3D Printing Airway Trainers: BME 402

Dates: April 24 - April 30, 2026

Client: Kristopher Schroeder, MD
Advisor: Dr. Paul Campagnola

Team:
Matt Sheridan (Communicator)
Dan Altschuler (Team Leader)
Cody Kryzer (BPAG)
Lance Johnson (BSAC)
Elleana Thom (BWIG)

Problem Statement

Airway management is an integral part of keeping a patient stable in many medical environments. While training medical practitioners with simple airway trainers has improved patient outcomes, this has not had the same effect on patients with abnormal airways. The use of 3D printing from existing patient imaging to create realistic and individualized airway manikins would assist medical professionals, allowing them to practice airway management skills on lifelike models.

Brief Status Update

The team presented at the final poster presentation and won Honorable mention for the Design Excellence Award!

Weekly Goals and Accomplishments

- Matt Sheridan
    - Presented
    - Won 2nd for Design excellence
- Dan Altschuler
    - Poster Presentation
    - 2nd for Design Excellence
- Cody Kryzer
    - Presented our poster
    - Honorable mention for design excellence
- Lance Johnson
    - Poster presentation
    - 2nd for Design excellence
- Elle Thom
    - Presented at the poster presentations
    - Won Honorable mention for Design Excellence!

Upcoming Goals

- Team
    - The team will present on Friday, finish up the final report and notebook, and then meet with Dr. Campagnola for a final meeting of the semester!
- Matt Sheridan
    - Finish final submissions
    - Meet for the final advisor meeting
- Dan Altschuler
    - Finish up report and notebook
    - Meet for a final advisor meeting
- Cody Kryzer
    - Finish report and notebook
    - Set up advisor meeting
- Lance Johnson
    - Finish up the report and notebook entries with the team
    - Set up the final advisor meeting
- Elle Thom
    - Submit report and notebooks