MEETING MINUTES

Meeting #: General Description

Meeting Date: 9-11
Meeting Time: 5:30pm – 7:00pm

Attendees: Aaron, Gia, Logan, Michelle

Table 1: Meeting Minutes

	Lit Review Topics: Align with technical roles (all) 1. Cleanroom Requirements (Materials for metals/plastics) - Gia 2. Fans (Power, Air flow in different shaped rooms, does the filter come in the fan?) - Aaron 3. Filters (Particle counting, HEPA filters) - Michelle 4. Modular Truss/Support Structures (collapsible structure) - Logan **SOTA Review:** Gia 1. Portable/modular cleanrooms **Customer Needs:** Logan/Michelle 1. Modular/Collapse 2. Spacious 3. Room connectability (attach clean and gown room) 4. Compliant storage 5. Fan HEPA 6. Generator connection to fan 7. Alcohol safe materials **Technical Needs:** Logan/Michelle 1. Positive pressure 2. Dimensions (10x10) or (10x20) 3. Particle counts (Level 7 CR) 4. FFU power requirement 5. Generator voltage output 6. Filter level 7. Temperature/pressure readout (20-25 C) 8. Load bearing N? **Mathematical Modeling:** All 1. Material Analysis 2. Positive Pressure (Thermodynamics Analysis) - What wall "structure" would be best 3. Fluid Analysis (Air Flow) - Different fan locations - Mass flow rates through exits 4. Truss Structure Analysis - 10x10 or 10x20 – can a 10x20 be used without supports? - Rigidity/stiffness requirements – does outside loads displace the structure?	ENG 314

	5. Electrical Load Analysis: - Spreadsheet for all the currents and voltages and power that are in the cleanroom. Determine the size of battery that would be needed to run the system in a power outage - UPS System that charges itself offline and can last a couple of hours Questions for Becker: - Power available for the fans - Other loads inside for power? - Hanging loads from the walls/ceiling? - Electrical and mechanical loads? - Rigidity requirements? - External point load required? - Biomedical club for fundraising? - NAU or Becker owned? - If other people are going to use the cleanroom can they match the 10% funding?	

Table 2: Action Items for Next Meeting

Action Item	**Person Assigned**	**Due Date**