



COVID-19 CORE

Collaborative Outcomes Research Enterprise

Abstracts or presentations that have been published out of data received

- Connie Shao/Drew Gunnells
 - Shao C, McLeod MC, Thogaripally S, Chu D, Gunnells D. “Increased risk of post-operative mortality with obesity, age, male sex among COVID-19 surgical patients”. 31st Annual SBAS Scientific Meeting. Virtual. Sep 16-19, 2021.
 - Shao C, McLeod MC, Theiss L, Marques I, Hardiman K, Kennedy G, Hollis RH, Cannon J, Morris M, Chu D, Gunnells D. “Effect of COVID-19 pandemic on surgical volume and outcomes of non-COVID patients undergoing surgery”. Southeastern Surgical Congress. Atlanta, GA. Aug 21-24, 2021.
 - Shao C, Thogaripally S, Mugavero M, Chu D, Gunnells D. “Increased risk of post-procedure mortality associated with obesity, age, male sex among patients previously infected with COVID-19”. ACS Quality and Safety Conference. Virtual. July 12-16, 2021.
 - Shao C, McLeod M, Thogaripally S, Mugavero M, Chu D, Gunnells D. “Increased Post-Operative Mortality with Prior COVID-19 Infection, Higher BMI, and Male Sex”. 17th Annual Academic Surgical Congress. Orlando, FL. Feb 1-3, 2022. (Submitted).
- Yulia Khodneva
 - The project was featured at the “Learning Health Systems Month” as an invited presentation on March 24, 2021, attended by over 70 UAB researchers
 - Project results were presented at the Columbia University school of Medicine meeting on April 26, 2021 in New York, NY
 - Project results were presented at the UAB Hypertension and Vascular biology trainee meeting on April 29, 2021.
- Comorbidities Working Group
 - Gabrielle Rocque: abstract submitted to San Antonio Breast Cancer Symposium that has a component of COVID-related research (Participants interviewed on perspectives of how COVID would impact their view on de-escalation cancer treatment within clinical trials).
 - Lyse Norian: Presentation given to The Obesity Society in November, 2020 regarding the effects
- Healthcare Worker Wellbeing and Satisfaction Working Group
 - Two abstracts have been submitted to ID week as latebreakers, disposition pending (topics were impact of PPE shortages on physicians and the economic & workload impact of the pandemic on physicians).
 - Podium Presentation: 1. Meese, K.A., Dobbins, C., Colon-Lopez, A., Van Pelt, F., Rogers, D.A., Flood, K. (June, 2021) Psychological PPE: Is Accountable Care Team Membership Protective During a Crisis? European Academy of Management. Montreal, Canada. (Virtual)
 - Invited presentations for Katherine Meese using survey data from the employee pulse survey which was informed by the CORE SWG as follows:
 - 1. “Self-Care and Safety.” National Air Transportation Association. (April 2021).

- 2. “Rapid Primary Data Collection with a New CORE team during COVID-19.” UAB Learning Health Systems Month. (March 2021). Approximately 72 attendees.
- 3. “Healthcare is a Team Sport.” Rush University Master’s of Health Systems Management Program- Leadership Capstone (March 2021). Chicago, Illinois (Virtual). Approximately 30 attendees.
- 4. “Well-Being During COVID-19.”- Presentation to 15 Chief Medical Officers across the country through the Exceptional Leadership Foundation. (Feb 2021). Approximately 15 attendees.
- 5. “Tools for the leader in All of Us.” UAB Medicine Certified Registered Nurse Anesthetist CQI Morning Meeting (Feb 2021). Approximately 65 attendees.
- Latebreaker oral abstract presentation at IDWeek 2020
- Willett E, Long D, Turner W, Chapman-Lambert C, Creger T, Mugavero MJ, **Burkholder GA**. Economic and workload impact of COVID-19 pandemic on physicians in the United States: results of a national survey. Oral abstract presented at: Late Breaking COVID-19 Abstracts. IDWeek; 2020 Oct 21-25.

Manuscripts that have been written and/or published out of data received

- Connie Shao/Drew Gunnells
 - *Shao C, McLeod MC, Theiss L, Marques I, Hardiman K, Kennedy G, Hollis RH, Cannon J, Morris M, Chu D, Gunnells D. "Effect of COVID-19 pandemic on surgical volume and outcomes of non-COVID patients undergoing surgery". American Surgeon. (In Progress).*
 - *Shao C, Thogaripally S, Mugavero M, Chu D, Gunnells D. "Increased risk of post-procedure mortality associated with obesity, age, male sex among patients previously infected with COVID-19". American Journal of Preventative Medicine. (In Progress).*
 - *Shao C, Thogaripally S, Mugavero M, Chu D, Gunnells D. "Propensity score adjusted assessment of post-procedure mortality among patients previously infected with COVID-19". Annals of Surgery. (In Progress).*
- Yulia Khodneva
 - A manuscript titled "Clinical Outcomes of Covid-19 in a Racially Diverse Sample: Role of Renin-Angiotensin-Aldosterone System Inhibitors" has been prepared for submission.
- Carrie Howell
 - Title: "Cardiometabolic disease, social determinants of health and severe COVID-19 outcome prediction using retrospective electronic medical record data from patients at a large academic medical center in the Deep South"
- Ferhat Zengul
 - Zengul FD, Zengul AG, Mugavero MJ, Oner N, Ozaydin B, Delen D, Willig JH, Kennedy KC, Cimino J. A critical analysis of COVID-19 research literature: Text mining approach. *Intell Based Med.* 2021;5:100036. doi: 10.1016/j.ibmed.2021.100036. Epub 2021 Jun 17. PMID: 34179855; PMCID: PMC8214804.
- Shea Polanich
 - Polancich, Shea; Hall, Allyson G.; Miltner, Rebecca; Poe, Terri; Enogela, Ene M.; Montgomery, Aoyjai P.; Patrician, Patricia A. Learning During Crisis: The Impact of COVID-19 on Hospital-Acquired Pressure Injury Incidence, *Journal for Healthcare Quality: May/June 2021 - Volume 43 - Issue 3 - p 137-144* doi: 10.1097/JHQ.0000000000000301
- Kierstin Kennedy
 - Kennedy, Kierstin Cates, Kristine R. Hearld, Brian May, Allyson G. Hall, Sue S. Feldman, Kyndal McKnight, Abigayle Kraus, Wendy Feng, and William Opoku-Agyeman. "Inpatient Telehealth and Coronavirus Disease 2019 Outcomes: Experiences in Alabama. *Telemedicine Reports* 2, no. 1 (May 1, 2021)
- Jami Anderson
 - Jami L. Anderson, MSc, MBS^{1§}; Rebecca A. Reamey, PhD²; Emily Levitan, DSc³; Irfan Asif, MD⁴; Monica Aswani, DrPH¹; Faith Fletcher, PhD, MA⁵; Allyson Hall, PhD¹; Kierstin Kennedy, MD, MSHA⁶; Dustin Long, PhD⁷; David Redden, PhD⁷; Alia Tunagur²; Molly Wasko, PhD⁸; James Willig, MD, MSPH²; Matthew Wyatt, MSHI⁹; Michael J. Mugavero, MD, MHSc²; on behalf of the UAB COVID-19 CORE. The UAB COVID-19 Collaborative Outcomes Research Enterprise (CORE): Developing an Institutional Learning Health System in Response to the Global Pandemic
- Comorbidities Working Group
 - Gabrielle Rocque has a paper that is in preparation that includes a small component (based on an abstract submitted to San Antonio Breast Cancer Symposium that has a component of COVID-related research) related to COVID.
- NeuroCOVID Working Group
 - We contacted the Comorbidity Working Group to explore the idea of doing a joint paper on the prevalence of neuropsychiatric and comorbidities in COVID patients across decades of life.

- NeuroAIDS/NeuroCOVID brief report exploring the intersection between the two – This is drafted.
- Vance, D. E., Perazzo, J. D., & Fazeli, P. L. (in press 3-2021). Parallels between neuroHIV and neuroCOVID-19: Considerations for a post-COVID-19 era. Journal of the Association of Nurses in AIDS Care. DOI: 10.1097/JNC.0000000000000265
- Safety and Quality Working Group
 - *Montgomery, A.P., Patrician, P.A., Hall, A., Miltner, R.S., *Enogela, E.M., & Polancich, S. (In revision). Modeling patient risk for hospital acquired pressure injuries during Covid-19: A retrospective study. *Journal of Nursing Care Quality*.
 - Polancich, S., Hall, A., Miltner, R., Poe, T., Enogela, E. M., Montgomery, A. P., & Patrician, P. (2021). Learning during crisis: The impact of COVID-19 on hospital acquired pressure injury incidence. *Journal for Healthcare Quality*, 43(3), 137-144.
- Healthcare Worker and Wellbeing Working Group
 - Meese K et al. Healthcare is a Team Sport: Stress, Resilience and Correlates of Well-Being among Clinical and Non-Clinical Health System Employees during the COVID-19 Pandemic. *Journal of Healthcare Management* (2021). Burkholder, Colon-Lopez & Singh are co-authors.
- Three additional articles have been invited to special series in the *Journal of Health Management and Policy* and the *Journal of Healthcare Finance* with various members of the group, including Alejandra Colon Lopez, Katherine Meese, Aoyjai Montgomery, Patricia Patrician and Greer Burkholder. Another Telemedicine article is in draft phase with the goal of submitting this summer
- Comorbidities Working Group
 - Lyse Norian, Co-I on submitted NIH R01 grant application (July 2020), entitled: Investigating the contributions of diabetes, obesity, and inflammasome-mediated inflammation to COVID-19 severity
 - Isabel Scarinci and Monica Baskin are leading a coordinating center across 17 cancer centers to assess the impact of COVID-19 on cancer prevention and control (cancer center supplement)
 - UAB is participating in an NCI study on COVID in cancer (lead Dr. Trey Leath).
- Health Disparities Working Group
 - "Investigation of Community-Level and Individual-Level Determinants of COVID-19 health impact in Birmingham: A Mixed-Methods Study to Inform Strategy Development": submitted to UAB Office of Research. PI: Allyson Hall
 - "UAB RADx-UP Specific Aim 1": submitted to NIH. PI: Mugavero/Rana (Aim 1: Hall, Fletcher)
 - "Pediatric Emergency Department use in Alabama during COVID-19": funded by UAB School of Public Health (PI: Bisakha Sen, Pallavi Ghosh)
- NeuroCOVID Working Group
 - We have developed an aims page with neuroCOVID/neurocognitive aims. We are floating this with the ADRC and RCMAR to see if they are interested in supporting this as a supplement onto their center grants.
 - GRANT NUMBER NOT ASSIGNED YET (PI: WHEELER).
02/01/2022 - 01/31/2027
NIH/NIA
Total Funds Requested \$3,704,500 (\$2,499,995 direct)
Examining Neurocognitive Trajectories and Dementia Risk in Middle-aged and Older Adults with COVID-19
The purpose of this ESI R01 is to allow the PI to transition into a new field by examining long-term neurocognitive outcomes among individuals with varying severity of COVID-19, and to also examine risk factors for such outcomes.
 - OT2 HL161934 (MPI: Marrazzo, Erdmann, Levitan) 05/01/21-04/30/25

NIH/NHLBI

\$4,152,853 (total costs)

Deep South SARS-CoV-2 Recovery (DSR) Cohort

The DSR Cohort will contribute to the SARS-CoV-2 Recovery Cohort Investigator Consortium to investigate Post-Acute Sequelae of SARS-CoV-2 infection (PASC) with the goal of optimizing our understanding of PASC.

Role: Co-Investigator, 5% (0.6 calendar months), Theme: Burden of PACS and Relation to Acute Disease

Richard Kennedy and David Vance are on this to provide neuroCOVID expertise.

- Safety and Quality Working Group
 - Yes, submitting one now to HRSA. Workforce Engagement for Compassionate Advocacy, Resilience, and Empowerment (WE CARE). It targets interventions for nursing staff and patient care technicians at UAB Medicine, students and faculty at the SON, and nurses throughout AL.
- Healthcare Worker and Wellbeing Working Group
 - Submitted HRSA Training Cooperative Agreement (approx \$2M)- CORE Participants: PI: Pat Patrician, Program Staff: Aoyjai Montgomery & Katherine Meese

Grants that have been developed, submitted and/or funded out of data received

- Lyse Norian
 - 07/20. Title: Investigating the contributions of diabetes, obesity, and inflammasome-mediated inflammation to COVID-19 severity. National Institutes of Health R01. \$2,499,955 in direct costs. Hubert Tse, Principal Investigator; Kirk Habegger, Principal Investigator; Ron Banerjee, Principal Investigator; **Lyse Norian, Co-Investigator**; Alex Szalai, Co-Investigator; Maria Grant, Co-Investigator; Chad Petit, Co-Investigator.
 - 12/20. Title: Defining the interplay of diabetes, obesity, and NLRP3 inflammasome-mediated inflammation in COVID-19. NIH NIDDK R01. \$750,000 in direct costs. Hubert Tse, Principal Investigator; Kirk Habegger, Principal Investigator; Ron Banerjee, Principal Investigator; **Lyse Norian, Co-Investigator**; Alex Szalai, Co-Investigator; Maria Grant, Co-Investigator; Chad Petit, Co-Investigator.
- Carrie Howell
 - Used data as preliminary data for my K01 submission – submitted June 2021. Title: “Harnessing social determinant of health data to identify and engage high risk, socially vulnerable populations for diabetes prevention”
- Connie Shao/Drew Gunnells
 - 2020-2021. Secondary Data Analysis on COVID-19 in the context of Obesity and Health Disparities through the UAB Obesity Health Disparities Research Center (OHDRC) (U54MD000502)
PI: Drew Gunnells
Role: Trainee (\$7,000)
- Mike Mugavero
 - 9/23/2020- 5/31/2023: RADx-UP-121 COVID COMET (CFAR Supplement), \$3,323,570 Total, \$5,000,000 Overall Total Award
- James Willig
 - PENDING: 8/1/2021-7/31/2024: PASC One Florida Clinical Research Consortium (CRC) - PCORnet Phase 3, \$315,000 Total
- James Curtis
 - 9/15/2020- 7/31/2024: Building and InnovatinG: Digital heAlth Technology and Analytics (BIGDATA): Data Capture and Integration Core, \$749,148 Total
- Marazzo/Katz/Erdmann/Levitan
 - PENDING: 8/01/21- 7/31/25: Post-Acute Sequelae of SARS-CoV-2 Infection Initiative: NYU Langone Health Clinical Science Core, Data Resource Core, and PASC Biorepository Core, \$44,642,617 Total