: akshitaagrawal@uci.edu
Kevin Trieu: kt59@uci.edu
Eashani Sathalingam: eashani.sathalingam@uci.edu
Dimple Patel: dmpatel@uci.edu
Maakee Kyne Pronda: mkynepronda@uci.edu
Shreya Akkenapally: shreya.akkenapally@uci.edu

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