**CVCSCCM Research Committee Agenda**

Conf Call: Monthly, 1st Thurs 3pm

1. **UPDATE ON CURRENT RESEARCH PROJECTS** 
   1. **Outreach FCCS Education (Kigali, Rwanda)** 
      1. Abstract presented to World Congress of Critical Care & SCCM 2020.
      2. Submitted and turned down by J Crit Care, Global Health. Results section re-written, pre-final draft circulating for feedback among authors before submission.
      3. Contact: Kwame (mr.kwameboateng@gmail.com)

* 1. **Stewardship of the Withdrawal of Alcohol Tool (S.W.A.T.)** 
     1. Project aiming to develop tool to diagnose patients with ETOH withdrawal, while on sedation / mech ventilation (MV).
     2. Co-investigators and collaborative institutions identified for Step 3 (Charleston Area Medical Center, VCU Health System, Vidant Health System, New Hannover Regional Medical Center)
     3. Awaiting IRB approval, study start at UK.
     4. Contact: Audis (Audis.Bethea@uky.edu)

1. **NEW RESEARCH PROJECTS**
   1. **Opiates and predictors of long-term use after hospital discharge** 
      1. Considering: Evaluation of pre-existing and in-hospital predictors of post-discharge abuse. (follow ICU survivors longitudinally after discharge).
      2. Fruitless (or complicated) access requests with the NC Med Board & three methadone clinics in Durham area (out of >15). Premier database only for Surgery inpatients – discussed with stakeholders. Requested access from Duke Pop Health (Ashley Dunham) to Truven **Marketscan**. Pricing $5,125 / 6 months of access, no statistical support. Option to co-fund through Duke SCORES (Shelley Hwang)?
      3. Critically ill patients; perhaps a sub-analysis comparing factors, or between critically ill and non-critically ill patients
      4. Contact: Carolyn ([mageeca@musc.edu](mailto:mageeca@musc.edu)), Audis ([Audis.Bethea@uky.edu](mailto:Audis.Bethea@uky.edu)), George ([George.kasotakis@duke.edu](mailto:George.kasotakis@duke.edu))
   2. **Study evaluating the impact of intravenous medication admixtures in critical illness**
      1. Preliminary data obtained by committee member suggest that > 50% of fluid exposure during critical illness is due to admixtures vs. maintenance intravenous fluids / resuscitation, and how the additional volume may contribute adversely to clinical outcomes.
      2. Data available on Epic, will require manual extraction.
      3. Difficult access at VCU, due to transition to new EHR.
      4. Email for interest/data availability/extraction sent to group, response by **Aug 28**.
      5. Contact: Carolyn Magee ([mageeca@musc.edu](mailto:mageeca@musc.edu))
      6. **Interested parties may inquire with local pharmacies/EHR support teams about ability to extract IVF volume data & notify team.**
   3. **Compliance of common ICU bundle implementation and related outcomes**
2. Consider looking at common ICU bundles, and determine how compliance to those improves related outcomes:
   * Foley care -> UTIs
   * Central catheter care -> CLABSIs
   * Daily SBTs -> Length of Mech Vent, ICU LOS
   * Surgical wound care -> SSIs
   * DVT prophylaxis -> DVTs/PEs
   * Stress ulcer prophylaxis -> UGIBs
   * Oral care for mech ventilated -> VAPs
   * Etc
   * Data available for automated extraction from Duke HER; What about other institutions? Email for interest/data availability/extraction sent to group, response by **Aug 28**.
3. Contact: Kristin Miller ([Kristin.miller@vcuhealth.org](mailto:Kristin.miller@vcuhealth.org))
   1. **Tracheostomy for weaning off mechanical ventilation**
      1. Ventilator weaning after tracheostomy available in Duke pts. Interest in utilizing data to address clinical questions.
      2. Outcomes of interest (adjusting for resp disease, neuro status, trach size, etc):
         * Weaning from Mechanical Ventilation (MV)?
         * Trach removal
      3. Possible questions:
         * Does duration of mech ventilation prior to trach predict time to MV weaning?
         * Trach collar as tolerated vs. progressively increasing intervals
         * Failed extubation + reintubation vs. straight to tracheostomy for MV weaning
         * Time to first TCT after trach predict MV weaning?
      4. William Lao, MD (Duke SICU fellow) gathering additional datapoints from Epic. Starting clinical fellowship, will need additional data extractors.
      5. Contact: Andrew Miller ([andrew.g.miller@duke.edu](mailto:andrew.g.miller@duke.edu)), Michael Wilson ([michael.wilson@duke.edu](mailto:michael.wilson@duke.edu)), George Kasotakis ([george.kasotakis@duke.edu](mailto:george.kasotakis@duke.edu))
   2. **ARDS prediction in trauma patients** 
      1. Predictive modeling for development of ARDS in the general medical patient population exists (LIPS), however no such tool exists in trauma, the #2 cause of ARDS overall.
      2. We developed model identifying independent risk factors in trauma patients last year. Can utilize to develop predictive model.
      3. Use existing dataset (e.g. TQIP). Approved by Dept of Surgery for Stats support.
      4. Contact: George Kasotakis ([george.kasotakis@duke.edu)](mailto:george.kasotakis@duke.edu))
   3. **Traumatic brain injury as an independent predictor for development of ARDS**
      1. A model we developed identifying risk factors in trauma patients last year, demonstrated lower GCS as an independent predictor for development of ARDS.
      2. No literature exists that associates TBI with ARDS, although ‘common knowledge’ among Neurosurgery colleagues
      3. Regression vs. matching project with TBI vs. non-TBI (similar risk factors/injury severity)
      4. Chest injury to be included? Approved by Dept of Surgery for Stats support.
      5. Contact: George Kasotakis ([george.kasotakis@duke.edu)](mailto:george.kasotakis@duke.edu))
   4. **Ketamine in the Acutely and Critically Ill patients: use, perceptions, and potential barriers**
      1. Pre-final manuscript draft circulated among members. SCCM leadership still needs to approve.
      2. Contact: Carolyn Magee ([mageeca@musc.edu](mailto:mageeca@musc.edu))
   5. **COVID Research & Outcomes tracking**
      1. Approval for use of the UK NHS Biobank to determine factors that predispose patients with COVID to require hospitalization; ICU admission; ARDS development; mortality.
         * To download data
      2. Links for enrolment:
         * SCCM VIRUS Registry: <https://sccm.org/Research/Research/Discovery-Research-Network/VIRUS-COVID-19-Registry>
         * International CovidSurg Cohort: [https://globalsurg.org/covidsurg-network](https://globalsurg.org/covidsurg-network/)
4. **RESEARCH BUDGET ALLOCATION**
5. Budget increased to $2,000 for new year (June 1 2020 – May 31 2021).
6. Current Balance: $2,000.
7. Potential for additional funds in future budget years, depending on interest & utilization.
8. Standard application form & webpage reviewed & approved by Committee, and Board of Directors (7/9/20). Currently live on our website (<https://cvcsccm.org/research-committee>).
9. **DEFINE COMMITTEE MISSION**

To support, advance and promote the conduct and dissemination of high quality basic, translational and clinical research in critical care, by facilitating multi-disciplinary and multi-center collaboration while providing mentorship to junior researchers across organizations from all four Chapter States. The goal of these research efforts is to optimize the delivery of multi-disciplinary critical care, and improve clinically relevant patient outcomes.

Specific Goals:

To assist with access to institutionally available literature and patient databases; aid with study design and data analysis; data interpretation and presentation; enable multi-center sample and data collection; and facilitate the peer-review process.