То:	Attendees	Date of meeting:	May 20, 2019
Project Name:	Bull Run Hall Addition	Time of meeting:	9:00-10:00
Project No.:	1019004.01	Location of meeting:	Sci Tech, IABR, Conf Rm 1004
		Meeting Number:	1.1

Meeting Purpose: Programming for Instructional Cadaver Lab & Support Spaces

Attendees: <u>George Mason University:</u>

- Crystal Clemons, ITS
- Bill Hahn, BMED
- Martha Wescoat-Andes, COS
- Tony Falsetti, COS-FRSC
- Peggy Einhorn, COS
- Mary Ellen O'Toole, COS
- Vincent Hermoso, COS
- Donna Fox, COS
- Ramin Bighamian, VSE-Mech Eng.
- Shane Caswell, CEHD-ATEP-SMART
- Carrie McVicker, COS
- Paul Didier, EHS
- Laura Manno, Provost/Planning
- Colby Grant, Sci Tech Admin
- Debbie Brady, Facilities
- Virginia Steele, Facilities
- Joy Staulcup, Facilities
- Ben Allen, ITS

EYP:

- Melissa Burns, Academic Planner
- Brian Tucker, Lab Planner
- Rick Clarke, Lead Architectural Designer
- Rebecca Ross, Planner/Architect
- Suzanne Klein, Project Director

Minutes: General Comments:

The group met on George Mason University's SciTech campus to discuss functional space needs for Bull Run Hall Addition and Academic VIII Buildings. This meeting focused on needs specifically related to the Instructional Cadaver Lab and Support Spaces.



- 1. **Introductions:** Laura Mano provided an introduction of the design team EYP which was followed by introductions of all participants.
- 2. Project Overview: Laura explained that the Sci Tech campus will be a standalone campus and GMU is committing resources to make that happen. The first step is Bull Run Hall Addition followed by a 200,000gsf building, Academic VIII, listed as the number one priority to request capital funds. She asked the group to identify functional space needs to refine the program for the Bull Run Hall Addition and identify new needs for the expansion into Academic VIII.

Brian and Melissa lead a programming exercise to list and describe each functional space type related to the instructional cadaver lab.

- 3. **Specialty Uses for the Cadaver Lab:** The group described functional uses they envision in an Instructional Cadaver Lab.
 - Human Gross Anatomy and Physiology.
 - Shane Caswell explained that the College of Education and Human Development is a clinically oriented program and they would use the cadaver lab to study muscular skeletal anatomy.
 - Tony Falsetti explained that Forensic Sciences would teach Death Investigation using the Cadaver Lab.
 - Laura mentioned there will probably be an additional need for Medical Education to have a Cadaver Lab potentially in Academic VIII.

CADAVER LAB ANATOMY & PITYSIOLOGY D HUMAN GROSS SPECIMENS SETUP FOR OMISCLE/SKEETAI WAREDORE AREA SIGITAL AIDS IMAGINE (3D/MODEUNG) STORAGE EATH INVESTIGATION DIGITAL DISSECTION >UNDERGRAD ATP 74 STUD/BOPF 3 HPS. LECTURE (ESEWHERE) (BO-ED) 454 - 1thore - Lecruse IN LAD (2:45 OPEN LAB TIME -> OTES. TING - BIOMECH. PROPERTIO (24 STUDENTS) (SITTING)

- 4. Lab Set up/Teaching: The users described the set up and prep time required for the Cadaver Lab.
 - Typically have two students per table; class size of 24 students
 - Group agreed that they could have 4 (max) students per table.
 - Anatomy and Physiology 2 hr. 45 min total lab time; 45 min to 1 hour of total consists of lecture in the lab.
 - Students have outside open lab time; 8 hours per week.
 - Usually labs are open during the day for students to utilize for open lab time;

supervised.

- Labs = 24 students; Lecture (in lecture hall) = 80 100 students
- Forensics 3-hour lab time
 - Students often come back on Saturday for open lab time.
 - Graduate Students
- Shane talked about accreditation requirements. Students need to be able to come back after lab hours to use the lab. Lab needs to have some oversight and supervision during these hours.
- Shane explained there is a considerable amount of set up time for these labs usually 2 hours to set up.
- Ability to have a set of specimens that remain setup for a period of time.
- Models are very large and require a lot of cabinet storage for anatomy and physiology.
- Cadaver uses are unique for each group sharing actual cadaver would not be possible. There could be overlap where one group needs to perform full dissection and then specimens from that may be used by other groups.
 - Shane: CEHD most interested in the post full dissection review of bodies and specimens. Primary intent is to observe; not the doing dissection.
 - Tony: Gross Anatomy grad students do dissection on the cadavers.
 Could talk about prepping the cadavers at the end of a lab or removing parts for other classes to use.
 - Peggy Einhorn: Anatomy and Physiology/ Undergrad Biology go from the model to the specimen, but do not do any dissection.
- 5. Current Lab Use: Today there are no cadavers on campus.
 - Bill Hahn Classes currently go to Georgetown as part of a joint program to use their lab three times during the semester
 - Students suit up and pair up in small teams with an instructor at each cadaver.
 - Ex. Advanced Biomedical Program 600 level sections
 - Georgetown is not a good example to reference for the new lab, they are old school.
 - Shane students in their program use the lab at Fairfax for 6 weeks. Currently do not do dissection but would like to.

6. Forensics Specialized uses:

Body Farm (outdoor facility), Explosive Site, Crime Scene, Canines, DNA Lab + Sequencing, Specialized Chemistry, Photography Room

- The Sci-Tech campus could be completely house the Forensics program and be a destination site for students.
- DNA Lab and sequencing room has contamination concerns.
- Chemistry Lab for explosives and drug analysis (wet lab):
 - Analytical equipment
 - Fume Hoods
 - Secure Storage for Schedule 1 Drugs. (This is required to pass evaluation for DEA license.)
 - Photography Room should be adjacent to wet lab

Dark (no lights) room for image processing

- Not traditional dark room for developing film
- Trauma research partnership with Biomedical Engineering
 - Test properties of human bone
- Morgue Station
 - Decomposed human remains
 - Sink, wall mounted
 - Tables roll up and latch onto sink
 - Heavy Duty
 - Functional part of a prep room or be its own room adjacent to the cadaver lab.



7. Storage and Prep Space:

- Cooler to store cadavers (come from Richmond)
- Un-embalmed cadavers are used for forensics
 - Storage for 4 un-embalmed bodies at a time
 - Need refrigeration
 - In cooler for 24 hours
- Embalmed cadavers are used for gross anatomy
 - Do not need refrigeration.
 - The cadavers come embalmed.
 - In theory a body could last for 1 year; if scheduled right could be used for 12 months.
 - CEHD curriculum runs 12 months.
 - Peggy: Undergrad Anatomy and Physiology would not have their own cadavers, they will coordinate with other groups to share.
 - 24 total cadavers at one time (12 in storage; 12 in the lab)
- Need storage for Body Farm medical waste.
 - Prep areas for "cut down"
- Student storage space for backpacks etc.
- Washroom/locker room area

STORAGE/PREP	4. · GRHB - 3 HZ. LAB
SETUP: MODELS (2 HR.) 12 BODES 10 STODAGE 02 (AB -> NO DISTUBED	ATTUENCE - TOAMS/ WORK- OPEN LAB
TEAR TOWN (1 HR) - PREP AREA FOR TOWN (1 HR) - PREP AREA FOR CUT-DOWNS FOR FOR SSING MORGUE - DOPY FARM "MORGUE - DOPY FARM "COLLER - D & BODIES SCRIENED	- OVGRESSAHT OF FRANKTY - ONERHEAD CAMBERS + TECH! - GW - VCU Web Sorrau
*DISPOSAL STORAGE "SPACE" # OF BODIES + PHRIP ?	R

- 8. Digital Considerations: Keep in mind digital age that goes into a cadaver lab.
 - Digital anatomy table that is open to students to use before and after the lab.
 - Camera display for instructor to "demo" around a model that is set up at the front of the room.
 - Imaging (3D Modeling)
 - Digital Dissection

9. Example Institutions:

- VCU Medical School Cadaver Lab
- University of Tennessee Body Farm

End of Meeting

The above constitutes my understanding of the items discussed and the decisions reached. If there are any additions or corrections, please, contact the undersigned.

Signed:	Suzanne Klein
Cc:	Attendees
Date:	May 25, 2019